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M'Culloch's Universal Gazetteer.

A

DICTIONARY,

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL,

OF THE VARIOUS

COUNTRIES, PLACES, AND PRINCIPAL

NATURAL OBJECTS IN THE WORLD.

BY J. R. M'CULLOCH, ESQ.

WHICH THE ARTICLES RELATING TO THE UNITED STATES HAVE BEEN GREATLY MULTIPLIED AND EXTENDED, AND ADAPTED TO THE PRESENT CONDITION OF THE COUNTRY, AND TO THE WANTS OF ITS CITIZENS.

BY DANIEL HASKEL, A.M.,

LATE PRESIDENT OF THE UNIVERSITY OF VERMONT.

"Nec omnia dicentur sed maxime insignia."

Illustrated with Seven large Maps.

IN TWO VOLUMES.

VOL. I.

NEW-YORK:

PUBLISHED BY HARPER & BROTHERS, 82 CLIFF-STREET.

1843.

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Charles T. Harbeck
24, MAR. 04

PREFACE

BY THE AMERICAN EDITOR.

GEOGRAPHY is one of the most interesting, useful, and practical of the sciences. To survey the natural features and physical condition of the globe which we inhabit—its continents and islands, its oceans and seas, its rivers and lakes, its mountains, and other natural features, and its soil and productions, cannot but afford much entertainment to an inquisitive mind. But an acquaintance with its inhabitants, in all their vast variety from barbarism to refinement, and the various means by which they have made nature subservient to human comfort, is still more interesting and important. To survey the toil and privations of savage life; to see how much human happiness is advanced by the progress of civilization, by the arts and sciences, by the intercourse of nations, by means of commerce, rendering a single country the storehouse of the conveniences and comforts of the world; to see how, by human contrivance and exertion, the earth has been subdued and rendered fertile, and overspread with cultivated fields and with convenient dwellings; how towns and cities have been reared, and social and civil institutions have contributed to the perfection of human society and to the promotion of individual enjoyment, and how the inferior creation have been made to alleviate the toil and to minister to the support of man, is indeed a most rational and interesting employment of the human faculties. It is no wonder, then, that geography is a science so universally popular, that it interests the minds of the young, and loses none of its attractions in mature years. Nothing has contributed more to that general intelligence by which the people of the United States are so eminently distinguished, and by which the perpetuity of their free institutions is so effectually secured, than the universal study of geography in all our schools. The mind is thus early sent abroad over the world, and led to survey man in his physical and moral condition, and receives an expansion which no other study could equally afford; and it returns to its own highly favoured country with a higher appreciation of its peculiar privileges. But the elementary treatises on geography, though they may lay an important foundation, are not sufficient to rear the superstructure; they are entirely inadequate to the advancing intelligence of mature life. Something more in detail is necessary to gratify the appetite thus early created, and systematic, scientific, and extended geographies and gazetteers are demanded by the wants and the taste of the community.

A good universal gazetteer is at present a desideratum in the United States. While there is much in a good gazetteer that is permanent, yet so frequent and extensive are the changes which are taking place in the world, that there is much which, within a limited period, becomes obsolete and incorrect. The principal existing gazetteers have become, in a measure, antiquated; and some which have been recently published have been constructed on the basis of those which were produced many years since; and whatever effort may have been made to accommodate them to the present time, they necessarily partake, to a great extent, in the imperfection of their origin. An old house may be so repaired as to put on a very fair exterior, and a superficial observer might regard it as in no way inferior to a new structure; but on a more careful examination it would be found that there were many things in its materials, its plan and its construction, to render it inferior to an entirely new erection. Hence, in preference to costly repairs, most wise persons prefer to demolish an old house entirely, and to erect a new one on its ruins, and to introduce improvements which any other course would preclude. The same principle will apply to the con-

Charles T. Harbeck

struction of a gazetteer. The new structure will involve more labour and expense, but it will amply compensate for them in the end.

The most splendid gazetteer recently issued in Great Britain is that by M'Culloch, the well-known author of the Commercial Dictionary, which latter work has enjoyed an extensive and deserved popularity; and the American publishers believe that they are performing an important service to their fellow-citizens by presenting to them his valuable gazetteer, with all the matter of the English edition, with its splendid maps, and greatly improved and extended in the part which relates to the United States, at less than one third of the expense of the original work.

The author of this gazetteer wisely determined to build a new house, and not to repair an old one. Hence this work is constructed upon the basis of no former similar work, and it is "drawn up from original sources, and with as much care and discrimination as possible."*

"Systematical works, or those in which the various details with respect to the physical, moral, and political state of a country or district are arranged in their natural order, in a consecutive narrative, are probably best adapted for the use of the student and scientific reader. But dictionaries are decidedly more convenient, and better fitted for public use. When arranged in alphabetical order, they are easy of consultation; and, if properly compiled, the articles in them are not connected and mixed up with others, but are separately complete, supplying the inquirer with independent, and, at the same time, precise and well-authenticated information. Such works seem, from the extreme diversity and interest of the subjects treated of, peculiarly fitted to 'excite curiosity by their variety, to encourage diligence by their facility, and to reward application by their usefulness.' We need not, therefore, wonder that they have generally, even when their execution has been very indifferent, enjoyed a large share of popularity."

It is impossible that a work of this kind, without being immoderately extended, should name every place in the world: many places are of too little importance to encumber such a work, and even the mention of them would curtail very unprofitably the description of important places. Every gazetteer which is what it should be, will be constructed upon the principle of selection, and the value of the work will depend very much upon the judgment exercised in the choice of its materials. It is presumed that this work will satisfy its readers in this respect; for while it is particularly full in its principal articles, affording a large fund of general geographical information, and adapted to extensive reading, it will be found to be sufficiently particular in regard to minor and unimportant places. A gazetteer ought to dwell with most particularity on the places in which those for whose use it is prepared feel the deepest interest. On this account, the articles in this work relating to the British dominions are particularly full and complete; while, at the same time, there will be found to be no cause of complaint in regard to other portions of the world. This can be no objection to it with the citizens of the United States, for there is no country except their own, respecting which they desire so particular information as the parent country.

But the American publishers are sensible that this work, splendid and complete as it is in regard to other portions of the world, needs material improvement in regard to the United States, and that the articles respecting this country require to be greatly multiplied and extended, and generally re-written, to meet the wants of their fellow-citizens. This will be done, and the latest and most authentic information will be imbodied in it, to as great an extent as its limits will permit. It is hoped that, by the labour and care of the American editor, the part which relates to the United States will be found equally satisfactory with the other parts of the work.

With respect to the English edition, the author remarks: "Without neglecting

* Those portions marked as quotations are extracted from the preface to the English edition. This seemed preferable to giving the whole original preface, and substituting a separate preface to the American edition.

the *physical* geography of the different countries and places, we have directed our principal attention to what may be called their *political* geography: that is, their industry, institutions, and the condition of their inhabitants. Neither have we attempted to confine ourselves within what might, perhaps, be called the limits of a strictly geographical and statistical work. Whenever the occasion seemed to justify it, we have not scrupled to commend and censure, as well as to describe; and have endeavoured to appreciate the influence of institutions and habits on national welfare. The historical notices are necessarily brief, and, unless in the more important articles, are mostly restricted to an enumeration of leading events. It did not enter into our plan systematically to notice countries or places as they existed in antiquity; but, whenever it was supposed that such notices would be likely to interest the general reader, we have not hesitated to introduce them. Our object, in fact, was not so much to compile a dictionary on strictly scientific principles, and that should be perfectly homogeneous in its parts, as to produce one that might be relied on, and should omit few articles of importance, and that ordinary readers should find generally instructive and interesting.

"None can be more fully satisfied than we are of the extreme difficulty of accomplishing even this much. In a work embracing so great a variety of statements, many of them relating to matters in regard to which it is all but impossible to acquire correct information, perfect accuracy need not be looked for. But we can honestly say that we have spared no pains to make our work worthy of the reader's confidence, and would fain hope that its errors are not such as sensibly to detract from its utility.

"The maps which accompany this work have been carefully compiled from the latest and best authorities, and are entitled to rank with the first of that class of publications. Those of Asia, of the inland navigation, railways, &c., of Great Britain and Ireland, and of the British possessions in North America, will be found to be particularly valuable." In the American edition, the latter will be much improved by being more full and complete in regard to the New-England States, and portions of the other American States included in it, and the original will be corrected by the insertion of the recent divisions of the Canadas, which have been constituted since the publication of the English edition. The original work contains no separate map of the United States, an omission which will be supplied by a new and complete map of this country, prepared expressly for this work, which will exhibit the railroads and canals which have been completed and are in operation. "To prevent misapprehension, it may be well to add, that the distances between one place and another are always, unless where the contrary is stated, *direct*. They have been mostly measured on the best maps, or deduced from other good authorities." With respect to the world at large, this is the only practicable course; but, were it possible, it would be better to give distances according to the nearest travelled route, as people can never go from one place to another in a direct line. In the United States, the distances will be given according to the nearest post route; and these distances, by means of contracts for transporting the mail, have been settled by the Postoffice book, recently revised and issued by the department, with great correctness.

It is common to use abbreviations in such a work for the sake of condensation, and this has been done in the original work, without any list of these abbreviations and an explanation of them. Their import is, in general, sufficiently obvious, and similar abbreviations will be used in the part relating to the United States, and they will be generally left to explain themselves. There are a few exceptions to this remark which require to be specified, as use is divided in regard to these abbreviations. The distance and bearing of each place will be given from the capital of the state in which it is located, and from Washington, the capital of the United States. The name of the state capital will be given in full, and the distance from Washington will be denoted by a capital W. subjoin-

ed to the distance. The abbreviation *t.* denotes township, and if there is a post-office in it of the same name, it is denoted by the abbreviation *p. t.* The letter *v.* denotes a village or collection of dwellings compactly built, and if it has a postoffice of the same name, it is expressed by *p. v.* attached to it.

In the Northern States, every county is divided into *townships*, generally from four to six miles square, incorporated with certain rights and privileges, and generally called towns. They are also divided into parishes, which is an ecclesiastical division. In New-England, the principal village generally takes the name of the township in which it is situated; but latterly, in many instances, villages have risen up which have received a name different from that of the township, but generally at some distance from the centre. In the State of New-York, villages have frequently an incorporation distinct from that of the township in which they are found, sometimes taking the same name, but more commonly a different one. In New-Jersey, Pennsylvania, Ohio, and Indiana, the villages, which are often called towns, generally take different names from the townships in which they are situated. In the states south of Pennsylvania and the Ohio River, no such division as that of townships exists, and what are there usually denominated towns denote only a cluster of houses, generally without including an incorporated district or territory. In Pennsylvania, the incorporated villages are generally denominated boroughs, which will be denoted by the letter *b.*; and if they contain a postoffice of the same name, by *p. b.* In South Carolina, *districts* denote a territory which answers to counties in the other states; and the same is true of *parishes* in Louisiana, the abbreviations of which, in this work, will be readily understood. In the new states, and the newer parts of some of the older states, where the lands have been surveyed by the United States, the territory has been divided into townships of six miles square, denoted by ranges and numbers; but it is questionable whether these townships will ever generally receive distinct names as in New-England, as the tendency seems to be to follow the example of the Southern States, by adopting only the designations of counties and villages or cities.

In the English edition, the sources are generally given whence the information contained in the several articles is derived, and the same is done with respect to the articles which relate to the United States. This will be done in the American edition, excepting in the articles on the United States, as these references will be valuable to those who are disposed to pursue their inquiries beyond the bounds of a gazetteer; but, as we hope to present a more complete and correct account of this country than can be derived from the authorities quoted by the author, many of which are very valuable, but some of which have ceased to be at present correct, we shall omit a mention of the sources of our information, which would exceedingly encumber the work. In the construction of this part of the work, fifty volumes, and as many state or other local maps, containing the latest and most authentic information, have been consulted, besides a written correspondence from intelligent men in all parts of the country. The late very valuable United States census and statistics have contributed very much to enrich this work. To encumber the work by attaching to each article the sources whence the information has been derived, would, it is believed, be unprofitable, as they are numerous. No fact has been stated but upon what is considered the best authority. Our aim has been to present to the citizens of the United States a work, in regard to their country, on which entire reliance can be placed. A faultless work, involving so many particular facts, it would be difficult, and perhaps impossible, to produce.

If extensive and accurate information with respect to the present condition of the world is desired, it is believed that this great work, with its improvements, will afford the opportunity of obtaining it, with least possible expense of time, trouble, and means; and that it will be a source of extensive improvement and the most substantial gratification to many minds.

A

UNIVERSAL GAZETTEER,

OR

DICTIONARY,

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL.

AA, the name of some small rivers in France, Switzerland, the Netherlands, Hanover, Saxony, &c. The wide diffusion of the name seems to prove, as has been judiciously remarked, that it has some general signification applicable to all the rivers to which it belongs. Probably it may be derived from the Celtic *Aek* or *Ac*, water. There are, indeed, two small German rivers, one of which falls into the lake of Constance, and the other into the Iller, that are called Aach.

AALBORG, an old town of Denmark, cap. diocese and bailiwick, and the principal town in Jutland, situated about 17 m. from the sea, on the S. side of the channel of the Lymfiord, or great internal gulf, entering from the Cattegat, near where it begins to expand into an extensive lake. Lat. 57° 2′ 22″ N., long. 9° 56′ 41″ E. Pop. 7050. It is intersected by two small rivers, and surrounded by ditches; it is the seat of a bishopric, has a gymnasium or college, an episcopal library with 11,000 vols., a school of navigation, and an hospital and two workhouses. Exclusive of distilleries and breweries, it has manufactures of soap, fish-oil, fire-arms, refined sugar, leather, silk, &c., with a considerable amount of shipping and trade: principal exports corn, flour, fish, butter, spirits, &c. Formerly it was accessible to large vessels; but owing to the gradual filling up of the channel of the Lymfiord, it is now accessible only to the smaller class of merchantmen, or those not drawing more than nine or ten feet water.—(*Catteau, Tableau des Etats Danois*, tom. i., p. 88.) Aalborg means Eeltown; a name derived from the immense number of eels that are found in the waters in its vicinity.

AALEN, a town of Wirtemberg, circ. Jaxt, cap. bailiwick, formerly a free imperial city, on the Kocher, 42 m. E. Stutgard. Pop. 2400. It is surrounded by walls flanked with high towers; has manufactures of wool and cotton, and breweries. There are extensive forests in the environs, and iron mines.

AALSMER, a village of Holland, E. side of the sea of Haarlem, 10 miles S.W. Amsterdam. Pop. 1800.

AALTEN, a village of the Netherlands, Guelderland, 7½ miles S.S.W. Groenlo. Pop. 3590.

AAR, a river of Switzerland, the most considerable in that country after the Rhone and Rhine. Its principal sources are in the glaciers of the Schreikhorn and Grimsel mountains in Berne, near the source of the Rhone. Having united its different arms near Meyringen, it flows thence through the lakes of Brienz and Thun. Escaping from the latter, it takes a northerly direction till it reaches Berne; it then turns W. till having received its tributary, the Saane; it flows N.E. by Arberg, Soleure, Aarau, &c., till it unites with the Rhine, opposite to Waldshut. Its most important tributaries are, on the right, the Emme, Reuss, and Limmat; and on the left, the Saane, already noticed, and the Thiele. Its course is about 170 m. It becomes navigable on emerging from lake Thun. In the upper part of its course it dashes along with great fury, and is precipitated over several waterfalls. This also is the name of two small rivers in Waldeck. —(*Coxe's Switzerland*, Letters 29, 30, &c.)

AARAU, or **ARAU**, a town of Switzerland, cap. cant. Aargau, on the Aar, 1140 feet above the level of the sea, 23 m. S.E. Basle, lat. 47° 23′ 35″ N., long. 6° 3′ 55″ E. Pop. 3100. It is well built, has a gymnasium, a school of art, a *seminarium* or normal school for the instruction of teachers, a public or cantonal library, a society of national instruction, &c., with manufactures of silk and cotton, a cannon foundery, and bleach-fields. The peace, which terminated the civil war of 1712, was concluded here.

AARGAU, or **ARGOVIA**, one of the Swiss cantons, separated by the Rhine from Baden, having the canton of Zurich on the E., that of Lucern on the S., and Soleure and Basil on the W. Area 502 sq. m. Pop. (1836) 182,755, having increased from 144,093 in 1803. The mountains in this canton do not attain to any very great height, and it possesses a very considerable extent of fertile land. It is traversed by the Aar, whence it derives its name, and by its important tributaries the Reuss and Limmat. The country is well cultivated, and the produce of wheat and other grain exceeds the consumption: there are numerous vineyards, but the wine is inferior; with abundance of garden and orchard fruit. The rearing of cattle and sheep is not found to be productive, but they are advantageously fattened in the meadows, which are both extensive and excellent. Manufactures have made great progress. The principal is that of cotton, next to it is silk, and then follow linen, straw-platting, &c. Cottons are not woven by power-looms, but mostly in the cottages of the peasants, or small labouring farmers, as has been the case with linen in Ireland. But though this sort of double employment has hitherto afforded a considerable degree of security against the injurious influence of the vicissitudes incident to agriculture and manufactures, the presumption is, that the rapid progress of mechanical improvements in other countries will force its abandonment, and that the Swiss will have to employ machinery in the weaving as well as in the spinning of cotton, or be compelled to abandon the former department. This canton is especially distinguished by the attention it has paid to education. Every district of 120 children must have at least one primary and one superior school. In every circle (*Bezirk*), the population being from 15,000 to 20,000, there are from five to six secondary schools. There is also in the capital a gymnasium, a school of arts, and a normal school for the instruction of teachers. The expense of the schools is defrayed partly by the communes and partly by the state funds. In the gymnasium and school of arts the state provides for the payment of fourteen professors and their assistants. About 3-5ths of the population are Catholics and 2-5ths Protestants. The public revenue amounts to about £45,000 a year; but as nearly the half is derived from state property, interest, &c., it is immediately seen that taxation is very light. The cantonal contingent to the diet is fixed at 2410 men, and 52,212 Swiss fr. For an account of the government, see art. SWITZERLAND. Principal towns Aarau, Laufenberg, Baden, Zoffingen, &c.—(*Bowring on the Commerce of Switzerland*, p. 80.)

AARHUUS, a sea-port town of Denmark, cap. diocese and bailiwick of the same name, on the E. coast of Jutland, lat. 56° 9′ 35″ N., long. 10° 14′ E. Pop. 6765. It is pretty well built, has a large cathedral founded in 1201, a lyceum, a museum of antiquities, and a valuable diocesan library. Its commerce and industry have increased considerably of late years. The exports consist principally of agricultural produce, with spirits and beer the produce of its distilleries and breweries; and cloth and gloves. Considerable sums have recently been expended on the improvement of its port, which has been rendered one of the best in Jutland. Packets sail regularly between it and Callundberg, on the west coast of Zealand.

AARONSBURG, p. v., Hains t., Centre co., Pa., 80 m. N.W. Harrisburg, 181 W. It contains a Lutheran church, two stores, eighty dwellings, and about 450 inhabitants.

AASZY, the *Orontes* of Greek geographers, which see.

AATYL, a town or village of Syria, in the Haouran or Great Plain, extending S. from Damascus and E. from the

mountains beyond Jordan, lat. 32° 15′ N., long. 36° 33′ E. The inhabitants consist of Druses (see *Libanus* and *Syria*), of the number probably of 200 or 300. Though now insignificant, the remains of ancient grandeur in its vicinity prove that Astyl was once a place of importance. These remains occupy a circuit of a mile, and in many instances are inhabited by the present population. W. of the town a perfect arch of very fine workmanship, with broken pillars and friezes, marks the site of a small but elegant temple. On the S. another temple, almost entire, with a portico of four columns and an entrance beautifully and elaborately carved, has been converted into a private residence.

Astyl is 54 m. (direct distance) S.S.E. Damascus, and 48 m. E. lake of Tabaria, the Genesareth of the Bible.—(*Robinson's Travels in Palestine and Syria*, vol. ii., p. 155, 156.)

ABADEH, a town of Persia, prov. Fars. 115 m. N. Shiraz. Pop. 5000. It is surrounded by walls in a state of decay; and is defended by a large square fort, now containing the whole population. It has suffered severely from the frequent contests for the Persian throne during the 18th century; but it is still environed by gardens, and sends fruit to Shiraz.

ABAKAN, a river of Siberia, an affluent of the Jenisei, which it joins, 16 miles S. Abakansk.

ABAKANSK, a town of Siberia, gov. Jeniseisk, on the Abakan near the Jenissei. The climate is mild; but it is, notwithstanding, a poor miserable place, and would be wholly unworthy notice were it not that on mount Istk, and other places in its environs, are found some of the most remarkable of those singular remains of former civilization that are met with in many places of Southern Siberia. They consist principally of tumuli or tombs, which frequently contain earrings, bracelets, and other ornaments and utensils of gold, silver, and copper, with iron stirrups, &c. Near Abakansk are statues of men from seven to nine feet high, and covered with hieroglyphics, of which unfortunately no explanation has yet been given.—(*Malte Brun*, Balb. ed. 1837, p. 896; *Gmelin. Voyage en Siberie*, cap. 63, 64, &c.)

ABANCAY, cap. prov. of same name in Peru, 60 miles N.W. Cuzco.

ABANO or ALBANO, a village of Austrian Italy, prov. Padua, 10 m. S.W. Padua. Pop. 3000. This village derives its entire celebrity from its hot springs and *muds*. It is situated near the Huganean hills, in a place marked with some low eminences, whence issue copious springs of water capable at their source of boiling an egg quite hard. The waters are partly employed to prepare and soften mud, partly to supply the baths, and partly go to waste, or turn a mill which revolves amid volumes of smoke. They are supposed to be efficacious in cases of palsy, rheumatism, and a variety of complaints. The mud is applied hot to the affected part, somewhat after the manner of taking a stucco cast; and the baths are regarded principally as an auxiliary to the "dirty" application. The season is in the heat of summer; and, according to Mr. Rose, the accommodations for company are very deficient.

These baths were well known to, and much used by, the Romans. They were called *Patavina Aqua*, the principal source being distinguished by the name of *Aponus fons*, whence their modern name has evidently been derived.

> Aponus terris ubi fumifer exit.
> *Lucan*, vii., 1, 194.

There is a very full account of these baths in *Rose's Letters on Northern Italy*, i., p. 59–70; see also *Cramer's Ancient Italy*, i., p. 123.

ABAZIA, a country in the region of Caucasus, in the Russian gov. of that name, which see.

ABB, a town of Arabia, in the Dejebel, or mountain land of Yemen, lat. 13° 58′ N., long. 44° 15′ E., 95 m. S. Sanaa, 73 m. N.E. Mocha, and 104 m. N.W. Aden. Number of houses said to be about 800, which at an average of six individuals to each gives a pop. of nearly 5000. It is built on the summit of a mountain; is surrounded by a strong and well-built wall; and overlooks a well-watered (for Arabia) and extremely fertile country. Houses (as usual in the mountain towns of Yemen) of stone; streets well paved, which, in this country, is very uncommon. An aqueduct conveys water from a mountain at a little distance on the N. to a large reservoir in front of the principal mosque.—(*Niebuhr, Des. de l'Ar.*, par. ii., p. 208.)

ABBEVILLE, a thriving, industrious town, in the N.W. of France, dep. Somme, cap. arrond. on the navigable river of that name, 25 m. N.W. Amiens, lat. 50° 7′ 4″ N., long. 1° 59′ 58″ E. Pop. 13,842. It is neat and well built; is regularly fortified on the system of Vauban; and has, exclusive of the old Gothic church of St. Vulfran, several public buildings worthy of notice, and a public library. A fine cloth manufactory was established here in 1669, by a Dutchman of the name of Van Robais, under the auspices of Colbert; and Abbeville has since continued to be distinguished as one of the most industrious towns in France. Besides black cloths of the best quality, with serges, barracans, &c., there are produced calicoes and stockings, sackings, packthread, cordage, jewellery, &c. It has also establishments for the spinning of wool, print-works and bleeching-works, tanneries, soap-works, a glass-work, a paper manufactory, &c. The tide rises in the Somme about 7 feet, and vessels of from 100 to 150 tons come up to town. Being situated in the centre of a fruitful country, and communicating by canals and roads with all the surrounding district, Abbeville has a considerable commerce.—(*Hugo, France Pittoresque, Dep. Somme.*)

ABBEVILLE, district, S. C., situated in the W. part of the state, and contains 960 sq. m. It has Saluda river on the N.E. and Savannah river on the S.W. Drained by branches of the Savannah river. It had in 1840, 28,642 neat cattle, 12,973 sheep, 54,939 swine. There were produced 93,104 bushels of wheat, 1,135,834 of Indian corn, and 8,526,482 pounds of cotton. It contained twelve commercial and commission houses engaged in foreign trade, sixteen retail stores, ten flouring-mills, forty-two grist-mills, twenty-four saw-mills, eleven academies, with 412 students, fifty schools, with 1115 scholars. Pop., whites 13,880, slaves 15,148, free coloured 323; total, 29,351. Capital, Abbeville.

ABBEVILLE, p. v., capital of Abbeville dist., S. C., 97 m. W. Columbia, 259 W. Situated on a branch of Little river, and contains a court-house, jail, an arsenal, a magazine and a number of stores and dwellings.

ABBEVILLE, p. v., capital of Henry co., Ala., 211 m. S.E. Tuscaloosa, 837 W. It contains a court-house, jail, and about 400 inhabitants.

ABBIATEGRASSO, a town of Venetian Lombardy, prov. Pavia, on the canal of Bereguardo, 14 m. W.S.W. Milan. Pop. 4600. It is fortified; and its position has made it be always regarded of considerable importance in a military point of view.

ABBOT, p. t., Piscatiquis co., Me., 70 m. N. by E. Augusta, 130 N. by E. Portland, 674 W. Watered by Piscatiquis river. Incorporated in 1837, and has twelve schools, 314 scholars. Pop. 661.

ABBOTTSTOWN, p. v., Berwick t., Adams co., Pa., 29 m. S. Harrisburg, 86 W. Situated on Beaver creek, and contains two churches, three stores, and seventy-five dwellings.

ABB'S HEAD (ST.), a promontory on the E. coast of Scotland, being the most southerly point of the Frith of Forth, lat. 55° 54′ 50″ N., long. 2° 8′ 20″ W.

ABELA, ABIL, or ABILA, a town of Syria, in the Hauran, on the *Sheriat-el-Mandhour* (anc. *Hieromax*), one of the largest affluents of the *Jordan*, lat. 34° 47′ N., long. 36° E. It is now in a ruinous and dilapidated state, having probably not more than from 100 to 150 inhabitants; but formerly it was a place of considerable importance, being the capital of and giving its name to one of the six departments (*Abilene*) into which the Romans dividided the country E. of Jordan. Some broken pillars and overthrown columns evince its ancient grandeur; but none of its old buildings remain entire, and it is preserved from desertion only by its vicinity to the water, which renders it a desirable residence for the few Arab families by whom it is still occupied.—(*Robinson, Travels in Palestine and Syria*, ii., 122, 214.)

ABENOJA, a town of Spain, prov. La Mancha, 20 m. S.W. Ciudad Real.

ABER, a sea-port and village of Wales, Caernarvon, where there is a ferry to the island of Anglesea, 9 m. Conway. Pop. 552.

ABERBROTHOCK, or ARBROATH, a sea-port and manufacturing town of Scotland, co. Angus or Forfar, at the mouth of the Brothock water, lat. 56° 34′ N., long. 2° 35′ W. Pop. of borough and parish in 1841, 14,591. Number of £10 houses in borough 184; Parl. constituency in 1837, 445. Arbroath unites with Brechin, Bervie, and Montrose, in returning a m. to H. of C. It has a parish church and two chapels of ease, with churches for Episcopalians, Seceders, Methodists, and Independents. The other public buildings are the town-house, the trades-hall, the public schools, and the signal tower, which communicates with the Bell-Rock lighthouse, distant about 12 miles. The harbour is secure, though small, and of difficult entrance. The town, which is rapidly increasing, owes all its prosperity to the flax manufacture; nearly half the population being employed in the spinning, dressing, weaving, and bleaching of coarse linen goods. Some of the mills are driven by the little rivulet that intersects the town; but steam-mills are numerous, both in the town and the vicinity. Here are the ruins of an abbey, founded in honour of Thomas à Becket, in 1178, by William the Lion, king of Scotland, who, on his death in 1214 was interred within its precincts. It was destroyed in 1560.

ABERCONWAY, or CONWAY. See CONWAY.

ABERDEEN, a maritime co., Scotland, bounded N. and E. by the German Ocean, S. by the cos. of Perth, Forfar, and Kincardine, and W. by Banff, Elgin, and Inverness. Extreme length 86 m. from N. to S., and 42 from E. to W. Area 1,260,800 acres. In the southwestern division, called the district of Mar, are some of the highest mountains of

Scotland. Ben Macdhui rises to the height of 4327 feet above the level of the sea, being only 43 feet lower than Ben Nevis; and several of the other mountains are but little inferior in altitude. About a fifth part of the surface consists of high mountainous tracts; and these, with hills, extensive moors, mosses, and waste lands, occupy nearly two thirds of the entire country. The arable land lies principally in the eastern parts. Principal rivers Dee and Don; and besides these are the Deveron, Bogie, Ythan, Ûrie, Ugie, &c. Limestone abounds in various places; there are quarries of excellent slate; and millstones are found of good quality. Vast quantities of granite are shipped at Aberdeen, particularly for London, where it is used in paving the streets. The mountains of Braemar contain numbers of coloured crystals, or cairngorms; and some real topazes have been met with. The winters, owing to the great extent of sea-coast, are mild; but the summers are usually short and cold. Agriculture is prosecuted with much more spirit and success than might have been supposed. Oats is the principal crop, about 160,000 acres being supposed to be sown with that grain; barley is also raised; and some, though only a little, wheat. The culture of turnips and potatoes is extensively carried on. Several thousand acres of land in the vicinity of Aberdeen have been trenched. The practice is not, however, confined to that district, and large additions are being constantly made to the arable land. Farm-houses and offices are now, with few exceptions, comfortable and commodious. A greater number of cattle are bred in this than in any other Scotch country: the native breed is preferred. They have increased much in size during the last thirty years; and are said, indeed, to have *doubled in weight* since the introduction of turnips! They are commonly black, but there are many red or brindled. Sheep comparatively few, and of a mixed breed. There are some large estates, but property is, notwithstanding, a good deal subdivided. Great diversity in the size of farms. It is usual for mechanics to occupy an acre or two. The woods, which are very extensive, afford shelter to the red deer. Average rent of land 4*s*. an acre. The woollen, cotton, and linen manufactures are carried on to a considerable extent, principally at Aberdeen. There are considerable fisheries on the coast and in the rivers, particularly in the Dee. Principal towns Aberdeen, Peterhead, and Fraserburgh. Parishes eighty-eight. Pop. in 1841, 192,983; inhab. houses in do. 32,193. Returns one member to the H. of Commons. Parl. constituency in 1837, 3066. Valued rental £235,665 Scotch. Annual value of real property in 1815, £325,218 sterling.

ABERDEEN, the capital of the above co., an ancient, distinguished, and flourishing royal borough, situated mostly on rising ground on the N. bank of the Dee, near its mouth; lat. (of Marischal College Observatory) 57° 8′ 38″ N., long. 2° 5′ 41″ W. Pop. in 1821, 44,796; in 1841, 62,960. It acquired trade and importance at a very early period, and made a conspicuous appearance in many of the stormy scenes of Scottish history. The earliest preserved charter is one granted by king William the Lion, about 1179; and the journals of the magistrates and town council have been preserved very nearly entire since 1398. King Robert Bruce bestowed much property upon it: in the civil wars, during the reign of Charles I., it made a conspicuous figure, and suffered greatly. It remained in a nearly stationary state for about two centuries previously to 1750, when it began to increase. It has since been signally improved, especially during the present century, by the extension of its manufactures and trade, and the formation of many new streets, which have superseded many of its old narrow and winding thoroughfares. From the S. Aberdeen is approached by two bridges across the Dee; one of 7 arches of stone, first erected in 1520–6, and rebuilt in 1719–23; the other a suspension bridge of iron, opened in 1830. The roads from these bridges conduct to Union Street, which, with Union Place, and Castle Street, in the same straight line, form a grand entrance of about a mile in length, the houses all of white granite, finely dressed: in one part this street crosses a deep and partly wooded ravine by a bridge of granite of one arch of 130 feet span, opened in 1804. Among the public buildings may be mentioned the assembly rooms, the town-house, court-house and new jail; the E. and W. churches of St. Nicholas; the N. church and others of late erection; St. Andrew's church of the Scottish Episcopalians; the barracks, placed on the castle hill, which in former times was the site of a fort; Gordon's hospital, the bridewell, theatre, infirmary, medical hall, and the new edifice of Marischal college. Besides the latter seminary, there are many public and private academies and schools, among which is the grammar school, established before 1418, the masters of which are appointed by comparative trial. The establishment of a regular post to Edinburgh dates from 1667; a printing press was set up in 1621, and the first almanacks published in Scotland commenced here in 1677. The number of charitable establishments and endowments is great; upwards of seventy being under the management of the magistrates, of which the nett annual revenue, in 1838, was £3084 12*s*. 4*d*. Gordon's hospital supports and educates 140 boys, and has an annual revenue of about £3000; and there are besides an infirmary; a lunatic asylum erected a few years ago at an expense of upwards of £10,000; an institution for deaf and dumb persons; a large hospital for girls about to be opened, and one for the education and support of the blind. An assessment for the poor, after having been long postponed, commenced a few years since in the six parishes of the city and the adjoining one of Old Machar.

Aberdeen occupies a distinguished place in the manufactures and commerce as well as in the literature of Scotland. The town and adjoining country were, during the last century, distinguished for the manufacture of knit woollen stockings, which were exported to the Continent; but the late war, and the introduction of machinery, superseded this branch of industry. There are very large establishments for the spinning of cotton, flax, and wool, in most of which steam power is employed; great quantities of the wool of the country are made into carpets; the cotton manufacture, introduced in 1778, employs nearly 3,000 hands; that of flax about 4,000; in 1838, there were imported 1,390½ tons of cotton, 3,460 of flax, and 1,657½ of wool. Extensive iron works have been established where steam-engines, anchors, chain-cables, and spinning machinery are produced. Ship-building is carried on to a considerable extent, and there are rope-works and sail-cloth manufactories: in the vicinity are paper mills, with tanneries, soap and candle works, distilleries of spirits, and brewhouses which export much porter. The natural productions exported are salmon, which is sent to London in ice, granite, of which the export in 1838 was 19,880 tons, eggs, butter, pork, corn, and live cattle, of which the number exported in 1838 by steam was 7001. The value of the exports coastwise and to foreign parts may be estimated at from a million and a half to two millions sterling; it is increasing steadily and rapidly. On the first of January, 1836, there belonged to the port 359 vessels of the burden of 41,743 tons, navigated by 3,095 men. There is a constant communication by steam ships with London, Leith, Peterhead, Inverness, and the Orkneys. The amount of customs duties in 1835 was £45,134, of postage in 1836, £9,930. There is a canal to Inverary, 18½ miles in length, which conveys chiefly agricultural produce, manure and coal. The harbour of Aberdeen has great natural capabilities, the Dee forming a considerable estuary; it has been in a train of improvement for the last sixty years. There being a bar at the mouth of the river, which sometimes shifts, great exertions have been made to remedy this defect, by the erection of a pier of about 1500 feet in length, projecting into the ocean on the N. side of the river, by a breakwater on the opposite shore, and various subsidiary works. Still, however, the harbour is a tide one, only entered when there is sufficient water on the bar, which has 12 feet at neap, and 16 or 17 at spring tides. The bay affords safe anchorage with off-shore winds, but not with those from the E. A light house has been erected on Girdle Ness, the S. point of the bay. In the interior of the harbour the quays have been greatly extended, the channel of the Dee confined by a massive embankment, and there is in progress the conversion of part of the tide estuary into a wet dock, of large dimensions. The revenue of the harbour, which is managed by a board of trustees, was for the year 1837–8, £15,976 9*s*. 4*d*.; the ordinary expenditure £8713 5*s*.; the expenditure on works in progress £9296 5*s*. 10*d*. From 1810 to 1838 inclusive, there have been expended on the harbour £456,016 16*s*. 10*d*., of which sum the interest of money borrowed amounted to £156,466 16*s*. 6*d*. From the great expenditure on new streets, and the harbour, the affairs of the burgh became involved in 1817, and a disfranchisement ensued, but no permanent loss was sustained, and for many years it has been in good credit. In 1838 the revenue was £17,507 10*s*. 6*d*.; the expenditure £16,661 5*s*. 8*d*., of which about £7500 was for the interest of borrowed money. In 1832, the number of houses was 2588, of which 1280 were of the value of £10 and upwards; since that year, Aberdeen returns one m. to the H. of C. being no longer associated with Arbroath, Brechin, Bervie, and Montrose. In 1837 the constituency was 2530, having increased from 2166 in 1834.

ABERDEEN (OLD), an ancient city, situated about a mile N. of Aberdeen, with which it is nearly connected by a village called Spital. In former times it was the seat of a bishopric, the see of Mortlach having been removed to it in 1154. In 1498 it received a charter from James IV., under which are elected a provost and eighteen other members; in 1715, it became disfranchised, and again in 1723. It is a small place consisting merely of a single street, has no trade, and very little property, its importance depending entirely upon its university. Population in 1831, 1483. The revenue in 1832 was about £42 5*s*., the expenditure £14 6*s*. 6*d*., and there was no debt, but a surplus. Seven trades are incorporated. The chief edifices are the college, cathedral, and bridges across the Don, near which the place is situated.

The buildings of King's College have an antique appearance, and are of different periods; from recent additions and alterations they are in good repair, about £6000 having been expended upon them. The library and chapel are attached to a lofty square tower, surmounted by an imperial crown of open stone work. The cathedral of St. Machar, or Macarius, after whom the parish is named, is an ancient Gothic edifice, chiefly of granite, commenced in the fourteenth century; the choir, transept, and great central tower have been demolished or fallen down upwards of a century ago; the nave remains, and is used as the parish church; at the west end are two finely proportioned stone spires; the roof of the interior also presents a curious relic. Near its mouth the Don forms a small haven, which does not admit any vessels but of a few tons' burden; a little above is the ancient bridge, erected by King Robert Bruce, of one Gothic arch, 70 feet in span, crossing the rocky and woody ravine in which the river flows; between it and the sea is a new bridge of five arches, opened in 1830, the expense of which was defrayed from the funds of the old and less convenient structure.

The *Universities* of Aberdeen are two in number, in each of which one college has been founded. The most ancient is that of Old Aberdeen, founded by Bishop William Elphinston in 1494, under a papal bull of Pope Alexander VI.; its buildings have been noticed above. It early received the name of King's College, instead of that of the Virgin Mary, to whom it was originally dedicated. The other and later seminary was established in 1593, and is called Marischal College, from its founder, George Keith, Earl Marischal. King's College has a principal, sub-principal, and nine professorships. A sum of about £1770 arising from charitable foundations, is annually distributed in different proportions among 134 students, who are called bursars. Marischal College has a principal, ten professors, and two lecturers on humanity and Scots law; in it are also taught medical classes, by five lecturers, appointed by both colleges. About £1200 is appropriated to bursaries, distributed in various amounts, among 107 students. The attendance of students at each college is about equal; those of divinity hear prelections in both, the distance between them being a few yards more than a mile. In session 1837–8, the aggregate number of students in arts, divinity, law, and medicine, was about 700. Both universities have chancellors and rectors and exercise their powers independently of each other; various efforts have been made to unite them into one establishment, but as yet without success. Although their bursaries are numerous, their other revenues are very small. Formerly the univerity of Aberdeen was entitled to copies of all works entered at Stationers' Hall; but in 1836 they relinquished the privilege for an annual payment of £242 14*s*. At present their libraries are exceedingly defective; in Marischal College there is a small museum, an observatory, and an extensive apparatus for teaching natural philosophy. The education given in these seminaries has been highly useful in disseminating knowledge over the N. of Scotland, and raising its intellectual state; particularly in improving the character of the parochial schoolmasters, who having been all at college, are superior to many of their brethren in the southern parts of the country. The cheapness of the education, and the number of bursaries, most of which are given by comparative trial, are inducements to attend; the fees paid by a student who is not a bursar do not amount to more than about £6 yearly, on the average of four years' study in the curriculum of arts; and respectable board may be obtained for about £25 or £30 during the session, which commences in the last Monday of October and ends at the beginning of April, without vacations. Many eminent men have been professors in these universities; among whom may be mentioned Dr. Reid, the author of the Inquiry into the Human Mind; Dr. Gerard; Principal Campbell, author of the Philosophy of Rhetoric, and the new Translation of the Gospels; Dr. Beattie, the bard of the Minstrel; and Dr. Hamilton, author of the celebrated Essay on the National Debt. The new buildings now raising for Marischal College, in order to replace very ineffective and ruinous ones, are on an extensive and elegant plan; government, through the agency of M. Bannerman, M. P. for the city, granted £15,000 towards their erection, and £7500 have been raised by subscription among the alumni and friends of the establishment. It is expected that their completion will lead the way to such additions to the university, and such improvements in teaching science and philosophy as will materially conduce to the benefit of this part of the Empire. (We are indebted for these valuable articles to a gentleman of distinction in Aberdeen).

Aberdeen, p. v., Brown co., O., 123 m. S.W. Columbus, 460 W. Situated on Ohio river, opposite to Maysville, Ky., and contains six stores and sixty dwellings.

ABERDOUR, a parish and village of Scotland, in Fifeshire, on the N. shore of the Frith of Forth, 10 m. N.W. Edinburgh Pop. 1751.

ABERFOYLE, in Scotland, a parish, and a celebrated pass or narrow valley leading into the Highlands, in the district of Monteith, in the S.W. part of Perthshire. The village or clachan of Aberfoyle in this pass is the scene of some of the most interesting adventures in the novel of *Rob Roy*. Pop. of parish 660.

ABERGAVENNY, a town of England, co. Monmouth, at the confluence of the Gavenny with the Usk, 14 m. S.W. Monmouth, 120 m. W. by N. London. Pop. of parish 4220. It is built in a straggling manner; has a fine bridge of fifteen arches over the Usk, and some branches of the woollen manufacture. There are very extensive iron works in the vicinity. On an eminence, near the S. end of the town, are the ruins of its ancient castle.

ABERGELEY, a sea-port and m. town of Wales, co. Denbigh, hund. Isdulas, considerably resorted to of late years for bathing.

ABERNETHY, a parish of Scotland, partly in Fife and partly in Perthshire. It was once the seat of an archiepiscopal see, removed to St. Andrew's in the ninth century. All that now remains of its ancient structures is a round tower 75 feet high, and 16 in diameter. The modern village of Abernethy is small, and the houses mean. Pop. of parish, 1776.

ABERYSTWITH, a sea-port town of Wales, co. Cardigan, at the mouth of the Ystwith, over which is a neat bridge, 178 m. W.N.W. London. Pop. 4128. It stands on an eminence overlooking the bay; and the streets, though well paved and Macadamised, are steep and uneven. It is a place of considerable trade, exporting lead, calamine, oak bark, flannels, &c., mostly to Liverpool; but owing to the shallowness of the water, it is accessible only to small vessels. As there is no market town within 18 m. it has the supply of a considerable adjacent territory. Latterly it has been extensively resorted to in summer for sea-bathing. Public rooms were opened for the accommodation of visiters in 1820, and a new theatre in 1833. It seems to have been once strongly fortified. Its castle, of which some vestiges still exist, was rebuilt by Edward I. in 1277. A considerable extent of fen land to the N. of the town has recently been recovered from the sea.—(*Municipal Boundary Reports, &c.*)

Aberystwith, a parochial chapelry, hund. Abergavenny, co. Monmouth, celebrated for its collieries and iron works, which have greatly increased during the last 20 years.

ABIAD (BAHR EL). See Nile.

ABINGDON, an ancient town of England, co. Berks, at the confluence of the Ock with the Isis, and at the junction of the Berkshire canal with the latter, 55½ m. W.N.W. London. Pop. 5259. It has several well-paved streets terminating in a spacious market-place, having a market-house in the centre. It has two churches, with places of worship for Dissenters, a well-endowed grammar school, and sundry almshouses and charitable endowments. It has a considerable corn market: some trade is carried on in malting, hemp-dressing, &c. During the late war a good deal of business was done in the manufacture of canvass, sacking, and such like coarse articles; but since the peace this employment has materially diminished. It returns one m. to the H. of Commons. No. of houses in 1831, 1114, of which 451 were estimated at £10 a year and upwards. Constituency in 1836, 292. This was formerly a scot and lot borough; every inhabitant assessed to the poor rates exercising the elective franchise.—(*Boundary Reps.*, i., p. 27.)

Abingdon, p. v., Harford co., Md., 52 m. N.E. Annapolis, 62 W. It contains two Methodist churches and an academy. Pop. 120.

Abingdon, p. v., capital of Washington co., Va., 304 m. S.W. Richmond, 372 W. It contains a court-house, jail, four churches, two Presbyterian and two Methodist, one male and one female academy, twelve stores, one flouring mill, one woollen factory, two cotton factories, and 200 dwellings. Pop. about 1000.

ABINGTON, p. t., Plymouth co., Mass., 20 m. S.S.E. Boston, 438 W. It contains three Congregational churches, twenty stores, various manufactures, employing a capital of $163,650, ten schools, with 673 scholars. Pop. 3214.

Abington, p. t., Montgomery co., Pa., 109 m. E. Harrisburg, 149 W. It contains a Presbyterian and a Friends' church, two stores, one flouring-mill, four grist-mills, two saw-mills, three academies, 171 students. Pop. 1704.

Abington, p. t., Wayne co., Ia., 72 m. E. Indianopolis, 505 W. Situated on the W. side of the E. fork of White river. Pop. 923.

Abington, p. t., Wyoming co., Pa., 151 m. N.E. Harrisburg, 257 W. Drained by the S. branch of Tunkhannock creek, flowing into Susquehanna river. It has five stores, two grist-mills, nine saw-mills. Pop. 1770.

ABO, the ancient capital of Finland, near the extremity of the promontory formed by the gulfs of Bothnia and Finland, on the river Aurajocki, by which it is intersected, lat.

60° 26' 38" N., long. 22° 17' 15" E. It was the seat of a university, and has a considerable trade. But in 1827 it suffered severely from a fire, which destroyed the university and above 700 private houses. The university has been since removed to Helsingfors, now the capital of the province. Previously to the fire the town contained about 12,000 inhabitants. It has a gymnasium, a bank, and some unimportant manufactures. A treaty was concluded here in 1743 between Russia and Sweden.

ABOITE, p. t., Allen co., Ia., 120 m. N.E. Indianopolis, 555 W. It contains two schools, thirty-eight scholars. Pop. 235.

ABOMEY, cap. of the kingdom of Dahomey, in Africa, nearly 100 m. N. from the sea, lat. 7° 30' N., long. 2° 17' E. Pop. said to be 24,000.

ABOUKIR, a village of Egypt, with a citadel, on a promontory, about 10 m. N.E. of Alexandria, being supposed by some to occupy the site of the ancient *Canopus*, lat. 31° 19' 44" N., long. 30° 7' 16" E.

ABOUKIR BAY, on the north coast of Egypt, formed on the west side by the point of land on which Aboukir is situated, and on the east by that which lies at the mouth of the Rosetta branch of the Nile. Here, on the 1st of August, 1798, was fought the famous battle of the Nile, when the French fleet that had conveyed Napoleon to Egypt was totally defeated by the British fleet under Lord Nelson; and here also, on the 7th of March, 1801, the English army, under Sir Ralph Abercromby, effected its disembarkation.

ABOUSAMBUL. See IPSAMBUL.

ABRANTES, a fortified town of Portugal, prov. Estremadura, lat. 39° 26' N., long. 8° 15' W., at the S. extremity of a ridge that trends S.W. from the great range dividing the valleys of the Douro and Tagus. Pop. 4514. Its position adapts it admirably for a military station; and Sir A. Wellesley availed himself of its local advantages by resisting there the progress of the French in 1809. (See *Napier*, ii., 317, &c.) It is about ½ m. from the right bank of the Tagus and 72 m. above Lisbon. The hill-side on which the town is built, as well as the hills about, bear vines, olive, peach, and other fruit trees, while the plain eastward produces pumpkins, water-melons, and other vegetables: all these products are carried down the river in barges to the capital, with which this town has very considerable traffic. The trade, now occupying above 100 barges, would be much increased if the navigation were improved. A few small craft go 24 m. higher, as far as Villabella; but the stream is rapid, and the bed much impeded with sand and rocks. The church of San Vincente is the largest and finest in Portugal.—(*Minano*, *Napier*.)

ABRUZZO, an extensive territory of Italy, forming the N.E. portion of the Neapolitan dominions, between 41° 50' and 42° 55' N. lat.; bounded E. (a distance of about 80 m.) by the Adriatic, N. and W. by the Papal dominions, and S. by other provinces of Naples. It is divided into the provs. of Abruzzo Ultra I., Abruzzo Citra, and Abruzzo Ultra II., so called from their position with respect to Naples. The first two, lying along the Adriatic, are divided by the Pescari, and occupy the whole country to the E. of Monte Corno and Monte Prata. Abruzzo Ultra II. is an interior prov., and comprises the whole country included between the others and the Papal states. Their extent, population, and revenue, ordinary and extraordinary, in 1831, were as follows:

	Area.	Population.			Revenue.	
	Sq. m.	Males.	Females.	Total.	Duc.	Grani.
Abruzzo Ultra I. .	976	94,876	96,040	190,916	107,971	60
Abruzzo Citra . .	1068	133,074	132,400	265,474	207,779	27
Abruzzo Ultra II. . .	1908	140,872	138,669	279,541	217,555	32
Totals . .	3952*	368,822	367,109	735,931	533,306	19

The country presents every variety of soil and surface; but the greater part is mountainous, rugged, and occupied by extensive forests. It is traversed throughout its whole extent by the Apennines, and has some of their highest summits. Monte Corno, surnamed *Il Gran Sasso*, or the Great Rock, rises to the height of 9527 feet above the level of the sea, Monte Majella to about 8500, and Monte Vellino to 8397. It is watered by many rivers, most of which fall into the Adriatic; and in Abruzzo Ultra II. is the celebrated Lago Celano, the *Lacus Fucinus* of the ancients (see CELANO, LAKE OF). The climate differs with the elevation of the soil; but though very cold on the mountains, and comparatively hot in the low grounds, it is, speaking generally, temperate and healthy. Along the Adriatic, and in the valleys and plains, the soil is very productive; and large quantities of corn, oil, wine, silk, liquorice, almonds, &c., are produced. Saffron used to be very extensively cultivated in the valley of Aquila, but the quantity raised is now very much restricted. The inhabitants of the mountainous districts are principally engaged in the rearing of sheep and cattle. The upper regions and recesses of the mountains, which cover by far the larger portion of Abruzzo Ultra II., are depastured in the summer season by vast flocks of sheep, brought from the Capitanata and other level provinces more to the S. Their migrations are regulated by law, and are similar to those that take place in Spain and in the S.E. depts. of France. The migratory sheep are supposed to amount, at present, to between 500,000 and 600,000, having been formerly much more considerable. The inhabitants are stout, well-made, healthy, and industrious. The occupiers and labourers, who form the vast majority of the population, are mostly poor, living in miserably dirty huts, feeding principally on Indian corn, and drinking a poor wine. Many thousands of the peasants emigrate every autumn to seek for employment in the Roman and Tuscan Maremme. Manufactures have made but little progress; but woollens, silks, earthenware, &c., are produced. An extensive contraband trade is carried on with the Papal dominions; and the coasting and foreign trade would be much more extensive than it is, were it not that the entire coast is without a single good port. Principal towns, Chieti, Aquila, Teramo, Sulmona, Avezzano, &c. (See the 2d vol. of the *Descrizione, Topografica, Fisica, &c. del Regno delle Due Sicilie*, Napoli, 1835, which is entirely occupied by an account of the Abruzzi: see also Mr. Keppel Craven's *Excursions in the Abruzzi*, 2 vols., Lond., 1838; and Sir R. C Hoare's *Classical Tour*, 4to, 1819.)

ABSECUM, v., Galloway t., Atlantic co., N. J., 95 m. S. Trenton, 105 W. Situated on Absecum creek, 2 m. above Absecum bay, and contains one store and eight or ten dwellings.

ABU-ARISCH, a petty state in the S.W. of Arabia, on the borders of the Red Sea, between 15° 50' and 17° 40' N. lat. and 41° 30' and 43° E. long., consisting of the narrow slip of low land which lies between the coast and the mountain district of *Haschid-u-Bekel*. On the N. it is separated from *El-Hedjaz* by a small district inhabited by wandering tribes of peculiar manners; and on the S. it borders upon the state of *Lohsia*. Its extreme length is about 130 m., and its greatest width from 70 to 80 m. It forms part of the *Tehama* or low lands of *Yemen*, being almost wholly a sandy plain (see ARABIA), extremely hot and dry, destitute of permanent water courses, and preserved from utter sterility only by the abundant rains in the neighbouring mountains, which periodically inundate its otherwise waterless soil. Its principal products are dhourah or barley, which forms the principal food of the inhabitants, and a peculiar and highly esteemed breed of asses.

ABU-ARISCH, a town of Arabia, cap. of the above state, and the residence of the sheriff, lat. 16° 40' N., long. 42° 20' E. It occupies the centre of the principality, being midway between the Red Sea and the mountains, and between its N. and S. boundaries. It is walled; and though its population be not certainly known, it may be safely estimated at from 4000 to 5000. In 1809 its strength and resources deterred the Wahabees from attempting its capture, after the battle in which they defeated the sheriff. Some rocky hills in the neighbourhood yield salt, which is exported.

It seems probable that Abu-Arisch, which at present is 24 m. from the sea, was formerly much nearer to it, if, indeed, it were not once what Gheran now is, the port of this part of Arabia. This is rendered probable as well from the appearance of the surrounding country as from the well-known fact mentioned by Niebuhr, that the coast here is constantly and rapidly gaining on the water.—(*Niebuhr*, *Des. de l'Ar.*, par. ii., p. 232; *Voy. en Ar.*, ii., p. 59.)

ABURY. See AVEBURY.

ABUTIGE, a considerable town of Upper Egypt, on the site of the ancient Abotis, lat. 27° 2' N., long. 31° 23' E. It is the seat of a Coptic bishop, and is celebrated for its opium.

ABYDOS, an ancient city, founded by the Thracians, and subsequently occupied by a colony of Milesians, on the Asiatic side of the Hellespont, where it is narrowest, bearing nearly S. from Sestos on the European side of the strait. It had a commodious harbour, and was strongly fortified. It was here that Xerxes constructed the bridge of boats by which he conveyed his ill-fated host across the Hellespont; and it is distinguished in ancient history for the desperate resistance made by its inhabitants to Philip of Macedon, who, however, partly by force and partly by treachery, succeeded in taking it. But Abydos, and also Sestos, are mainly indebted for their imperishable celebrity to the story of the loves of Hero and Leander, and the melancholy fate of the latter. *Abydos magni quondam emoris commercio insignis est.*—(*Amm. Marcellinus*, lib. i., c. 19.) It was de-

* These are Italian sq. m., 60 to the degree, and are equivalent to 5870 Eng. sq. m., 69·15 to the degree.

stroyed by the Turks; and the fact that the materials were carried 3 m. S. to assist in building the *Sultanie Kalessi*, or old castle of Asia, the strongest fort on the Dardanelles, and its contiguous town, accounts for few ruins being found at Abydos. The modern fort of Nagara occupies its site.—(*Mannert, Geographie; Tournefort, Voyage du Levant*, &c.)

ABYSSINIA, an extensive country of Eastern Africa, of which the boundaries are not well defined, but which may be regarded as occupying the space included between 9° and 15° 40′ N. lat. and 36° E. long. and the Red Sea; having E. the latter, N. Senaar and Nubia, and on the W. and S. Senaar, Kordofan, and other barbarous and nearly unknown countries. It is supposed to include in all above 300,000 Eng. sq. m.

Name.—Abyssinia was included in the Ethiopia (from *αἰθιοψ, a man burned by the sun, or of a dark colour*) of the ancients. The name Abyssina, or more properly Habessina, from the Arabic *Habesch*, signifying a mixture or confusion, has been given to the country by the Arabic and Portuguese geographers, and indicates the supposed Arabic origin of the people, and their subsequent intermixture with the Africans. The Abyssinians do not use this name; and either assume that of the provinces in which they live, or call themselves *Itjopians*, and their country *Menghesta Itjopia*, or kingdom of Ethiopia, a name given it by the Greeks during their ascendancy at Axum.

Face of the Country.—Abyssinia presents great inequalities of surface. It consists principally of a series of plateaus, intersected and separated by mountain ridges. Ritter classes the plateaus under three great divisions. Setting out from the coast of the Red Sea, and traversing the low arid ground by which it is bordered, and ascending the heights or mountains of Taranta, we arrive at the first plateau, or country of the Baharnegash, lying between the Taranta on the E. and the river Mareb on the W. Passing through the Baharnegash and making another ascent, we arrive at the great plateau of Tigré, between the Mareb on the E. and the Tacazze on the W.; but including to the south the mountain regions of Enderta, Wojjerat, Lasta, &c. The last-mentioned country contains the sources of the Tacazze, one of the principal affluents of the Nile. The towns of Adowah and the ancient Axum (see the names), are situated in the middle of the plateau of Tigré. Antalow lies more to the south, in the province of Enderta. The mountains of Samen, on the W. side of the plateau of Tigré, are the highest in Abyssinia, and form, with those of Lamalmon and Lasta, a great but not continuous chain, running N.E. and S.W., and separating the high lands of Tigré from the still more elevated plateau or alpine country of the Habesch or Amhara, including the provinces or countries of Dembea, Gojam, Damot, &c. This region, the highest in Abyssinia, and the nucleus and centre, as it were, of the old empire, contains the sources of the Bahr-el-Azrek, or eastern arm of the Nile, and the great lake of Tzana or Dembea. It has a mean elevation of about 8000 feet, and is fenced and intersected by mountain ridges, of which those of Gojam, from their containing the sources of the E. Nile, are the most celebrated. Gondar, the capital of Amhara, and formerly the residence of the Negus or emperor of Abyssinia, lies a little to the N. of the lake. From this plateau the country shelves down on the W. to the barbarous and unknown regions already alluded to.

The provinces of Efat and Schoa, which now form, with their dependant territories, the most powerful of the Abyssinian states, lie to the S.E. and S. of Amhara. The first is very elevated, part of its waters flowing westward to the Nile, and part eastward to the Hawash. Its chief town is Ankober. The province of Schoa, lying along the southern side of the Nile, is comparatively low, and is renowned for its magnificent pastures and fruitful valleys. It has several towns and some celebrated monasteries. Salt is inclined to think that the Ethiopic language and literature, and the ancient manners of the Abyssinians are preserved in a purer state in these provinces than in any of the others; but they are very imperfectly known.

Exclusive of the above, there is a vast and but little known country in the S.E. part of Abyssinia, between Efat and Lasta, and the Red Sea and the sea of Bab-el-mandeb. It is almost entirely occupied by tribes of Gallas, some of them the most brutified of any to be found in Abyssinia. The country of Nana, at the sources of the Maleg, S.W. from the province of Damot, is one of the most elevated of the African plateaus. Its inhabitants are said to be nearly as white as the Spaniards and Neapolitans.

On the S.E. of Tigré, between it and the low country or province of the Dankali, lying along the Red Sea, and between the fourteenth and fifteenth degrees of latitude, is an extensive salt plain, having, in most parts, the appearance of ice covered with partially thawed snow. The salt is perfectly pure and hard for about two feet deep; but that lying beneath is coarser and softer till purified by exposure to the air. It is cut into pieces with a hatchet; and not only serves to season and preserve food, but even circulates as money. The salt is carried off by caravans, or companies, consisting of from 300 to 600 beasts of burden, and its digging is not unaccompanied by danger from the attacks of the savage Gallas.

Mountains.—Those of Abyssinia have not been accurately measured. They were represented by the early Portuguese travellers and the Jesuits as being of such vast height that, compared with them, the Alps and Pyrenees were mere hillocks! But these exaggerated representations have been since reduced to their proper value. Bruce states, that during his residence he saw no snow in any part of the country, and he even affirms that it is there totally unknown. This, however, was a rash and unwarrantable assertion. It is doubtful, indeed, whether snow be not always to be found on the highest summits and crevices of the mountains of Samen, at all events, Mr. Pearce was overtaken by a snow storm when passing them in the middle of October, and Mr. Salt saw snow on them from a great distance on the 8th of May. It is clear, therefore, that if the highest summits of the Samen do not attain, they approach closely to the line of perpetual congelation, so that their elevation may be fairly estimated at from 12,000 to 13,000 feet. The mountains of Gojam are of very inferior altitude, and are cultivated to the summits. Generally the Abyssinian mountains have a peculiarly abrupt and precipitous appearance. Sometimes they form what are called *ambas* or hill forts, consisting of steep, rocky, and all but inaccessible sides, having on the summit a level surface covered with trees and verdure. The most celebrated of these hill forts is that of Ambu Geshm, formerly used as a place of confinement for the princes of Abyssinia.

Rivers.—Of these the Bahr-el-Azrek, Blue River, or eastern branch of the Nile, is by far the most famous. It rises from two mountains near Geesh in Gojam, being, according to Bruce, in lat. 10° 50′ 25″ N., long. 36° 55′ 20″ E., and at an elevation of 10,000 feet above the level of the sea. Its course is thence N. to the lake Dembea, a large sheet of water, which receives many other streams; but the Nile is said to preserve its waters with but little intermixture with those of the lake, across which its current is always visible. Escaping from this lake it sweeps in a southerly direction round the E. frontier of the provinces of Gojam and Damot, till, between the ninth and tenth degrees lat., it takes a N.W. direction, which it preserves till, at Halfhia, near the sixteenth degree lat., it unites with its other and more important branch, the Bahr-el-Abiad, or White River, flowing from the S.W. (see NILE). The next most important stream is the Tacazze, whose source has been already noticed. It drains the mountains of Samen and Tigré; and pursuing a pretty direct N.N.W. course through Senaar, falls into the Nile near the eighteenth degree lat. The Mareb, which rises in the heights of Taranta, runs nearly parallel to the Tacazze. In the dry season it loses itself in the sand; but Bruce says that in the rainy season it continues its course till it unites with the Tacazze. The Hamazo and Hawash run E. in the direction of the Red Sea; but the latter is swallowed up in the sands before meeting it. Exclusive of the great lake of Dembea or Tzana, already referred to, the lake of Ashangee, on the E. side of the Samen, is also of very considerable size.

Mineralogy.—This is very imperfectly known. Granite and schistus or slate seem to have been extensively observed; and it is probable that these primitive rocks occupy a large portion of the principal chains. In Tigré, the strata are chiefly vertical; but in the mountains of Samen they incline more to a horizontal position. They seem remarkably destitute of metals; the gold which passes through Abyssinia is brought from the barbarous countries on the S. and W.

Climate.—This necessarily differs with the elevation of the country, the direction of the mountains, &c. In the deep valleys and low grounds (*kollas*) the heats are frequently excessive; and this, combined with excess of moisture, renders them unhealthy. But the climate of the plateaus is extremely fine, particularly that of Amhara, which is said to enjoy a perpetual spring, *ver æternum*. The Portuguese found it quite as temperate as that of their own country. According to Ludolph, the natives often attain, in that happy climate, to the age of 100 years and upwards! The climate of Tigré is not quite so mild; but there, also, the great extent of pasturage and of verdant plains shows that the country is not visited by the extreme of heat. The plateau of the Baharnegash is the hottest. In March, Mr. Salt found its air hot and dry, and the beds of the rivers without water. The year is sometimes divided into four, but more properly into *three*, seasons. Winter (*kremt*) is the season of rain, which always falls in great quantities, and often with much violence, rendering rivers and even brooks quite impassable. Harvest (*tsadai*) follows winter; the rest of the year consisting of summer (*hagai*,) or the season of heat and drought.

Races—Population.—The inhabitants of Abyssinia comprise a variety of tribes. They all, however, closely resemble each other in their physical character and manners; and, in respect of bodily conformation, are entirely distinct both from the Negroes and the Arabians. They belong to what has been called the Ethiopic variety of the human race; and their most prominent characteristics will be found described in the article AFRICA, to which the reader is referred. Of the different tribes, the principal are the Tigrani, or inhabitants of Tigré; the Amharans, or inhabitants of Amhara; the Agows, inhabiting the province of Damot; the Efats, occupying the southern bank of the Nile; the Gongas and Enareans, still farther S.; and the Falashas, occupying the mountains of Semen, &c., who profess Judaism, and pretend, though it is believed on no very good grounds, to deduce their origin from Palestine. These tribes are easily distinguished by their language; but it is not clear whether their idioms be really distinct languages, or, which is most probable, only dialectic varieties of a much smaller number of mother-tongues.—(*Prichard on Man*, vol. ii., p. 138, 2d ed.)

The Galinas, or savage tribes, by which large portions of Abyssinia have been overrun, are said to have made their first appearance on the southern frontier in 1537. No doubt they belonged originally to the central parts of the African continent. They have a brown complexion, with long black hair; and their tribes are all independent of, and often at war with, each other. Most of them have adopted the Mohammedan faith, and have partially conformed to the manners of the Abyssinians. They are still, however, distinguished by their greater ferocity. In proof of this, it is sufficient to mention that the young men are denied certain privileges, and are, in fact, contemned by the women, as well as their seniors of the same sex, till they have given proof of their manhood by killing an enemy.

No means exist by which to form any probable estimate of the number of people in Abyssinia. Mr. Salt could obtain no accurate information on the subject. If the country were tranquil, it could hardly fail, owing to the fruitfulness of the soil and the general healthiness of the climate, to be exceeding populous; but the anarchy and civil war in which it is constantly involved more than neutralize these advantages, and keep the population far below its natural level. Its total amount is estimated, in the Weimar Almanac, at 4,500,000; and this, perhaps, is as good a guess as can be made.

Language.—The Gheez, or Ethiopic, a language akin to the Arabic and Hebrew, was the language of Axum, and of the subjects of the Axumite sovereign, at the era of their conversion to Christianity in the 4th century. It is now extant only as a dead language, consecrated to literature and religious uses. The Amharic, or modern Abyssinian, is not a dialect of the Gheez, though it has adopted from it a great number of words, but a totally distinct language. It is probably an ancient African language, and the original idiom of the inhabitants of the south-eastern provinces of Abyssinia. As regards literature and learning, the Abyssinians are at the lowest ebb. The clergy are ignorant, and have no taste for learning. Mr. Gobat thinks that in the country where Amharic is spoken about one fifth part of the male population can read a little, and in Tigré about one twelfth part.

Productions.—The country is very fertile, and has a vast variety of products; among which are, wheat, barley, millet, and other grain. On the high grounds wheat is raised in considerable quantities; but in the low grounds the heat is too strong for it. Barley (*dheurra*) is raised in large quantities; but the principal dependance of the country is on the *teff* (*Poa Abyssinica*), which grows on every soil, except the very lowest, and affords the bread in general use. The plant is herbaceous. From a number of weak leaves rises a stalk about 28 inches in length, and not much thicker than that of a carnation. Out of the top spring a number of branches, which contain the seed or fruit inclosed in a species of capsule. The grains are not larger than the head of the smallest pin, yet so numerous as to constitute on the whole a bulky crop. But the lowest grounds (*kolla*) are unfit even for the production of teff; and on these is raised a species of corn called *tocousso*, which yields a black bread, the food of the lowest classes. There are at least two harvests in the year; and in the same place may at once be seen in progress the operations of ploughing and reaping, with corn in every different stage of advancement. Among the other vegetable products are cotton, of which clothes are usually made; senna, myrrh, &c. The stack of the *enseta*, a species of palm, the banana of Abyssinia, is said, when stripped of its green covering, to be the very best of all vegetable food. It is found in great abundance. Various species of figs, some of them of a very large size, as the *Ficus sycamorus*, are also very plentiful. Citrons, oranges, and sugar-canes are met with in the low grounds, but not on the elevated plateaus. Dates and vines are met with, but neither are supposed to be indigenous. Both are believed to have been imported and cultivated by the Portuguese. At present the vine is grown only in the district of Emfras, on the E. side of lake Dembea, where it produces magnificent grapes. The Abyssinians do not use wine except for the communion table. Tellez says expressly, that in his time the vine was unknown in Abyssinia. The *papyrus*, so celebrated for its furnishing the principal species of paper used by the ancients, is abundant in the lakes and rivers; and Bruce contends that it was thence transplanted to Egypt.

The domestic animals of Abyssinia do not differ materially from those of Europe. The horses, which are the principal wealth of the inhabitants of the plateaus, are strong and active. They are used in war and the chase, mules and asses being used principally as beasts of draught and burden. Oxen are very abundant. The most remarkable species is a native of the low grounds, and has horns of an enormous magnitude, Mr. Salt having seen one 4 feet long, and 21 inches round at the base. It is called the Galla ox, from its being brought to Tigré by the Gallas. Of the wild animals, the most numerous and characteristic is the hyæna, called here the *dubbah*, exceedingly fierce and untameable. In most parts of the country they are found in vast numbers, place travellers in continual danger, and even enter houses. They are not naturally gregarious, yet sometimes assemble in vast troops, attracted by some common object, particularly the scent of dead bodies, which, according to the barbarous custom of the country, are often left unburied. Bruce contradicts the common report of their digging into sepulchres. They are protected by the superstitious belief of the people, who regard them as a species of enchanted men! The elephant and rhinoceros are numerous in the low grounds, and in places full of moisture. They are hunted by the Shangallas, who use their teeth as an article of commerce, and feed upon their flesh. It is a mistake to suppose that any of them have ever been tamed in this country, or, indeed, in any part of Africa. There is a species of rhinoceros with two horns, found only in a few districts. Its horns have no connection with the bone; its skin, which has no folds, is used for shields; the horns for handles for swords, and also as a lining to drinking vessels. The antelope species, which is very numerous, is seldom found in the cultivated districts, but chiefly appear on broken ground near the rivers. The buffalo, domesticated in Egypt and elsewhere, is here one of the most ferocious of animals; he lodges himself in deep and sultry valleys, under the shade of the tallest trees, and near the largest and clearest rivers. The hippopotamus, called *gomari* by the natives, is abundant in the lake of Dembea; but Ludolf affirms that this lake contains no crocodiles. They are both, however, found in the deep pools of the Nile, Tacazze, and other rivers. The crocodiles in the latter are of an enormous size, of a greenish colour, and are more dreaded by the natives than the hippopotamus. The torpedo is found in the rivers and lakes. The lion is found only occasionally. There are several species of leopard. The zebra is frequent in the southern provinces, where its mane adorns the collars of the war horses. A small animal, the jerboa, about the size of a rat, burrows in the fields both here and in Barbary.

The feathered creation in Abyssinia bears more than its usual proportion to the other species. The vast profusion of insects, grains, and plants, even the waste and destruction attending continual wars, afford them an abundant supply of food. The nisser, or golden eagle, perhaps the largest bird of the old continent, and a beautiful species called the black eagle, are particularly noticed by Bruce. To these Salt adds a new species called goodie-goodie, the size of the common falcon. Storks, partridges, snipes, pigeons, and swallows, occur in great number and variety. Bruce never saw a woodcock, sparrow, magpie, or bat; and ostriches are not found in Abyssinia Proper.

Among insects the most numerous and useful are bees. Honey constitutes everywhere an important article of food. Several provinces used to pay a large proportion of their tribute in this article. The honey assumes different appearances, sometimes black, sometimes blood-red, according to the plant on which the insect feeds. Of a very different character is the locust, which commits here ravages quite as terrible as in the other countries of Northern Africa. It sometimes depopulates whole provinces. In the sublime language of the prophet, "*A fire devoureth before them, and behind them a flame consumeth: the land is before them as the Garden of Eden, and behind them a desolate wilderness; yea, and nothing escapeth them.*"

Government—Political Divisions.—The former government of Abyssinia, or that which existed in it when it became known to the Portuguese and the Jesuits, was an absolute and despotic monarchy, in which the emperors, restrained by no written laws, popular assemblies, or privileged classes, had full power to dispose at pleasure of the lives and property of their subjects. But this ancient government

may now be said to be totally extinct. The force of the central government was gradually weakened, partly by the rebellion of the governors of the different provinces, and partly by the irruption of the Gallas and other savage hordes, who have subjugated some of its finest countries. Salt has ingeniously compared the state of Abyssinia in a political point of view to that of England during the heptarchy; and since he visited it anarchy seems to have made a still more rapid progress. The whole country is now split into an endless variety of states, the limits of which are perpetually changing, and between which the most deadly animosities and interminable contests constantly prevail. The kingdoms of Amhara, Tigré, including the country between the Red Sea and the Tacazze, with the provinces of Enderta, Wojjerat, &c., and Shoa, including Efat, are supposed to be at this moment (1837) the most powerful of these states. But we have no exact information as to their boundaries, organization, or condition. They have this in common, that they are all despotisms, and anarchy and bloodshed prevail in them all to a greater or less extent. Schoa, which is now entirely separated from the rest of the country, is said by Mr. Gobat to be less devastated by civil war than either of the others, and to be, in consequence, the least depopulated and most flourishing part of Abyssinia.

Manners and Customs.—This perpetual state of civil war and confusion, and not any peculiar cruelty of disposition, seems to be the main cause of that barbarism and brutality by which the manners of the Abyssinians are characterised. All the feelings by which man is restrained from shedding the blood of his fellows seem entirely blunted. Human life is scarcely more respected than that of brutes. Bruce seldom went out at Gondar without seeing dead bodies lying in the streets, left to be devoured by dogs and hyænas, without being even allowed the rights of sepulture. To show the indifference usually felt on such occasions, he mentions that one day, passing along the streets, he saw an officer of rank about to execute three men who had offended the sovereign. This person, calling to Bruce, begged him to stop till he had despatched this business, as he wished to have a short conversation with him. But the circumstance which seems to place the Abyssinians below even the most savage tribes, is the extreme coarseness of their festive indulgences. Their *brinde* (raw beef) feast has excited the astonishment of all travellers. Alvarez, who visited the country as ambassador from Portugal in 1520, and remained there for six years, describes it as a thing "of which he dare not in a manner speak." Being invited to a feast, he was much surprised, instead of the usual dishes, to see brought in "pieces of raw flesh, with warm blood." The landlord, on seeing his guests show no favour to this savoury dish, ordered other food better suited to their tastes; but immediately began eagerly to devour the flesh, "as if it had been marchpane or comfits." The lady of the house did not appear at dinner; but, in drinking, she "bravely seconded" the rest of the company. Bruce and Salt have furnished still more particular descriptions. The table, which is low, is first covered with successive piles of teff cakes, serving to the guests at once as food and as towels with which to wipe their fingers. The company being then seated, the next process is the slaughter of the cattle, which are standing at the door, and the cutting warm steaks from their flesh. Bruce says that these are extracted while the animal is yet alive, and bellowing under the pain of the wound. But this disgusting circumstance is not mentioned by any of the earlier writers, and Mr. Salt affirms that the head is separated from the body before the operation of slicing commences. Salt, however, as well as Bruce, admits that the luxury of an Abyssinian feast consists in having the pieces brought in while the blood is yet warm and the fibres palpitating. The female who sits next to each chief then wraps up the slice in a teff cake, and thrusts into his mouth as large a quantity as it is capable of containing, which is greedily devoured. All parties drink copiously of hydromel, and bouza, the beer of the country. Having satisfied themselves, they rise, and give place to another company of inferior rank, and these to a third, till all is consumed. The gross indecencies which Bruce represents as perpetrated on these occasions, and which he has described with such revolting minuteness, have been denied by Mr. Salt, and it is hardly possible to suppose that they can be other than rare occurrences. Mr. Gobat, the missionary, admits that a feast such as that described by Bruce may have taken place among the most shameless libertines; but he adds, that "excesses of that kind are not customary either as to their cruelty or indecency." The practice reported by Bruce, and which subjected him to no little ridicule, of cutting steaks from a living animal on a journey, and then closing up the wound and driving it on, appeared at first quite unfounded to Mr. Salt; but in his second journey he witnessed it, and found that it was called by a peculiar name—cutting the *Skulada;* which certainly goes a good way to prove its frequency, though that also is disputed by Mr. Gobat, who denies its occurrence, unless, perhaps, in cases of extreme hunger.

Justice in Abyssinia is altogether barbarous, venal, and corrupt. When a person accused of a criminal offence is found guilty, he is detained in prison till he has made satisfaction to the accuser; or, if he have committed murder, till he be disposed of by the relations of the deceased, who may either put him to death or accept a ransom. The latter is generally fixed at 250 dollars for a man, but the relations are under no obligation to accept it. Mr. Gobat says that the Tacazze is never passed on either side in pursuit of murderers; so that they must very frequently escape without even the pretence of a trial. When a murdered person has no relations, the priests take upon themselves the office of avengers of blood.

Marriage in Abyssinia is a very slight connexion, formed and dissolved at pleasure. The most formal mode of concluding it is, when the lover, having made certain engagements to the parents, and obtained their consent (for that of the bride is seldom asked), seizes her and carries her home on his shoulders. A magnificent feast is then given of brinde and bouza; and at a fixed period of twenty or thirty days afterwards, they go to church and take the sacrament together. It is in a few rare instances only that even this slight ceremony is used. In most cases, mutual consent, and a plentiful administration of raw meat and bouza, form the only preliminaries. The will of either party, or of both, is at any time sufficient to dissolve the connexion. If they have several children they divide them; if they have but one, and he is under seven years of age, he belongs to the mother; if above seven, to the father. Gobat says that after a third divorce they cannot contract another regular marriage, nor partake of the communion *unless they become monks;* Bruce, however, mentions being in company at Gondar, where there was a lady present, with six persons, each of whom had been successively her husband, although none of them stood in this relation to her at the time; nor do either party consider themselves bound to observe with rigid fidelity this slight engagement, even while it lasts. Manners may be considered, in this respect, as in a state of almost total dissolution. Slaves are common in all parts of Abyssinia. They consist of Shangallas, a race of savage Negroes inhabiting the low countries on the N.N.W. and N.E. frontiers. They are very numerous in Gondar and other places of Amhara, and also in Tigré; are well treated, and escape many of the privations to which they are subject in their wild state.

The only display of architectural magnificence in Abyssinia is in the churches. They are built on eminences; are of a circular form, with conical summits and thatched roofs; and are surrounded with pillars of cedar, within which is an arcade, which produces an agreeable coolness. The houses of the sovereigns and grandees are also large and commodious; though, in this warlike country, the camp is considered as their more proper residence. All the houses are mere hovels of a conical form, with a thatched roof. Their dress consists chiefly of a piece of cotton cloth, 24 cubits long by 1½ in breadth, which they wrap round them like a mantle, with close drawers reaching to the middle of the thigh, and a girdle of cloth. Their food consists of the different species of grain already enumerated, fish, fruits, honey, and raw meat at festivals. The most general drink is bouza, a species of sour beer, made from the fermentation of their cakes, particularly those left at entertainments. Tocousso, the coarsest grain, produces bouza equal or superior to any of the others. Hydromel is also made in great quantities. Agriculture, the only art much cultivated, is very far behind the perfection which it has attained even in the most backward parts of Europe. The ploughs, of the rudest construction, from the root or branch of a tree, are drawn by oxen. The land is twice ploughed; after which women are employed to break the clods. In the course of ripening, the corn is carefully weeded. As previously stated, there are two or three crops in the year. The worst grain is commonly used for seed. In general, every family cultivates for itself, and little is brought to market. The poor people live miserably on black teff and tocousso, and even persons of consideration use little except teff and bouza.

The Abyssinians profess Christianity, but it has little influence over their conduct. At present they are split into three parties, violently opposed to each other. They retain a great number of Judaical observances, abstaining from the meats prohibited by the Mosaic law, practising circumcision, keeping both the Saturday and Sunday as Sabbaths, and regarding fasts as essential. But their fasts, though apparently long and rigorous, are dispensed with on payment of a sum of money, according to the rank and wealth of the party. The Coptic patriarch of Cairo continues still to be the nominal head of the church, from whom the Abuna, the resident head, receives his investiture. They have monasteries, both of monks and nuns, who are far, however, from professing

that rigid austerity which is the boast of the Romish church. Their veneration for the virgin is unbounded; and the Catholic missionaries found that they completely outdid in this respect their own ultra zeal. Their saints are extremely numerous, and surpass, in miraculous power, even those of the Romish calendar. They represent them by paintings, with which their churches are lavishly adorned; but they do not admit any figures *in relievo*. The clergy do not attempt to prohibit divorce, or even polygamy, the propensity to which in the nation is probably too powerful to render any prohibition effectual.

Mohammedans, as well as Jews, are also found in Abyssinia. The former appear to have increased since Bruce's visit; at present they are most numerous in Adowah and its vicinity. Few of them have any knowledge of the Koran. They engage more in traffic than the Christians, and have more money. They are said to engross the whole traffic in slaves; the Christians, according to Mr. Gobat, never taking any part in it.

Though low, as compared with Europe, the manufactures of Abyssinia occupy a prominent place among most of the African nations. It supplies itself with all the most indispensable articles. Cotton cloths, the universal dress of the country, are made in large quantities, the fine sort at Gondar, and the coarse at Adowa. Being unable to dye their favourite dark blue colour, they unravel the blue Surat cloths, and weave them again into their own webs. Coarse cloth circulates as money. Manufactures of iron and brass are also considerable, the material being procured from Sennaar, Wakayt, and Berbera; knives are made at Adowah and spears at Antalow. The business of tanning is well understood in Tigré; and at Axum sheepskins are made into parchment. Saddles, and all sorts of horse furniture, are good. The foreign commerce of Abyssinia is carried on entirely by way of Massuah, whence the communication with the interior is maintained by the channel of Adowa. The imports are chiefly lead, block tin, gold foil, Persian carpets, raw silk from China, velvets, French broad cloths, coloured skins from Egypt, glass beads and decanters from Venice. The exports consist of gold, ivory, and slaves. The slaves are reckoned more beautiful than those which come from the interior of Africa.

Progress of Discovery.—The ancients never acquired any accurate knowledge of Abyssinia. To it, along with Sennaar, they, in a peculiar sense, applied the comprehensive name of Ethiopia; for though that term was made to extend generally to the interior of Africa, and even to a great part of Asia, yet *Æthiopia sub Ægypto* was regarded as the proper Ethiopia. Descriptions of Ethiopian nations are given by the ancients at considerable length; but they serve chiefly to show the imperfection their knowledge, and are tinctured with a large admixture of fable. Rennell supposes, seemingly on good grounds, that the Macrobian, or long-lived Ethiopians, said to live farther to the south than the others, belong to Abyssinia. The ancients had no distinct knowledge of more than two Ethiopian kingdoms: the first and only one known to the earliest writers is Meroe, or the Peninsula, which they erroneously supposed to be an island formed by the successive union of the Nile with the Astaboras and the Astapus (Blue River and Tacazze). The chief city of Meroe was placed by them on the Nile, in lat. 16° 26′; and Bruce, in passing through Sennaar, saw, near Chendi, immense ruins, which probably belonged to this celebrated capital of Ethiopia. The other kingdom became known after the Greeks, under the successors of Alexander, extended their navigation along the eastern coast of Africa. It was that of the Axumite, situated upon the Red Sea, and occupying part of Tigré. Its capital, Axum, still remains, and though in a state of decay, exhibits remains so vast as amply to attest its former greatness. The inscriptions discovered here by Salt show that the Axumites had received amongst them the religion and the arts of foreigners, and that they made use of the Grecian language in the inscriptions on their monuments. The port of Axum, Adulis, was the channel by which the finest ivory then known was exported, and a commercial intercourse maintained with the coasts both of the Red Sea and the Indian Ocean. Salt, though unable to visit it, seems to have ascertained its situation near Massoush.

Prior to the middle of the fourth century, Abyssinia was converted to Christianity, which it has ever since nominally professed.

After the rise and rapid spread of Islamism, those of the Egyptians who were reluctant to change their faith being compelled to fly southwards before the sword of the Saracens, Nubia and Abyssinia became filled with Jewish and Christian refugees. And as both these countries were at that time Christian, the Arabian geographers, who have fully described other parts of the continent, make a very slight mention of them; so that Abyssinia remained almost unknown till near the era of modern naval discovery. In 1445, the emperor of Abyssinia sent an ambassador to the senate of Florence, and wrote a famous letter to the priests his subjects at Jerusalem. This, and the favourable reports of the Abyssinian priests now referred to, gave rise to the most exaggerated reports. It was said that a Christian prince, to whom the Portuguese gave the fantastical name of *Prester* or *Presbyter John*, ruled over a vast, highly civilized, and rich empire, in the centre and E. of Africa. This statement inflamed at once the spirit of discovery and of religious zeal, the two ruling principles in that age. The Portuguese monarchs, who took the lead in exploring the eastern world, immediately devised measures for acquiring a knowledge of so remarkable a region. The passage to India by the Cape of Good Hope had not yet been discovered; Abyssinia was therefore viewed as a tract through which the commerce of India might be conducted. Two envoys, Covilham and De Paiva, were therefore sent, under the direction of Prince Henry, upon a mission to explore it. They went by way of Alexandria, and descended the Red Sea. De Paiva perished by some unknown accident; but Covilham, after visiting different parts of India and Eastern Africa, entered Abyssinia, and arrived, in 1490, at the court of the emperor, residing then in Schoa. Being brought before the sovereign, he was received with that favour which novelty, when there is nothing to be feared from it, usually secures; and being a man of address and ability, he contrived to maintain this friendly disposition. The reports which he transmitted of the country were favourable; and having prevailed on the empress-mother to send an Armenian as an ambassador to Portugal, whose arrival excited a great sensation in that country, the Portuguese sent out several other embassies. Of these the most remarkable is that described by Alvarez, in 1520. He remained six years in the country, and traversed it from north to south, visiting the provinces of Amhara, Schoa, and Efat. Paez, Almeyda, Lobo, and several others successively undertook journeys into Abyssinia. Paez, who resided in the country from 1603 till his death in 1622, visited, in 1618, the sources of the Bahr-el-Azrek or eastern arm of the Nile, and describes them nearly in the same terms as Bruce, who absurdly claims the honour of being their discoverer. From the accounts of these and other missions, Telles first (1660), and afterwards Ludolph (1681), principally compiled their histories and descriptions of Ethiopia. Ludolph, who was well versed in the language, derived a considerable part of his information from the communications of Gregory, an Abyssinian monk of the province of Amhara, then in Europe.

Public curiosity, however, with respect to Abyssinia, gradually subsided, till, towards the close of last century (1790), it was revived by the publication of Mr. Bruce's Travels. Many of the circumstances he relates are so very extraordinary as to give to his descriptions a good deal of the appearance of romance. The authenticity of his work was in consequence very generally doubted; and it must be admitted that some of his statements have been shown to be unfounded, and that others are of very questionable authority. But the accuracy of the leading features of his work has been fully established by Mr. Salt and other late travellers.

Our limits will not permit of our attempting to lay before the reader any sketch of the history of Abyssinia; and though we had abundance of space, the subject is too uninteresting to attract attention. Dr. Lee has prefixed a short notice of the church or Abyssinia to the Journal of Mr. Gobat's Residence in that country. An excellent summary of the information as to Abyssinia, contained in the earlier travellers and historians, will be found in the Modern Universal History, vol. xv., p. 1–204, 8vo ed. Besides it, we have consulted, in drawing up this article, the Travels of Bruce, Salt, and Lord Valentia; Mr. Gobat's Journal; the account of Abyssinia in Ritter's Geography; Prichard's Researches on Man, ii., p. 128–164, 3d ed., &c.

ACAPULCO, a celebrated sea-port and town of Mexico, in the intendency of that name, on the coast of the Pacific Ocean, 190 m. S. S. W. Mexico, lat. 16° 50′ 29″ N., long. 99° 46′ W. Pop. 4000 (?). The harbour is one of the finest in the world. "It is familiar," says Captain Hall, "to the memory of most people, from its being the port whence the rich Spanish galleons of former days took their departure to spread the wealth of the Western over the Eastern world. It is celebrated, also, in Anson's delightful Voyage, and occupies a conspicuous place in the very interesting accounts of the Buccaneers: to a sailor, therefore, it is classic ground in every sense. I cannot express the universal professional admiration excited by a sight of this celebrated port, which is, moreover, the very *beau-idéal* of a harbour. It is easy of access; very capacious; the water not too deep; the holding ground good; quite free from hidden dangers*; and as secure as the basin in the centre of Portsmouth dock-yard. From the interior of the harbour the sea cannot be discovered,

* This is not quite accurate. There is one shoal of limited extent on which a vessel was lost in 1781. But, being mentioned in the charts, it is easily avoided.—*Humboldt, Nouvelle Espagne*, iv., p. 99.

and a stranger, coming to the spot by land, would imagine he was looking over a sequestered mountain lake."—(*South America*, ii. p. 172.) There are two entrances to this splendid basin, one on each side of the small island of Roqueta or Grifo, the broadest being nearly 1½ m. across, and the other from 700 to 800 feet. The town, commanded by the "extensive and formidable" (Hall) castle of San Carlos, is poor and mean. Since it ceased to be the resort of the galleons, it has ceased to be of any considerable importance; and, when visited by Captain Hall, had only thirty houses, with a large suburb of huts built of reeds, wattled in open basket work to give admission to the air. The climate is exceedingly hot and pestilential. To give a freer circulation to the air, an artificial cut was made through the chain of rocks by which the town is surrounded. But, though this has been of considerable service, it still continues to be very unhealthy. Its natural insalubrity is increased by the poisonous vapours exhaled from a marsh situated to the E. of the town. The annual desiccation of the stagnant water of this marsh occasions the death of innumerable small fishes; which, decaying in heaps under a tropical sun, diffuse their noxious emanations through the neighbouring air, and are justly considered a principal cause of the putrid bilious fevers that then prevail along the coast. Some trade is carried on between Acapulco and Guayaquil, Callao, &c.; but, owing to the extreme tediousness and difficulty of the voyage from Acapulco to Callao, the intercourse between Mexico and Peru is confined within very narrow bounds.—(*Hall*, loc. cit.; *Humboldt, Nouvelle Espagne*, 2d. ed., iv., p. 88.)

ACCOMAC, county, Va. Situated in the S.E. part of the state, on the E. shore of Chesapeake bay, and contains 480 sq. m. With Northampton co. on the S., it constitutes the eastern shore of Virginia. The soil is mostly sandy, and it contains several islands in Chesapeake bay. It had in 1840, 13,376 neat cattle, 10,251 sheep, and 26,549 swine. It produced 14,479 bushels of wheat, 642,682 of Indian corn, and 4951 pounds of cotton. It has forty-seven stores, forty-nine grist-mills, six tanneries, twenty-six schools with 751 scholars. Pop. whites 9518, slaves 4630, free coloured 2848; total 17,006.

ACCOMAC, p. v., capital of Accomac co., Va., 193 E. by N. Richmond, 197 W. It contains a Methodist church, three stores, three grist-mills, and forty dwellings.

ACERENZA (an. *Acherontia*), a small and very ancient archiepiscopal city of Naples, prov. Basilicata, 14 m. N.E. Potenza. Pop. 3600. It is situated, according to the description of Horace (*Od.* lib. iii., car. 4., l., 14.), on an almost inaccessible hill, *Nidus celsus Acherontiæ*, the foot of which is washed by the Brandano. It has a castle, a cathedral, two convents, a grammar school, and an hospital. The archbishop resides at Matera. This town was looked upon by the Romans as one of the bulwarks of Apulia and Lucania.

ACERNO, a town of Naples, prov. Principato Citra, 16 m. N. by E. Salermo. Pop. 2500. It has a cathedral, a parish church, a *mont de piété*, which makes advances of seed to indigent cultivators, a fabric of paper, and a forge.

ACERRA, a town of Naples, prov. Terra di Lavoro, 9 m. N.E. Naples. Pop. 6300. It has a cathedral, a seminary, and a *mont de piété*. The country is fruitful, but unhealthy. This is a very ancient town. In the second Punic war it was destroyed by Hannibal, the inhabitants having deserted it on his approach. (*Liv.* lib. xxiii., s. 17.) Under Augustus it received a Roman colony.

ACHEEN, a principality occupying the north-west extremity of the island of Sumatra (which see).

ACHEEN, the capital of the above principality, situated near the N.W. extremity of Sumatra, on a river, about 3 miles from the sea, lat. 5° 35′ N., long. 95° 45′ E. It is very populous, being said to contain 8,000 houses built of bamboo and rough timber, and raised on posts, to secure them from inundations. A good deal of trade is carried on with Singapore, Batavia, Bengal, &c. Owing to a bar at the mouth of the river, none but small vessels pass up to the city.

ACHERN, a town of the G. D. Baden, on the Achern, 14 miles N.E. Kehl. Pop. 3000. Within a short distance of Achern is the village of Sassbach, contiguous to which is a granite monument, erected at the expense of the French government in 1830, on the spot where the Marshal de Turenne, one of the greatest generals of modern times, was killed by a random shot on the 27th July, 1675. His bowels were interred in the chapel of St. Nicholas at Achern.—(*Schreiber's Rhine; Biographie Universelle*, art. "Turenne.")

ACHIL, or EAGLE ISLAND, an island on the W. coast of Ireland, co. Mayo, separated from the main land by a narrow channel. It is about 30 m. in circumference, and contains above 23,000 acres. Pop. 5277. It is mountainous; and eagles—whence its name—breed in its inaccessible fastnesses. The inhabitants speak the Irish language, and are in an extremely depressed, miserable condition.

ACHMIN, or ECHMIN, a town of Upper Egypt, on the right bank of the Nile, 230 m. S. Cairo. Pop. 3000. Streets well disposed, broad, and straight, which is very unusual in Egypt; so that this would be a handsome town, were the houses built of better materials than baked bricks cemented with clay. It was anciently called Panopolis, or Chemnis; the former being the Greek, the latter the Egyptian name. It contains a church of some antiquity, and held in much veneration; but its chief ornament is the granite pillars taken from the ruins of Panopolis.

ACHMUNEIN, a large village of central Egypt, prov. Minyeh, on the site of the an. *Hermopolis Magna*, lat 27° 43′ N., lon. 30° 53′ E. In the environs is the portico of an ancient temple, covered with hieroglyphics, and regarded as one of the finest remains of Egyptian architecture.

ACHONRY, a parish of Ireland, co. Sligo, which gives name to a bishopric, now united to Kilala. 16 m. W. Sligo. Pop. of parish 15,357.

ACI-REALE, a sea-port town of Sicily, prov. Catania, cap. cant., at the foot of Mount Ætna, 9 m. N.E. Catania. Pop. 19,762, incl. cant., of which the town may have about 15,000. It stands on a vast mass of basaltic lava, about 800 feet above its port, the *Marina of Aci*, and is supported on arches constructed with great labour and expense through ten alternate strata of lava and earth. The situation is healthy; the town is regularly built, clean, with many churches, convents, and public buildings, the whole giving evidence of a thriving and industrious population. A considerable trade is carried on, particularly during the fair in July, in wine, fruit, gold, filigree-work, cotton, flax, and diaper, the last being bleached in great quantities in the plain below the town on the banks of the Acque Grande. The port is small; the mole is formed out of a mass of lava, and there are some good warehouses. During the servile war Aci-Reale was the head quarters of the consul Aquilius, who succeeded in suppressing that dangerous revolt, anno 101 B.C.—(*Smyth's Sicily*, p. 132, &c.)

ACKEN, a town and castle of the Prussian states, prov. Saxony, on the Elbe, 10 m. E.S.E. Calbe. Pop. 3000. It has manufactures of cloth and tobacco, and tanneries.

ACONCAGUA, a province of Chili (which see). This also is the name of the cap. of the same prov., a town containing about 5000 inhab.—(*Miers' Chi'i*, p. 420.)

ACQUA, a village of Tuscany, 15 m. E. Leghorn, celebrated for its baths.

ACQUAPENDENTE, a small ill-built town of the Papal dominions, 15 m. W. Orvielo. Pop. 2400. It has a cathedral and five churches.

ACQUA-VIVA, town of Naples, prov. Terra di Bari, 18 m. S. Bari. Pop. 5300. It is surrounded by walls, has a handsome parish church, some convents, two hospitals, and a *mont de piété*.

ACQUACKANONCK, p. t., Passaic co., N.J., 10 m. N. Newark, 79 N.E. Trenton, 236 W. Passaic river runs in a semi-ellipsis on its N.W., N.E., and E. border. It has eight stores, one cotton-factory with 1000 spindles, one grist-mill, three saw-mills, one brewery, one academy with 34 students, three schools, 130 scholars. Pop. 2483. The village is at the head of tide-water on Passaic river, and is the outport of Patterson. It contains two Dutch Reformed churches and about eighty dwellings.

ACQUI, or AQUI, a town of the Sardinian States, cap. prov. same name on the left bank of the Bormida, 47 m. E. S.E. Turin. Pop. 6700. It has a citadel, a cathedral, two churches, and a seminary; and is celebrated for its warm sulphurous baths. The inhabitants are principally employed in the silk manufacture.

ACRA, a small district on the Gold coast of Africa, belonging to the Ashantees, nearly under the meridian of Greenwich. The English, Dutch and Danes have forts at Acra.

ACRE, AKKA, or ST. JEAN D'ACRE, a town of Syria, cap. pachalic of same name, on the coast of the Mediterranean, lat. 32° 54′ 35″ N., long., 36° 6′ 5″ E., 33 m. S.S.W. Tsour (an. *Tyrus*), and 35 m. W. lake Tabaria or Genesareth. It is situated on a promontory, forming the N. E. limit of a fine semicircular bay (the Bay of Acre) opening to the N., bounded N.W. by cape Carmel, at the extremity of the mountain of that name. The harbour of Acre, on the S. side of the town, within the bay is shallow, and accessible only to vessels drawing little water; but opposite to Caipha, a small town at the foot of Mount Carmel, on the W. side of the bay, there is good anchorage ground in deep water. Few towns are more advantageously situated as a centre of commerce or seat of political power; but these advantages, by making its possession of importance, have served to expose it over and over again to hostile attacks. The climate is unhealthy; the winter rains, descending in torrents from the mountains, fill the adjacent plain with stagnant lakes, from which, and the decomposition of vegetable remains, constant malaria is produced, forming a striking contrast to the healthy atmosphere of the neighbouring mountain land. Cotton and corn are the chief products of the plain of Acre, and these form its staple exports.

Previously to 1833 the population of Acre was loosely estimated at from 15,000 to 20,000; but the siege of that year having ended in its almost total destruction, it is impossible to state the number of its present inhabitants. The same

same operates to make an account of the place historical, rather than descriptive of its existing state. Even before the period alluded to, a few broken columns of granite, and other dilapidated and neglected relics, were the only remains of antiquity; but of the Gothic age there were, at this epoch, the cathedral churches of St. Andrew and St. John. The mosque of Djemar Pacha was a fine quadrangular building, paved with white marble, and surmounted by a cupola supported on pillars brought from the ruins of Cæsarea. The same governor also constructed a large fountain, of incalculable advantage to the town.* The bazaars were numerous and good, being arched over, and well supplied with commodities. Houses built of stone, and flat-roofed, the terraces on their tops forming agreeable promenades; the more useful, as the streets were extremely narrow. At present, however, Acre is, or at all events within a year or two was, little better than a mass of ruins; of all its buildings, public or private, the fountain of Djezzar was the only one that escaped uninjured from the effects of the siege by the Egyptians in 1832.

Although the modern town be of comparatively recent date, its site has been occupied by buildings from the remotest antiquity. Here stood a Hebrew, or perhaps a Phœnician city, called Accho. Being improved and enlarged by the Greek sovereigns of Egypt, they gave it the name of Ptolemais; and it was justly regarded by them and their Roman successors as a port of great importance. Syria was one of the first conquests of the Mohammedans (*see* ARABIA), into whose hands Ptolemais fell, A.D. 636. It then received the name of Akka, which continues to be its Saracenic appellation. In 1104 it was captured by the first crusaders, and formed for eighty years part of the kingdom of Jerusalem, when it was taken by the famous sultan Saladin. About four years afterwards Richard Cœur de Lion and Philip Augustus appeared before its walls, and after a siege of twenty-two months it surrendered to their arms in 1191. It subsequently remained in the possession of the Christians exactly a century; and under the government of the Knights Hospitallers of St. John attained considerable importance and prosperity. It derived from the magnificent cathedral erected by these soldier monks to their patron saint its common western name of *St. Jean d'Acre*. In 1291, however, the knights were driven from Syria, and Acre was the spot on which their last desperate but useless struggle took place. From 1291 till 1517, it formed part of the Caliphate, when it passed, with the last paltry wrecks of that once mighty power, into the hands of the Turks. Neglected by the government, and exposed to the depredations of every wandering tribe, it continued to decay, till, in the beginning of the 17th century, it was seized by Fak'r-el-din, the celebrated emir of the Druses, under whose wise and energetic government it began to show symptoms of returning prosperity; but in the latter part of his life Fak'r-el-din, apprehending a Turkish invasion, destroyed the harbour, and thus left the place in a worse condition than that in which he found it. Another century of decay and misery ensued, till, in 1749, the Bedouin Arab Daher expelled the Turkish aga, and made Acre the capital of a territory which for more than twenty years was virtually independent of the Porte. Daher partially fortified Acre, partly cleared its ruins, and settled colonies of Greek and Mussulman farmers, harassed and despoiled in the neighbouring countries, in the surrounding plain. On Daher's fall in 1775, Acre reverted to the dominion of the Turks. For once, however, the change of masters was not productive of ruin. Djezzar, who was immediately appointed pacha, how inferior soever to Daher in personal character, seems to have resembled him in his political energy, promptness, and decision. He strengthened the fortifications, and embellished the town. The determined and successful resistance which it made in 1799 to the arms of Napoleon has rendered it famous in modern history. There is, indeed, good reason to think that the termination of the siege had a powerful influence over the future fortune of that extraordinary person, and consequently of the world. (See *Voyage du Maréchal Marmont*, iii., p. 76, &c.) Acre continued to prosper till 1832. Though fettered by imposts and monopolies, it carried on a considerable foreign trade, and had resident consuls from most of the great states of Europe. During its siege by Ibrahim Pacha in 1832, which lasted five months and twenty-one days, its private and public buildings were mostly destroyed. But its great importance to its Egyptian masters has already made them repair its fortifications, and render them stronger than ever; and no doubt also its streets and houses will be again re-opened and rebuilt.—(*Volney's Travels in Syria*, ii., passim; *Robinson's Travels in Palestine and Syria*, ii., 196–201; *Hogg's Visit to Alexandria*, ii., 159–172; *Russell's Palestine*, 317–357; *Voyage du Maréchal Marmont*, iii., p. 76–83.

ACRI, a town of Naples, prov. Calabria Citra, cap. cant., on the Mucone, in a healthy situation, 12 m. N.E. Cosenza. Pop. 7000. It has six parish churches and an hospital. The surrounding country is very fruitful.

ACTIUM. See ARTA, GULF OF.

ACTON, a village and parish of England, formerly resorted to for its mineral waters. Pop. 1929, 5 m. from London.

ACTON, p. t., York co., Me., 91 m. S.W. Augusta, 520 W. Salmon Falls River bounds it on the W. It has three stores, four grist-mills, five saw-mills, and 489 scholars in schools. Pop. 1401.

ACTON, t. Windham co., Vt., 18 m. N.W. Brattleboro, 90 S. Montpelier. It has four schools with 51 scholars. Pop. 170.

ACTON, p. t., Middlesex co., Mass., 22 m. N.W. Boston, 462 W. Watered by Assabet River. Incorporated in 1735, and has two churches, one Congregational and one Unitarian, four stores, one flouring-mill, two grist-mills, three saw-mills, five schools, 337 scholars. Pop. 1121.

ACUL, an inconsiderable seaport town of Hayti, on its N. coast. Lat. 19° 47′ 40″ N., long. 73° 27′ 13″ W. It was called St. Thomas by Columbus.

ACWORTH, p. t., Sullivan co., N. H., 46 m. W. Concord, 460 W. Watered by Cold river. Incorporated in 1712, and contains two stores, one woollen factory, and has 520 scholars in schools. Pop. 1150.

ADA, p. t., Kent co., Mich., 158 m. N.W. Detroit, 639 W. Watered by Thornapple river, flowing into Grand river, which crosses its N.E. corner. The v. is situated on Thornapple river, which affords water power near its entrance into Grand river.

ADAIR county, Kentucky, situated centrally in the south part of the state, and contains 440 sq. m. Drained by Green river and its branches. It had in 1840, 9108 neat cattle, 12,263 sheep, and 31,192 swine, and produced 27,888 bushels of wheat, 308,103 of Indian corn, and 1,030,116 pounds of tobacco. It has ten stores, ten tanneries, nineteen distilleries, five flouring-mills, nineteen grist-mills, twelve saw-mills, eleven schools, and 212 scholars. Pop., whites 6769, slaves 1605, free coloured 92; total 8466. Capital, Columbia.

ADAIR county, Mo., situated in the N. part of the state, and contains 567 sq. m. Drained by Chariton river. Erected in 1840. Capital, Hopkinsville.

ADALIA, or SATALIEH, a sea-port town of Turkey in Asia, Anatolia, cap. Sanglack Teké-ili, on the gulf of the same name, near the mouth of the Douden-sou, lat. 36° 52′ 15″ N., long. 30° 45′ 3″ E. Pop. 8000 (?), two thirds Turks and one third Greeks. It is finely situated, being built amphitheatre-wise round a small harbour on the declivity of a hill, the summit of which is surmounted by a castle. It is enclosed by a ditch, a double wall, and a series of square towers about fifty yards apart. Streets narrow, and houses mostly of wood. It is the residence of a pacha and of a Greek archbishop; and has numerous mosques, churches, baths, caravansaries, &c. The surrounding country is beautiful, and the soil deep and fertile.

Adalia is supposed to occupy the site of the ancient Olbia; and the fragments of columns and other remains of antiquity found within its walls attest its former flourishing state. (*Beaufort's Karamania*, p. 126; *Dict. Geographique*, &c.)

ADAMS, cape, the S. point of land at the mouth of the Columbia river, on the Pacific. A sand-bar, five m. across, extends from it to within a mile of Cape Disappointment, which is seven m. N.W. This bar renders the entrance of the river dangerous.

ADAMS county, Pa., situated in the S. part of the state, and contains 528 sq. m. The surface is uneven; soil fertile. It contained in 1840, 19,343 neat cattle, 19,140 sheep, and 31,583 swine. There were produced 216,606 bushels of wheat, 290,724 of Indian corn, and 274,960 of oats, and considerable buckwheat, barley, and potatoes. It has fifty-nine stores, three furnaces, five woollen-factories, twenty-eight tanneries, eighteen distilleries, two breweries, forty-two flouring-mills, forty grist-mills, seventy-six saw-mills, five printing-offices, two colleges, 190 students, one academy, 42 students, ninety-seven schools, 4065 scholars. Pop. 23,044. Capital, Gettysburg.

ADAMS county, Miss., situated in the S.W. part of the state, and contains 440 sq. m. Mississippi river bounds it on the N.W. It had in 1840, 22,033 neat cattle, 4741 sheep, and 4553 swine. There were produced 196,596 bushels of Indian corn, and 20,292,470 pounds of cotton, with considerable oats, potatoes, &c. It has eighteen foreign commercial and commission houses, 112 retail stores, four

* However bloodthirsty and selfish, it is evident, from the accounts of those who were little inclined to partiality, that Djezzar (the *butcher*) Pacha possessed many of the qualities that constitute an able and energetic ruler. Under his firm, though iron sway, the pachalic rose to an importance which made it be respected alike by the Porte and by all the unruly spirits in the neighbourhood. When his own passions did not interfere, he saw clearly and advanced steadily the interests of those beneath his government, as the public buildings he erected and his steady encouragement of European trade sufficiently evince. His subjects, too, were safe from all oppression except *his own*; a species of security which, though little valued in Europe, is no light matter in many parts of the East.

saw-mills, two printing-offices, at which are issued two daily, two weekly, and one semi-weekly newspapers; one college, ninety students; seven academies, 311 students; thirteen schools, 269 scholars. Pop., whites 5010, slaves 14,941, free coloured 283; total, 19,434. Capital, Natchez.

Adams county, O., situated in the south part of the state, on the Ohio river, and contains 550 sq. m. Watered by the Brush river, along which is iron ore. It had in 1840, 17,839 neat cattle, 20,550 sheep, and 17,470 swine. There were produced 136,292 bushels of wheat, 211,049 of Indian corn, 102,545 of oats, and 32,510 pounds of sugar. It has fifty-two stores, two furnaces, six tanneries, six flouring-mills, ten grist-mills, ten saw-mills, ten schools, 284 scholars. Pop. 13,183. Capital, West Union.

Adams county, Ia., situated in the E. part of the state, and contains 336 sq. m. Watered by Wabash and St. Mary's rivers. It had in 1840, 2194 neat cattle, and 4319 swine. There were produced 3948 bushels of wheat, 36,688 of Indian corn, and 15,588 pounds of sugar. It has three stores, one grist-mill, two saw-mills, three schools, 35 scholars. Capital, Decatur. Pop. 2264.

Adams county, Ill., situated in the W. part of the state, and contains 768 sq. m. Bounded W. by Mississippi river. It had in 1840, 19,312 neat cattle, 13,093 sheep, and 49,391 swine. There were produced 143,865 bushels of wheat, 721,565 of Indian corn, 154,577 of oats, and 7269 pounds of tobacco. It has four commission houses, fifty-six stores, four flouring-mills, fourteen grist-mills, twenty-four saw-mills, one woollen-factory, two breweries, four printing-offices and one weekly newspaper, one academy, 60 students, 101 schools, 2794 scholars. Capital, Quincy. Pop. 14,476.

Adams, p. t., Berkshire co., Mass., 20 m. N. Pittsfield, 132 W.N.W. Boston, 392 W. It has two villages. The N. village contains three churches, one Congregational, one Baptist, and one Methodist, and a bank. The S. village has three churches, one Baptist, one Friends, and one free to all denominations. Hoosack river affords great water power to the town, and it contains eighteen stores, fourteen cotton-factories, with 18,320 spindles, one dyeing and printing establishment, one furnace, five tanneries, two grist-mills, six saw-mills, one academy, 45 students, eighteen schools, 735 scholars. Pop. 3703. There is a curious natural bridge over Hudson's brook, a branch of Hoosack river.

Adams, p. t., Jefferson co., N.Y., 162 m. N.W. Albany, 403 W. Watered by Sandy creek, which has a fall of fifteen feet, producing a good water power. It has ten stores, one woollen factory, one flouring-mill, two grist-mills, three saw-mills, fifteen schools, 581 scholars. Pop. 2966. The village contains one Methodist and one Presbyterian church, a female seminary, and about 120 dwellings.

Adams, t., Coshocton co., O. It contains one grist-mill, two saw-mills, one school, 25 scholars. Pop. 838.

Adams, t., Guernsey co., O. Pop. 867.

Adams, t., Henry co., O. It has two schools, 34 scholars. Pop. 188.

Adams, t., Washington co., O. Watered by Muskingum river. It has six schools, 200 scholars. Pop. 792.

Adams, t., Seneca co., O. It has two stores. Pop. 1250.

Adams, t., Allen co., O. It has two schools, 35 scholars. Pop. 363.

Adams, t., Monroe co., O. Pop. 898.

Adams, t., Muskingum co., O. Pop. 988.

Adams, t., Darke co., O. Pop. 687.

Adams, t., Champaign co., O. It has one store, two saw-mills, five schools, 93 scholars. Pop. 970.

Adams, p. t., Hillsdale co., Mich., 93 m. S.W. Detroit, 533 W. It has four schools, 174 scholars. Pop. 534.

Adams, p. t., Decatur co., Ia., 54 m. S.E. by E. Indianopolis, 557 W.

Adams, t., Hamilton co., Ia. Pop. 512.

ADAM'S PEAK, the highest mountain in the island of Ceylon, altitude 6152 feet; 45 m. E.S.E. Columbo. It has a sugar-loaf shape; and its summit, supposed to be the point where Buddha ascended to heaven, is esteemed sacred, and is resorted to by pilgrims.

ADANA, a town of Asia Minor, the capital of a district or government of the same name on the Sihon (*Sarus*), about 25 m. above where it falls into the sea, lat. 36° 59′ N., long. 35° 16′ E. Pop. 10,000. It is very ancient, stands on a declivity, surrounded on all sides by groves of fruit-trees and vineyards; is large, well-built; has a castle; a bridge over the river, said to have been built by Justinian; and a most noble portico in the middle of the bazaar. It carries on a considerable trade in wine, fruits, and corn. In summer it is rather unhealthy, and the majority of the inhabitants retire to the country.—(*Kinneir's Asia Minor, &c.*, p. 131.)

ADANAD, a town or place of Hindostan, prov. Malabar, div. Shirnada, the residence of a class of Brahmins called Namburies. This sect refuse to eat or drink with other Brahmins. The elder sons marry as many wives as they can support, and live with them; but the younger sons of the family seldom marry, in order to prevent the decline of their dignity by their becoming too numerous.

ADARE, an ancient town of Ireland, co. Limerick, with some fine ruins, now very much decayed, situated on the Maig, over which it has a bridge of nine arches; 130 m. S.W. Dublin. Pop. 766.

ADDA, a celebrated river of Italy, formed by the junction of several rivulets near Bormio, in the Valteline. Having traversed the province, it passes Sondrio, enters the lake of Como near its northern and issues from its southern extremity, and passing Lodi and Pizzighettone, falls into the Po six m. W. Cremona.

ADDISON, county, Vt., situated in the W. part of the state, and containing 700 sq. m. Lake Champlain bounds it on the W. Watered by Otter cr. and its tributaries. This river is navigable 7 m. from the lake, and affords excellent water power. There were in the co. in 1840, 261,010 sheep, 39,718 neat cattle, and 14,305 swine; and there were produced 31,322 bushels of wheat and 95,204 of Indian corn; 449,079 of potatoes, besides considerable rye, buckwheat, and 132,013 pounds of sugar: has seventy stores, one furnace, eight forges, twenty fulling-mills, seven woollen factories, one cotton factory, with 3860 spindles, one glass factory, seventeen grist-mills, sixty-three saw-mills, one paper-mill, three printing-offices and three weekly newspapers, one college, 62 students, five academies, 134 students, 177 schools, 6449 scholars. Pop. 23,583. Cap. Middlebury.

Addison, p. t., Washington co., Me. 138 m. E. by N. Augusta, 720 W. It has thirty stores, one grist-mill, two saw-mills, six schools, 450 scholars. Pop. 1053.

Addison, p. t., Addison co., Vt., 12 m. W.N.W. Middlebury, 72 S.W. Montpelier, 483 W. The surface is level; soil fertile. Bounded W. by lake Champlain. It contains a Congregational church, two stores, one fulling-mill, one grist-mill, one saw-mill, ten schools, 260 scholars. Pop. 1338.

Addison, p. t., Steuben co., N. Y., 18 m. S. Bath, 227 W. by S. Albany, 292 W. It has two stores, one printing-office, issuing a weekly newspaper, one academy, 120 students, ten schools, 463 scholars. Pop. 1920.

Addison, p. t., Somerset co., Pa., 153 m. S.W. Harrisburg, 170 W. Watered by Youghlogheny river, and contains ten stores, one grist-mill, eight saw-mills, three distilleries, three tanneries, two schools, thirty scholars. Pop. 1301.

Addison, p. t., Gallia co., O., 107 m. S. by E. Columbus, 354 W. Bounded S.E. by Ohio river. Pop. 692.

Addison, t., Oakland co., Mich. It has one store, one flouring-mill, one grist-mill, one saw-mill, five schools, 125 scholars. Pop. 537.

ADELSBERG, a village and cavern in Illyria, about half way between Laybach and Trieste. The cavern is decidedly the most magnificent and extensive hitherto discovered in Europe. It has been explored to a distance of between 1 and 2 miles (1310 fathoms) from the entrance, and is terminated by a lake. It is believed, however, that this is not the end of these vast hollows, and that, were it carefully examined, its extent would be found to be much greater. The cavern is placed under the care of an officer in the adjoining village, who appoints guides to conduct strangers through it. It is easily accessible, and may be visited without any risk. The entrance is situated about a mile from the village, in the face of a cliff, below a ruined castle. At this point the river Polk, after winding through the plain, disappears beneath the mountain, sinking into the rock below a natural penthouse formed by the slope of the limestone strata. The entrance for visiters is a small hole above this, closed by a door. At a distance of 180 yards from the mouth, a noise of rushing waters is heard, and the Polk may be seen, by the light of the taper, struggling along at a considerable depth below; and, on a sudden, a vast hall 160 feet high, and more than 300 long, called the Dome, is entered. The river, having dived under the wall of rock on the outside, here re-appears for a short space, and is then lost in the bowels of the mountain. It is believed to be identical with the Unz, which bursts forth at Planina; planks of wood, thrown into the stream of the cavern, appear there, it is said, after ten or twelve hours.

The Dome was the only part of the cavern known down to 1819, when a labourer, working in the cave, accidentally broke through a screen of stalactite, and discovered that this was, to use the words of Russel, "but the vestibule of the most magnificent of all the temples which nature has built for herself in the region of the night." Rude steps, cut in the rock, lead down the sloping sides of this chamber to the level of the river, which is crossed by a wooden bridge; and the opposite wall is scaled by means of a similar flight of steps. Here the visiter enters the newly-discovered part of the cavern, consisting of a range of chambers varying in size, but by far the most interesting, from the variety, beautiful purity, and quantity of their stalactites. Sometimes uniting with the stalagmite below, they form a pillar worthy to support a cathedral; at others a crop of minute spiculæ rises from the floor; now a cluster of slender columns re-

minds one of the tracery of a Gothic chapel, or of the twinings or interlacings of the ascending and descending branches of the banyan tree. The fantastic shapes of some masses have given rise to various names, applied by the guides, according to the likeness which they imagine they can trace in them to real objects; such as the throne, the pulpit, the butcher's shop, the two hearts, the bell, which resounds almost like metal, and the curtain (Vorhang), a very singular mass about an inch thick, spreading out to an extent of several square yards, perfectly resembling a piece of drapery, and beautifully transparent. The stalactical matter pervades almost every part of the cavern; it paves the floor, hangs in pendants from the roof, coats and plasters the wall, cements together fallen masses of rock, forms screens, partitions, and pillars. The only sound in the remote chambers is produced by the fall of the drops of water charged with lime, which are found, on examination, to tip each pendant mass, forming an ascendant spire, or stalagmite, on the spot where it descends. One of the long suite of chambers, larger and loftier than the rest, and with a more even floor, is converted once a year (in May) into a ball-room. On that occasion the peasant lads and lasses assemble from miles around, and the gloomy vaults re-echo with sound of mirth and music.—(*Murray's Handbook for Southern Germany*, p. 289.)

ADEN, a small state of S. Arabia in Yemen, lying between 12° 32' and 13° 3' N. lat., and between 43° 30' and 45° 30' E. long. It extends from E. to W. about 115 m., its greatest width being about 30. The mountains in this part of Arabia are close upon the sea, and, for an Arabic district, it is well supplied with water; and from both these causes the heat of the climate is considerably mitigated, and vegetation flourishes upon a more extended scale than in most other parts of the peninsula. It has a considerable forest. The cultivated parts produce wheat, dhourah, and cotton; the woods consist of mangoes, sycamores, and pomegranates, and the surface of the whole country is interspersed with date trees. Wellsted (*Travels*, ii., 409) states that in purity of atmosphere, richness of soil and verdure, nature of vegetation, and proximity of production and desolation, this country resembles Egypt. The barren parts are represented as *peculiarly* so; but they occur in comparatively small patches, and in the midst of fertility. The inhabitants are mostly agriculturists; but such is the miserable state of the country, that the husbandman never goes to his labour without being armed, and resorts to the towns for security during the night. The town inhabitants of the interior carry on an extensive trade with the Bedouins, who bring to market their ghee (butter), frankincense, and milk, receiving in return grain and cloth. Manufactures limited to a fine striped cloth or silk, used for the dresses of the superior classes, the weaving of which occupies about thirty looms in the town of Lahedeje.—(*Niebuhr, Descr. del' Ar.*, par. ii., p. 221, 222; *Voy. en Ar.*, ii., p. 52, 53; *Wellsted's Travels in Arabia*, ii., 400–411.)

ADEN, a sea-port town of Arabia, cap. of the above state, on the Indian Ocean, lat. 12° 45' N., long. 45° E. It stands upon a lofty promontory, called the *Peninsula of Aden*, connected with the main land by an isthmus about 200 yards in breadth. When Salt was here, in 1809, this isthmus was overflowed at every high tide, and constant communication between Aden and the main land was preserved only by a large causeway of seven arches. A striking proof of the rapidity with which buildings vanish and coast lines change, in Arabia, is afforded by the fact, that on Wellsted's visit to the same spot in 1835, the causeway existed only in an "old map;" the isthmus was never under water, but a narrow channel, still farther to the S., separating Aden from the rocky islet of Sirah, became dry at every ebb tide. On the N. and W. the town is overhung by a steep and craggy mountain, on the pinnacles of which are several towers, now all but inaccessible, the decaying nature of the rock having made the ascent much more precipitous and abrupt than it was when they were built. The E. or outward harbour of Aden, formerly (and apparently at a recent period) large and commodious, is now nearly filled up with sand; but the water which washes the W. and N. sides of the promontory, called "*Aden Back Bay*," affords a convenient and secure haven. From this the approach to the town, situated 2½ m. S., is over a low ridge of the mountain, and in some parts is cut through the solid rock. Strong fortifications formerly existed, now buried in sand, or falling into rapid decay; and some enormous guns, which once formed an impregnable battery towards the sea, now serve only as memorials of departed strength and greatness. In the 17th century Aden had a population of 30,000; at present the inhabitants do not probably exceed 800, of whom 250 or 300 are Jews, and about half that number Banian Indians.

About 100 houses, with some wretched huts and three or four minarets, the mosques belonging to which have fallen, are the only buildings remaining in Aden; the rest of its area is occupied by heaps of rubbish, tombs, mounds, and the roofless walls of older dwellings. In 1707, De la Roche noticed some spacious baths, lined with jasper, and surmounted by domes; but these have entirely vanished. There are reservoirs, however, of solid masonry, sixty-eight feet long and twenty deep; cisterns cut in the solid rock, three of which are eighty feet square; and aqueducts to bring the water from the upper parts of the mountains, all evincing that Aden was once the home of industry, wealth, and science.

This town, or one occupying its site, was known to the Greeks as the channel through which the treasures of India were conveyed to the coast of Egypt. Some time after the direct passage across the Indian Ocean had been achieved by Hippalus, A.D. 50, the Romans, to secure the monopoly of the Indian trade, caused Aden to be destroyed. When or by whom it was rebuilt is unknown; but from the 11th till the 16th century it was the great, or rather the exclusive, entrepôt of Eastern commerce. The discovery of the passage by the Cape of Good Hope was the first great blow to its importance; and simultaneously with the appearance of the Portuguese in India, the Turks under Solyman the Magnificent took possession of many Arabic ports, Aden among the number. The Turks erected the fortifications, the ruins of which excite the admiration of every traveller, and which repelled the attacks of the famous Portuguese general Albuquerque. From this date, however, Aden has declined; nor did the expulsion of the Turks, which took place in the middle of last century, retard its downfall. Its ruin seems more complete than could have been anticipated; for its convenient harbours and plentiful supply of water make it a desirable port. But, though it be still the chief mart for the myrrh, aloes, libanum, mastich, and other commodities brought by the Soumalee traders from the N.E. coast of Africa, not more than twenty families are engaged in commerce; the rest gain a miserable subsistence by supplying the shipping and Hadj boats with wood and water, or by fishing. The exports consist of rice, tobacco, and cloth, brought by the Hadj boats. The African trade is carried on wholly in Soumalee bottoms (see ARABIA), and nearly all the resident merchants are Banians.

We have been thus particular in noticing the past and present state of Aden, because it is most probably destined again to become of very material importance. It is understood that the town, and the peninsula on which it is built, have been ceded to the E. I. Company, who intend making it a depôt and halting-place for the steamers employed in the passage between Bombay and Suez. It is admirably situated for such a purpose. And its natural strength, the excellence of its ports, and its convenient situation for commerce, will no doubt render it, when under British rule, a flourishing emporium. It is quite as well situated as Mocha for carrying on the trade in coffee; of which it will, most likely, come to be the centre.

One of the few perennial streams of Arabia, the Meidan, is in the state of Aden, and falls into the sea at Sheik Ahmed, 5 m. W. of the town. Niebuhr describes this river, but doubts have since been entertained with regard to its existence. The recent visit of Mr. Wellsted has, however, established the perfect accuracy of Niebuhr's statement.

But the abundant supply of water, for which Aden is remarkable among Arabic towns, is drawn, not from this river, but from the ravines and gulleys of the surrounding mountains; and from the land springs, which are abundant on the sea shore.

Aden is 180 m. S.S.E. Sanaa, and 140 m. E.S.E. Mocha.—(*Niebuhr, Descr. del'Ar.*, par. ii., p. 221, 222; *Voy. en Ar.*, ii., 51, 52; *Salt, Voy. to Abyss.*, p. 105–111; *Wellsted*, ii., 382–399.)

ADJYGHUR, a town of Hindostan, prov. Allahabad, lat. 24° 50' N., long. 80° 3' E. It has a fortress at the top of a steep hill, that was taken by the British in 1809, after a stout resistance.

ADIGE, a large river of Italy, the *Atesius* or *Athesis* of the ancients. It is formed by several rivulets which have their sources in the Rhetian Alps, and unite near Glurns; thence it flows E. till near Bolzano it is joined by its important tributary, the Eisack. It then takes a southerly course past Trent, where it becomes navigable to Roveredo and Pontone. It then changes its course to the E., and passing Verona, Legnago, and Aquileia, falls into the Adriatic 20 miles S. Venice. It is deep, rapid (*Velox Athesis*, Claud.), and is usually navigated with difficulty. In spring, on the melting of the snow in the mountains, it is liable to sudden floods, to prevent the injurious influence of which in the Polesino of Rovigo and other low grounds, it is fenced by strong banks, while a part of the surplus water is carried off by canals. Exclusive of the Eisack, its principal affluents are the Noce, Aviso, and Agno.

ADIRONDACK MOUNTAINS, N. Y., lying S. W. of Lake Champlain, and are nearly as high as the White Mountains, N. H., Mount Marcy, the highest peak, being 5467 feet above tide-water in the Hudson river.

ADMIRALTY ISLAND, an island on the W. coast of America, between George the Third's Archipelago and the continent, about 90 m. long and 25 broad. Lat. 57° 2′ to 58° 24′ N., long. 225° 10′ to 226° 31′ E.

ADMIRALTY ISLANDS, a cluster of twenty or thirty islands in the South Pacific Ocean, of which the largest, called Great Admiralty Island, is 55 to 60 m. in length: in about 2° 10′ S. lat., and from 126° to 128° E. long. They were discovered by the Hollanders in 1616, and are inhabited.

ADORF, a town of Saxony, on the Elster, 15 m. S. E. by S. Plauen. Pop. 2500. It manufactures all sorts of musical instruments, with cloth and cotton stuffs.

ADOUR, a considerable river in the S.W. of France. It has its source in the Pyrenees, 6 m. E. Bareges, whence it flows N. by Bagneres and Tarbes to Oise; here it takes an easterly course, and passing St. Sever, Dax, and Bayonne, falls into the sea a little below the latter. It is navigable to St. Sever. The Oleron and the Pau are the most considerable of its affluents.

ADOWA, the capital of Tigré, in Abyssinia, partly on the side and partly at the foot of a hill, commanding a magnificent view of the mountains of Tigré. Lat. 14° 12′ 30″ N., long. 39° 5′ E. The houses are all of a conical form, pretty regularly disposed into streets or alleys, interspersed with trees and small gardens. Pop. probably 8000. It has manufactures of cotton cloths, and an extensive trade in cattle, corn, salt, and slaves.

ADRA, a sea-port town of Spain, cap. district same name, prov. Granada on the Mediterranean, 45 m. S. E. Granada. It is situated near the mouth of the Adra. In its vicinity are some of the richest lead mines in the world, the produce of which constitutes the principal article of export from the town.

ADRAMYT, a town of Turkey in Asia, Anatolia, about 4 m. from the E. extremity of the gulf of the same name, 78 m. N Smyrna, lat. 38° 29′ N., long. 26° 57′ 15″ E. Pop. 5000 (?); streets narrow, ill paved, and filthy; houses, with few exceptions, mean, and miserably built. The olives produced in the adjoining territory, with large quantities of wool from the interior, are principally shipped for Constantinople; little except galls being shipped for other parts of Europe.—(*Turner's Levant*, iii., p. 265.)

ADRIA (an. *Atria* or *Hatria*), a town of Austrian Italy, deleg. (formerly the Polesino of) Rovigo on the Castagnano, between the Po and the Adige, 12 m. E. Rovigo. Lat. 45° 2′ 57″ N., long. 12° 3′ 55′ E. Pop. circa 10,000. This is a very ancient city, being supposed to be of Greek origin, and having afterwards formed part of the dominions of the Etruscans. It was originally a sea-port of such magnitude and importance as to be able to give its own name to the great arm of the Mediterranean on which it stood; but owing to the gradual extension of the land, in consequence of the mud and other deposits brought down by the rivers, the port of Adria has been long since filled up, and it is now an inland town 18 or 19 m. from the sea. When Strabo wrote, it had become a comparatively unimportant place, and it subsequently suffered much from inundations and war, particularly from the attacks of the barbarians. During the twelfth century it began to revive. Its climate, which had become very unhealthy, and its environs, have both been materially improved by the drainage effected by opening the canal of Portovico. It is the seat of a bishopric, has a fine collection of Etruscan and Roman antiquities found in the vicinage, with manufactures of silk, leather, &c. The surrounding country is productive of corn, wine, and cheese.—(*Cramer's Ancient Italy*, i., p. 116, Balbi Abrégé ed., 1837.)

ADRIAMPATAM, a town of Hindostan, on the sea-coast of Tanjore 37 m. S.E. Tanjore, long. 79° 30′ E., lat. 10° 20′ N.

ADRIAN, p. v. Logan t., capital of Lenawee co., Mich., 67 m. S.W. Detroit, 501 W., situated on Raisin river, and contains three churches—one Methodist, one Baptist, and one Presbyterian—twenty-seven stores, three grist-mills, six saw-mills, two printing-offices, two weekly newspapers, sixteen schools, 671 scholars. Pop. 2496. It is connected with Toledo by a railroad, and is one of the most flourishing villages in the state.

ADRIANOPLE (called *Edreneh* by the Turks), a celebrated city of Turkey in Europe, prov. Roumelia, on the Mariza (an. *Hebrus*), where it is joined by the Toonga and the Arda, 134 m. N. W. Constantinople, lat. 41° 48′ N., long. 26° 29′ 15″ E. Pop. variously estimated at from 80,000 to 140,000. According to the Hon. Mr. Keppel it contains 23,000 houses and 90,000 inhabitants, of whom 45,000 are Turks, 30,000 Greeks and Bulgarians, and the remainder Armenians and Jews. It is beautifully situated in one of the richest and finest plains in the world, on the sides and base of a low hill, and when viewed from a distance has a magnificent appearance; but, as is the case in most Turkish towns, the illusion vanishes on entering. The streets are narrow, crooked, and filthy; and in certain periods of the year it is unhealthy. Some of the houses are three stories high, and their shelving roofs project so much as to meet those on the opposite side. In the centre of the town an old wall, supported by massive towers, the work of the sovereigns of the Lower Empire, encloses a space occupied by the rayah population. Originally it may have been the citadel; but it is now useless as a defence. Among the public buildings, the most distinguished are, the ancient palace of the sultans, in a state of decay; the famous bazaar of Ali Pacha, appropriated to the warehousing and sale of various descriptions of commodities; and the numerous mosques. Of the latter, the one erected by Selim II. is the most splendid; and ranks, indeed, among the finest Mohammedan temples. There are numerous booths and retail shops stored with all sorts of merchandise. There are also numerous baths and fountains supplied with water conveyed into the city by an aqueduct. A medrasseh, or superior school, is attached to the mosque of Sultan Selim, and there are a number of other schools. The Maritza is navigable up to the city during winter and spring; but in summer the sea craft only ascend as high as Demotica. Enos, at the mouth of the Maritza, is properly the sea-port of Adrianople. It formerly admitted large vessels; but owing to the carelessness of the Turks, who have allowed a sand-bank to accumulate, it is now accessible only to vessels of comparatively small burden. With the exception of tanning, which is rather extensively carried on, manufactures are inconsiderable. It has, however, a pretty extensive commerce. The exports consist principally of the raw products of the adjacent country, comprising excellent wool, cotton, silk, good wine, otto of roses, fruits, berries for dyeing, &c. The imports consist principally of manufactured goods; as cottons and hardware from England, woollen stuffs from Germany, &c. The trade is principally carried on by Greek merchants. It is the seat of a Greek archbishop.

In early times Adrianople was the capital of the Bessi, a people of Thrace, and was then called Uskadama. It derives its present name from the emperor Adrian, by whom it was improved and embellished. The Turks took it in 1360; and it continued to be the seat of their government from 1366 till the taking of Constantinople in 1453. It was occupied by the Russians in 1829; but was evacuated on a treaty being concluded between them and the Turks in September that year.—(*Keppel's Journey across the Balkhan*, i., p. 250–563; *Macmichael's Journey from Moscow to Constantinople*, p. 156; *Walsh's Journey from Constantinople to England*, p. 144; *Dict. Geographique*, art. "Andrinople," &c.)

ADRIATIC SEA, or GULF OF VENICE (*Mare Adriaticum* or *Superum*), is that great arm of the Mediterranean extending S.E. and N.W. between the coasts of Italy on the W. and those of Illyria and Albania on the E., from about 40° to 45° 55′ N. lat. Its southern extremities are the Capo di Leuca, or St. Mary's, in Naples, and the isle of Fano to the N. of Corfu; and its northern extremity the bottom of the gulf of Trieste. It derived its ancient name from the once flourishing sea-port town of Adria (which see), now 18 m. from the shore, and its modern name from Venice. Its W. or Italian shore is deficient in harbours, is generally low, and from the entrance to Rimini has deep water; but from the latter northward it has been partially filled up by the deposits brought down by the Po and the Adige, and is edged by lagoons, marshes, and shoals. On the E. side its coasts are generally high, steep, and rocky, and are broken into deep bays and gulfs formed by the numerous islands by which it is fenced. With the exception of those already mentioned, it receives no river of any considerable magnitude; and the saltness of its waters is said to exceed that of the ocean. The ebb and flow are considerable at Venice and other places. The *bora* or N.E. wind is the most formidable obstacle to its safe navigation. It comes on in sudden and impetuous squalls, which generally continue for three days, and in an advanced season from nine to fifteen or more. A vessel overtaken by it should always make for a port or anchorage ground on the E. coast, those on the W. being open and unsafe. The S.E. wind throws up a heavy sea; but is not dangerous, as vessels may easily get to an anchorage on the E. shore. Venice, Trieste, Ancona, and Fiume are the principal trading ports on the Adriatic. (*Dict. Geographique; Purdy's Directions for the Gulf of Venice*, &c., p. 23, &c.)

AERSCHOT, a town of Belgium, prov. S. Brabant, on the Demer, 9 m. N.E. Louvain. Pop. 3722. It was formerly fortified; and has some breweries and distilleries.

AFFGHANISTAN, the name applied to a country of Central Asia inhabited by the Affghan nation; and, sometimes, to a kingdom of which that country formed the principal part. In the latter sense, the boundaries of Affghanistan have been subjected to the same political changes which have affected other Asiatic states. In the former, considered as the country of the Affghan people, it may be described as extending from the 30th to the 35th degree of N

latitude, and from the 63d to the 71st degree of east longitude; having the Indus on the E., the crest of the Himâleh or Hindoo-Coosh, and part of the Paropamesan or Goor mountains on the N.; the districts of Seeweestan, Cutch Gundava, and Sareewan, with part of the desert of Beloochistan on the S.; part of Seistan, with Ghorian of Khorasan on the west; and Merghâb, and the Hazareh country on the N.W. This rather indefinite bounding line will exclude the Eymaak country, as well as the Hazarehs, neither of these tribes being of Affghan descent; while it includes Herât and its dependencies, which are entirely inhabited by genuine Affghans.

History and Political Changes.—Affghanistan having, from the remotest period of authentic record, followed the fortunes of its more powerful neighbours, or formed but the centre of a greater whole, cannot correctly lay claim to any history of its own, until after the death of Nader Shah. For though several dynasties sprung from its soil, they never erected there a separate kingdom of any duration, unless perhaps in the instance of Subuctageen, father of the celebrated Mahmood of Ghiznee, who resided at that city before the rise of his son's power—a power which extended over great part of Asia. On the murder of Nader, in Khorassan, Ahmed khan Abdallee, after an indecisive conflict with the Persian troops of that conqueror's army, fought his way with 3000 Affghan horse to Kandahar, where, seizing on a convoy of treasure on its way to Nader's camp, he assumed the ensigns of royalty; and, at the age of twenty-three, in October, 1747, was crowned as king, the Doorânee, Kuzzilbash, Beloochs, and Hazâra chiefs assisting at the ceremony. Wise and prudent beyond his years, Ahmed consolidated the discordant mass of the Affghan tribes by employing them in the congenial occupations of foreign conquest and plunder; in which he was so successful that, before his death, in June, 1773, after a reign of twenty-six years, his dominions extended from Nishapour of Khorassan to Sirhind of the Punjâb, and from the Oxus to the Indian ocean. He was succeeded by his son Timour Shah, a weak and indolent prince, who died in 1793.

Zemaun Shah, the son of Timour, who was placed on the throne by a faction headed by the queen, began his reign with a promise of energy and talent which the event but ill redeemed; for after a seven years' reign of ill-directed enterprises, domestic rebellions, and dark conspiracies, he fell a victim to the revenge of a chief whom he had provoked, and who first opposed, then seized the Shah, and delivered him to Mahmood, his half-brother and most formidable competitor, who blinded the unfortunate Zemaun.

Mahmood, however, was in his turn soon opposed by Shujah-ool-Moolk, full brother of Zemaun, who, seizing the treasure at Peshawur, proclaimed himself king. But his prosperity was short-lived. Mahmood, who had been made prisoner, escaped, and joining with Futeh Khan, the able chief of the Baurikzehees, who had caused the ruin of Zemaun, raised a rebellion against Shujah. At this period the British mission under Mr. Elphinstone arrived at Peshawur; and before it had well quitted the country, the ill-fated Shujah was forced to fly and seek a refuge with Runjeet Sing, chief of the Sikhs, from whose persecutions he afterwards with difficulty escaped to throw himself on the protection of the British government at Loodheana. Mahmood, a king only in name, became a pageant in the hands of Futeh Khan. This minister, turning his arms westward, seized Herât, but soon after fell a victim to treachery and the feelings of disgust which his arrogance had excited in the mind of his royal dependant, being first blinded and then put to death by order of Mahmood and his son Camrân Meerza. His numerous brothers alarmed at this act, fled to their various governments and strongholds, exciting discontent and rebellion throughout the kingdom, until nothing of his dominions remained to Mahmood, save Herât and its immediate dependencies. Since then, till the present day, the affairs of Affghanistan present but a series of civil broils, crimes, and murders, with scarcely a fact worth recording, except the advance of the Sikh chief Runjeet Sing, who has stripped it of Cashmere and subdued Peshâwur, with the country between it and the Indus. The remaining Affghan country is now principally in the hands of three chiefs; Dost Mahomed Khan, brother of the murdered Futeh Khan, who possesses Caubul and its dependencies; Khon Dil Khan, another brother, who holds Kandahâr, with a smaller territory; and Camran, son of the late Mahmood Shah (who died a few years ago), who still holds possession of Herât and the district belonging to it, in spite of the efforts of the Shah of Persia, who has made more than one attempt to annex it to his own territories.

Divisions and Aspect of the Country.—The former depending rather upon natural features and formation than upon political or artificial arrangement, will best be noticed in describing the latter. This, so far as is known, presents an aggregation of mountainous groups and ranges, diverging from certain principal points, and thus becomes divided into numerous valleys of greater or lesser size, which are watered by streams of corresponding magnitudes, and which sometimes stretch out into plains of considerable extent. The south face of the Hindoo-Coosh is furrowed by a variety of subordinate glens and ravines, which carry their waters to the Caubul river. This stream, which rises near Ghiznee, but drains also the highlands of Kohistan, runs in a large and frequently very broad valley from that city to the Indus, which it enters at Attock. It separates the mountains of Hindoo-Coosh from those to the southward, which, originating in the huge peak of Speengur or Suffeed-koh (White Mountains), spread east and west, confining the Caubul valley on the south, and stretch in a variety of huge ranges in that direction: one of these uniting with that of the Tucht-e-Solymaun, extends to Dereh Ghazeekhan; another enters Seeweestan; and another, tending more to the westward, by Shawl and Pisheen, sinks into the deserts of Beloochistan and Seistan.

The Caubul valley is the most important of the natural divisions thus constituted. It contains the largest river, the finest plains, and the principal cities of the country, including the ancient town of Ghiznee; and extends from the westward of Bauminan to the Indus, a distance of more than 200 miles. It is subdivided into several sections, of which the western is formed by Kohistan or "the Highlands," comprising the valleys and lowlands of Nijrow, Punjsheer, Ghorebund, Tugow, and Oosbeen, which are all blessed with a delightful climate, embellished with the finest scenery, produce the finest fruits in abundance, and are well watered and cultivated.

Lugmaun, also on the north side of the river, comprehends the valleys of Alingâr and Alisheng, with numerous subordinate glens, all equally rich and beautiful. The fertile plains of Jelallabad afford the produce of both torrid and temperate climates. The Dell of Coonnur forms but a bed for the rapid river of Kashkâr, which traversing Kafferistan, here pierces the Himâleh range to join that of Caubul. The small valleys of Punjecora and Bajour pour their streams into the more extensive and very fertile district of Swaut, where forest, pasture, and cultivated land are found admirably blended, and every valuable fruit and grain is produced. The same description will apply to Boonere, Choomla, and all the glens that discharge their waters into the Caubul or Indus rivers from the north. Peshawur, the lower division of the great Caubul valley, is divided from the plains of Jelallabad by a range of small hills, which stretch from the Hindoo-Coosh across to the Suffeed-koh. It is well watered and extremely rich, but suffers from heat in summer.

Damaun, which signifies the "skirt," and is the tract between the foot of the Solymaun mountains and the river Indus, is poorly cultivated and thinly inhabited; being chiefly hard, tenacious clay, scantily covered with tamarisk and thorny shrubs. It is bounded on the north by the Salt range of the Khuttuk country, and stretches southward to Dereh Ghazee Khan. A wide extent of mountains intervenes between this district and the valleys which furrow the western face of the Solymaun range; but even in this wild region we hear of fertile tracts. The plain of Boree, for instance, is compared by the natives to that of Peshawur for extent and richness; the rivers Zhobe and Goomul water some fine valleys; and Tuil, Chooteealee, and Furrah are mentioned as well peopled and cultivated.

Among the valleys opening westward, those of Shawl, Burshore, Pisheen, Yessoon, Saleh, Urghessan, Guashtâ, are described as interspersed with well cultivated spots, but as more generally suited to pasturage than agriculture; but the two first are stated to be rich and productive. Beyond these, to the northwest, the river Turnuk, rising near Ghiznee, but on the southern slope of the country, runs through a poorly watered and ill cultivated district, till, to the westward of Kandahar, it is joined by the Urgundâb, and both fall into the great river Helmund. The district of Kandahar is fertile and highly cultivated, but is circumscribed within narrow limits by the desert. In like manner the valley of Herât, which may be 30 miles long by 15 wide, constitutes the most important portion of that district.

A vast and varied surface, such as has been described, must naturally exhibit much diversity of aspect and fertility. Of the mountainous tracts, some are covered with deep forests of pine and wild olive trees; others afford excellent pasturage for sheep and cattle, while others again are bare, rocky, and sterile. Of the valleys, as we have seen, many are fertile, well watered and wooded, especially those which pierce the Hindoo-Coosh range; while others, particularly to the south, are bare, or covered only with tamarisk and thorny shrubs.

Mountains.—These have been already mentioned. The chief ranges are those of Hindoo-Coosh, or Himâleh; the Speengur or Suffeedkoh, called Râgul by Captain Burnes, a branch from which joins the Solymaun range; and perhaps that of Khojeh Amrân, which seems to be the prolongation

of a spur from the last-mentioned range. The Hindoo-Coosh, or Himâleh, is described by Mr. Elphinstone as rising above the level of Peshawur in four distinct ridges, the lowest of which, clear of snow on the 24th of February, was clothed with forests of oak, pine, and wild olive, and a profuse variety of fruit-trees, and graceful herbs and flowers. The second was still more densely wooded; the third was at that time white with snow; and beyond rose the glittering and stupendous crest of the true Himâleh, spiring into sharp peaks and bold masses.

Captain Burnes states that the term Hindoo-Coosh, though applied generally to this chain, which is a continuation of the Himâleh, belongs properly to one single peak, forming the western buttress of the range, which beyond that point declines in height, and is lost in the Paropamesan or Ghôr mountains. The peak of Koh-e-Baba, estimated by him at 18,000 feet high, is the only one covered with perpetual snow to the westward of the passes. Little is known of the height of the other ranges, but the Suffeedkoh obtains its name from its snowy cap. The Tucht-e-Solymaun is estimated at 12,000 feet in height; and there is a very lofty peak to the southwest, named Kund.

Rivers.—The principal of these have also been mentioned. They are the Caubul, the Helmund, the Turnuk, and Urghundâb; the Goomul, the Zhobe, the Lorah. The courses of the three last are little known, and their waters are lost in the sand, excepting in the time of floods. The river of Kashkûr (called Kama in Arrowsmith's map to Captain Burnes' Travels), which comes from the northeast, running by Chitrâl, can be only considered as partially belonging to this country: the same may be said of the Helmund.

There are no lakes of any consequence known to exist in Affghanistan.

Climate and Soil.—These, as remarked in the general description, vary in an extreme degree, according to locality. In the eastern part of the Caubul valley and in those to the south, bordering on Cutch Gundava, the heat is sufficient to mature all the products of India, such as the sugar-cane, indigo, and some of the tropical fruits; while the northern valleys abound in the productions of cold regions, and the mountains are covered with forests of pines. The plain of Peshawur must, according to Captain Burnes, be one of the most fertile regions of the earth, and wants only industry to become one of the richest and most productive. "The soil," says he, "is a rich mould; it is intersected with water on all sides; and, it is said, continues green during the whole year. It yields a succession of three crops annually; and if we reckon the barley (which is cut twice before it ears, and given to horses), we have no fewer than five returns in the year!" (*Travels*, iii., p. 258, 12mo ed.) After this statement we need not be surprised to learn that wheat is sold in Peshawur for less than 1*s*. 6*d*. a bushel, and barley for less than 1*s*. In like manner with regard to fertility, the plains of Jelallabad, Swaut, Boonerr, Boree, Shawl, &c., are composed of rich loam and alluvium, yielding the most abundant crops; but the baked clay of Damaun is almost impracticable to the plough; and the vast tracts of secondary mountains and undulating plains to the west, are only suited for grazing lands, and are lost in the sandy deserts of Seistan.

Mineral products.—The mineralogy, as well as the geology, of Affghanistan, is but little known; but enough is known to render it probable that the mineral riches of its mountains are great. Gold, copper, iron, and antimony have been already produced. Burns tells us of two sorts of sulphur, of wells of petroleum or naphtha; and, above all, of what may prove still more valuable, of coal, which exists in the district of Cohat, below Peshawur. This, with the discovery of the same mineral in Cutch, may, by facilitating steam navigation, have a powerful effect on the condition of Central Asia.

Agriculture is in the same rude state as in Persia and most Asiatic countries. The soil is broken by a crooked log of wood, sometimes shod with iron, which is generally dragged by oxen; and irrigation is resorted to wherever rain does not fall in sufficient abundance to bring forward the crops. Only the richest and most promising tracts are thus employed; so that, as the seasons are usually regular, the harvest afforded, even by so rude a process, is for the most part abundant. Wheat, barley, rice, maize, form the produce of the more temperate regions; while in the warmer, the smaller grains common to India, as *moongy*, *chunna*, *joar*, *dâl*, &c., with the sugar-cane, cotton, tobacco, indigo, madder, &c., reward the farmer's labours. Horticulture is carried to a considerable extent in the neighbourhood of the principal towns; and to the fruits of Europe in high perfection, are added grapes, pomegranates, figs, the mango, orange, lemon, guavas, plantains, and other fruits of India. Vegetables are also reared in great abundance, and of excellent quality; of these two, the rhubarb (ruwaish) and the assafœtida plant, deserve mention: the former is used when young and tender, blanched artificially, and is eaten both raw and dressed in great quantities, as a very wholesome delicacy; the latter is not only cultivated for its valuable gum, but is eaten roasted, when it springs young from the earth, like the flower of a cauliflower in appearance. It is esteemed a great delicacy; but it smells so strong, that to those unaccustomed to its odour, one head of it, while being cooked, is enough to poison the air of a whole camp.

Manufactures are confined to home-made stuffs of cotton and wool, and a little silk, which serve for the dress of the inhabitants: little or nothing is manufactured for export.

Commerce.—The disturbed state of the country for a succession of years has been unfavourable to trade; and the large and valuable caravans which formerly carried the rich productions of India and Cashmere to Caubul and Herât, for the consumption of the courts at these cities, or for transit, by Yez, into Persia, now no longer venture to traverse lands where robbery and extortion combine to ruin the merchant. There is still, however, a less extensive traffic carried on, chiefly by a pastoral tribe called the Lohânees, occupying much of the country between the Indus and Ghiznee, who at certain periods of the year repair to India to make their purchases, or receive goods from those who have brought them from thence, at the ferry of Kaberee. With these they return, carrying them on their own camels, through their own country, by the Golairee pass, and the valley of the Goomul, not only to Ghiznee and Caubul, but northward, across the mountains, to Berkhara. Captain Burnes tells us, that a thousand camel-loads of English and Indian chintzes, calicoes and muslins, brocades, shawls, Punjab turbans, spices, &c., are yearly consumed in Caubul; in return for which are sent back horses in great numbers, madder, saffron, assafœtida, and fruit, both fresh and dried, in large quantities, &c. This trade is increasing, and will probably continue to do so, provided tranquillity and security of property be established in the country, and the present moderate scale of duties levied at Caubul be not increased: and the expected opening of the river Indus for trade, a channel which, with the Caubul river, will enable goods to be conveyed into the heart of Asia, cannot fail to stimulate the commercial propensities of the people, and give rise to a vast increase of civilization as well as traffic.

Population.—There are no data on which to ground a tolerably accurate estimate of the population of this country. It must vary greatly in different districts. The rich tracts bordering the Caubul river, and the fertile glens that penetrate the Hindoo-Coosh, are certainly more densely peopled than the high and bleak pastoral countries to the west. Mr. Elphinstone, from the best information he could obtain, has mentioned the supposed numbers of several of the principal clans; but it is to be feared that these are not to be depended on. Thus the Eussufzehees, who occupy a very small district at the extreme N.E. corner of the country, are set down as 700,000 souls at least; and the whole of the Berdoorânees, a collection of tribes including the Eussufzehees, who inhabit a country of about 15,000 sq. m., are estimated at nearly 1,400,000, or 90 to the sq. m. The Doorânees, on the contrary, who occupy at least 50,000 sq. m., are said to amount to only 800,000 or a million, being from 17½ to 19½ per sq. m. The Ghiljees, in like manner, from 500,000 to 600,000 souls, are spread over 1500 sq. m., or about 40 per sq. m. This is on a calculation of five individuals to a family, which is too little in these countries.

Now the whole of Affghanistan as here defined does not quite amount to 170,000 sq. m. of surface, of which suppose the richer parts, such as, and including the,

	sq. m.		per sq. m.	Pop.
Berdoorânees country, to be	30 000	at	90	2,700,000
Country of secondary fertility	20,000		40	800,000
Poor high land, such as much of the Dooranee country	60,000		18	1,080,000
The remainder, taken at a low average	60,000		20	1,200,000
	170,000			5,780,000
Add estimated amount of Tanjiks, &c., scattered over the country and in cities				1,500,000
				7,280,000

And this is independent of Hindoos, &c., who are stated to be numerous.

This estimate, founded on the vague numbers stated above, would give to Affghanistan a population of more than 7 millions, or nearly 43 to the sq. m., which, taking into account the vast tracts of high and unproductive lands on the west of the Suleiman range, and north of Kundahar and Zemeendawur, is undoubtedly far beyond the truth. The rate of population in Persia does not most probably exceed 10 per sq. m.; and if double be assigned to Affghanistan, it may be received as an ample rate for that country, notwithstanding the large extent of desert in the former and the many fertile districts in the latter. Upon grounds of analogy and probability, therefore, rather than from any existing data, the population of Affghanistan may, perhaps, be regarded as little exceeding 4 millions.

Tribes.—The Affghan nation is composed of a great num-

ber of tribes, who claim a common origin, and assuredly differ intrinsically very much from all their neighbours. This origin is very obscure: a lately translated history derives them from *Saul** the king of Israel, whose progeny was carried away in the time of the captivity; but no proof of this is adduced, and Mr. Elphinstone classes this among other fabulous genealogies. The name *Affghan* is not known to the people, who call themselves *Pooshtoon*, in the plural *Pooshtâneh*, from whence, by corruption, *Peitân* or *Patân*, the name they have obtained in India; and of their great antiquity there is no reasonable doubt. The tribes of Soor and Lodi, from both of which kings have sprung, are mentioned as owing their origin to the union of an Arab chief, Khaled ibn Abdoolla, with the daughter of an Affghan chief, in A.D. 682; and Mahmood of Ghiznee, though sprung from another race, ruled over the Affghans in the ninth century. According to their own traditions, the whole of the tribes descended from the sons of one Kyse or Kais Abdorresheed, who, whether a real or imaginary character, is the person to whom all their genealogies refer; but as it would be impossible to examine all these, the following classification must suffice to enumerate the principal tribes, with their *habitats*, as they at present exist:

EASTERN DIVISION.—*Berdooranees.*

Eusuffzehees.†	Peshawer tribes.	Bungush.
Otman Kheil.	Khyburees.	Khuttuk.
Turcolanees.		

Neighbourhood of Salt range.

Esawkheil.	Bunnoosees.	Khoosters.
Sheotucks.	Dowers.	

Tribes of Damaun.

Dowlutkheil.	Baboors.	Gundepoorees.
Meankheil.	Stooreeanees.	

CENTRAL DIVISION.—*Including mountain tribes.*

Janjoes.	Vizeerees.	Zmurrees.
Zorrees.	Murheils.	Sheeranees.
Jadrans.	Moomkheil.	Speenteereens.

WESTERN DIVISION.—*Dooranees.*

Zeerak.	*Pungepaw.*
Popul-zehee.‡	Noor-zehee.
Allecko-zehee.	Ali-zehee.
Baurik-zehee.	Iskhak-zehee.
Atchik-zehee.	Kouganee.
	Makoo.

Ghilgees.

Tooran.	*Booran.*
Hotukee.	Solymaukheil.
Tokhee.	Alikheil.
	Under.
	Turrukee.
Sheerpah.	Wurducks.
Kharotee.	Baraitshes.
	Tor Tereens.

National Character.—This aggregation of tribes, though exhibiting considerable diversity in customs, dress, and appearance, among themselves, form, taken together, a nation singularly homogeneous; yet Mr. Elphinstone remarks, that "amid the contrasts which are apparent in the government, manners, dress, and habits of the different tribes, I find it difficult to select those great features which all possess in common, and which give a marked national character to the whole of the Affghans." And this becomes the more perplexing, because even the virtues and attributes on which they most value themselves, and which separate them most from their neighbours, are apt to be misunderstood or overlooked by strangers. Thus an English stranger might regard their wild freedom as but a savage mixture of anarchy and arbitrary power. Alarmed at the absence of any organized government, or regular courts of justice, and witnessing the summary inflictions of retributive and customary laws,§ he might fancy that violence and revenge entirely usurped the place of justice and equity; while the rude hospitality, the bold and simple manners, and martial and lofty spirit of the people, would scarcely in his mind compensate for their proneness to violence and rapine—to the deceit and fraud which are the vices necessarily engendered by the lawless freedom in which they exult.

The traveller from India, on the other hand, sickened with the servile vices of its pliant, timid, and indolent inhabitants, would probably be favourably impressed, not less with the bold and independent bearing of his new acquaintance, than with their sobriety, their superior energy, their strong and active forms, their fair complexions, and features marked and striking even to harshness; and he might view, in the stormy independence of their mode of life, a favourable contrast to the apathy of that which he had left. The result in both cases might be, that, mingled with many a vice and failing, he would find the germ of many a virtue and noble quality; and that however much he might lament their great failings, he would not be able to deny them a portion of his esteem.

One of the strongest characteristics of this people, according to all travellers, is their hospitality, which is founded on national feeling, and there are some usages connected with this principle which deserve mention. The first is that of *Nannawautee* (two Affghan words, signifying, "I have come in"), by which a person having a favour to entreat goes to the house of the individual on whom it depends, but refuses to sit on his carpet or partake of his food until the boon be granted; and this, if in the power of the party besought, custom makes it imperative on him to concede. A still stronger appeal is the second, being made by a woman, when she sends a person her veil, and implores assistance for herself or for her family.

All persons, even a man's bitterest enemy, is safe under the protection of his roof; but this protection extends not beyond the lands of the village, or at most of the tribe; and it is not uncommon for the stranger who has benefitted by it, and experienced the kindest treatment, to be robbed and plundered when once beyond its influence. "There is no point in the Affghan character," remarks Mr. Elphinstone, "of which it is more difficult to get a clear idea, than the mixture of sympathy and indifference, of generosity and rapacity, which is observable in their conduct to strangers. So much more do they attend to granting favours than to respecting rights, that the same Affghan who would plunder a traveller of his cloak if he had one, would give him a cloak if he had none." In this, as well as in their regard for hospitality, their customs much resemble those of the Desert Arabs.

The pastoral tribes in the west are more addicted to robbery and theft than the agricultural ones; but, in general, a previous understanding with the chiefs, confirmed by the presence of a single man, ensures safety; and the Affghans, it is said, are less prone to add murder to plunder than most other rapacious tribes. They are reproached with ignorance, barbarism, and stupidity, by the Persians, but on no sufficient grounds. They are less polished, it is true, and have less of worldly knowledge than their reproachers; but are in general prudent, sensible, and observant, and are less indifferent to truth than most of their neighbours. Like most mountaineers, they are proud of their lineage, and will hardly acknowledge one who cannot prove six or seven descents. Like Highlanders too, they are highly national. Love of individual freedom, strong though it be, is exceeded by devotion to family and clan, and this seems by no means to prejudice their love of country at large; for the "*Nung du Poosh taunch*," or, honour of the Affghan name, which is one of the feelings warmest in their breasts, appears to be equalled by local attachments, so strong in all mountaineers. A native of the wild valley of Speiga, who for some offence had been forced to wander abroad, declared, on his return, that he had "seen all Persia, India, Georgia, Tartary, and Beloochistan, but in all my travels I have seen no such place as Speiga." "To sum up their character in a few words," says Mr. Elphinstone, "their vices are, revenge, envy, avarice, rapacity, and obstinacy; on the other hand, they are fond of liberty, faithful to their friends, kind to their dependants, hospitable, brave, hardy, frugal, laborious, and prudent; and they are less disposed than the nations in their neighbourhood to falsehood, intrigue, and deceit."

Customs, Manners.—The former of these heads comprehends the internal government of the tribes. This is patriarchal. Tribes are subdivided into branches, which are termed *ooloos*, and each of these are commonwealths, which have their chief or *speen-zherah* (literally white beard), or *mullik* (master), if small; or if large, a khan, who is always chosen from the oldest family, and is sometimes selected by the king, sometimes by the people. These carry on the internal government, in conjunction with certain assemblies of heads of divisions, which are called Jeerga, and which determine all matters of consequence. In civil actions the statutes of Mohammed are generally adhered to; but criminal justice is administered according to *Pooshtunwullee*, or Affghan usage, a system sufficiently rude, and founded on the law of retaliation. This, however, as tending to perpetuate feuds and quarrels, is modified by judicial *jeergas* composed of khans, elders, and moollahs, who inflict suitable penalties on offenders; and in fact this whole system is subject to various and considerable modifications.

* Burnes says, the Affghans call themselves "Bin-i-Israeel," or children of Israel: but consider the term of "Yahoodee," or Jew, to be one of reproach.

† The termination zehee corresponds exactly to the Scotch *Vich* or *Mac*, or the Arab Ben: thus Eusuff zehee means "the sons of Eusuff," *Kheil* means Clan, or subdivision of a tribe.

‡ Both the Suddoozehee and Baurikzehee, the first the tribe of the kings the second that of their ministers and of Futehkhan, are divisions of the Popul-zehee.

§ A striking instance of this is given by Captain Burnes, who saw on a dung-hill the mangled and hardly dead bodies of a woman, caught in an act of infidelity by her husband, and of her paramour; both of whom had fallen victims to the sanguinary, but here justifiable rage of the injured party.—*Travels*, ii., p. 80.

A family forced or induced to quit its oolooss may be received into another; and once received, it is treated with peculiar attention, and placed in all respects on an equality with the original members of the community. Every ooloos, moreover, has many persons called *Humsayahs* (or companions), who are not Affghans, and who are regarded with consideration, but not permitted to share in the administration of affairs. Of such *kheils oolooses* and tribes the nation is composed; and when placed under one sovereign, has seldom yielded him a full or implicit obedience. Mr. Elphinstone has compared it to that yielded by Scotland of old to its kings, who ruled pretty absolutely over the principal towns and country in their vicinity, but whose authority diminished as it extended to the extremities of the kingdom; whose court nobles were inordinately proud, and whose more distant chiefs were nearly independent.

Women, Marriage.—Their customs with regard to their females are nearly those of most Mohammedan countries; those in towns are jealously secluded, those in the country have greater liberty. They purchase their wives, who therefore are regarded as property. The husband can divorce at pleasure; a man marries the widow of a deceased brother*, and it is a mortal affront for any other man to take her without his consent; but she is not forced to marry at all. The age for marriage is twenty among men, sixteen for women. In towns, courtships resemble those in Persia, &c. In the country, matches are made more according to the liking of the parties. If a lover can cut off a lock of his mistress's hair, or snatch away her veil, and in doing so proclaim her his affianced wife, no other will approach her with these views, and he generally obtains the consent of her parents on payment of her price; if not, they elope; and this offence, which ranks not less gravely than a murder, is settled by intervention of parties. Among some tribes the bridegroom earns his wife by service, as Jacob did Rachel; some permit not the least familiarity before marriage, others an excessive and perilous degree of it. Polygamy is permitted, as in other Mohammedan countries, but less practised; the poor content themselves with one, those of middle rank with two wives, and perhaps as many concubines. The wives of the rich live in luxury and indolence; the poor not only employ themselves in household, but in field labour. In towns they go about, as in Persia, veiled from top to toe; in the country they only veil in the presence of strangers, and that more from decency than obligation. The Affghan women are said to be correct in conduct and deportment; but adultery or incontinence is punished with death to both parties upon the spot, by the injured relative. (See *ante*, p. 25, note.)

Education is conducted much as in the conterminous countries. A village moollah, or schoolmaster, teaches the children of the poor to say their prayers and to read the Korân; the rich keep *lallas*, or private tutors, in their houses; the village schoolmasters are paid in allotments of land and some small fees. Those intended for the learned professions go to towns, and live in colleges instituted for the purpose of instruction.

Literature is at a very low ebb. The Pooshtoo language is an original stock, embracing a good deal of Persian, with some Zend and Sanscreet words: they use, in writing it, the Niskee character of the Persian alphabet; but there are few or no works of much repute in the language.

Religion.—The Affghans are all Mohammedans of the Soonee persuasion, and are superstitious enough, believing in alchemy, astrology, and magic; but are far from being intolerant to others. Hindoos remain unmolested, on paying a slight tax. Christians sustain neither persecution nor reproach; they are called people of the *book*, as deriving their tenets from a written source, which they themselves respect, instead of being pagans, as the Hindoos. Sheahs are detested more than any sect: yet the country is full of Persian sheahs, many of whom held important offices under the crown, and now do so under the several chiefs. Soofeeism (or free-thinking), though denounced by the moollahs, is common, and gains ground among the higher orders. The priests and moollahs, like those of Persia, are avaricious, hypocritical, and bigoted, as well as arrogant and overbearing, and they exert a very absolute and dangerous power over the people. This is strengthened by the occasional exercise of good offices, and by the influence of some rare examples of wisdom and virtue, evinced in repressing bloodshed and violence. But the blind regard of the Affghans for these holy impostors is chiefly attributable to their ignorance and superstition, which lead them almost to adore all dervishes and other ascetics, and to visit their tombs as those of canonized saints.

Personal Appearance, Amusements.—The men of Affghanistan are for the most part robust, generally lean, though bony and muscular. They have elevated noses, high cheek bones, and long faces; their hair is commonly black, sometimes brown, rarely red; they wear long thick beards, but shave the middle of the head: the western tribes are stouter than those to the east; the latter have darker complexions, and more strongly-marked features: their demeanour is frank and open, equally free from stateliness and puerility: they are very social, delighting in dinner-parties, smoking after dinner, and sitting in a circle telling stories of kings, viziers, and genii, or singing songs, generally about love, to the sound of instruments like rude guitars, fiddles, and hautboys: they take much snuff, of a high-dried, fine-powdered sort, like the Scotch; they are fond of the chase, driving the game into some valley, and killing great quantities; also of coursing hares, foxes, and deer with greyhounds; and they ride down partridges in the open ground, tiring them out till they can knock them down with sticks; they are also fond of horse-racing, and fighting cocks, quails, rams, dogs, and even camels. The western Affghans have a dance, called the attum or ghoomboor, in which ten or twenty people move in strange attitudes, shouting and clapping hands in a circle, round a single person, who plays on an instrument in the centre. The national costume appears to consist of a loose pair of trousers of dark cotton stuff; a large shirt, like a wagoner's frock, reaching a little below the knees; a low cap, the sides being of black silk or satin, and the top of some sort of brocade; half-boots, lacing up to the calf; and a cloak of soft gray felt, or of well-tanned sheepskin, with the wool inside. The women wear a shirt like that of the men, but much longer, and of finer materials, coloured or embroidered with silk; their trousers are tighter than those of the men; a small cap of bright-coloured silk, embroidered with gold thread, comes down to the forehead or the ears; and they throw over their head a large sheet of plain or printed cotton, with which they hide their face when a stranger approaches; they divide the hair on the brow, and plait it into two locks, which fasten behind; they wear round their head strings of Venitian sequins, and chains of gold or silver, which are hooked up, and end in two large balls hanging down on either side: ear-rings, finger-rings, and nose-pendants are worn. In towns the fashions more approach those of Persia, particularly to the westward.

Of individual Tribes.—What has been said applies to the nation in general; but almost every tribe has its peculiar characteristic, which can be but shortly touched upon. The Berdooranees, who occupy the north-eastern districts, are brave but quarrelsome, active, industrious; but selfish, bigoted, and remarkable for vice and debauchery. Their quarrelsome disposition is thought to have given origin to a sort of federative alliance, offensive and defensive, among tribes and subdivisions called *Goondees*, which were held more binding than ties of blood. From these *Goondees*, however, were excepted the Eusuffzehees, the most powerful and numerous, as well as most haughty, insolent, and turbulent tribe of the Berdooranees, who are said to number 700,000 souls. They now occupy Swaut, Bunere, Punjecora, &c., and are notorious for the anarchy which reigns among their *oolooses*. Though an agricultural people, they do not themselves labour; this is left to their *fakirs*, a species of *villains* or servants, consisting of strangers or individuals of conquered tribes of other nations, reduced to serve these invaders, and protected by them for their services. Their masters, or *khawunds*, can beat or kill them at pleasure, but are bound by custom to protect them; and, provided they pay their customary tax and do their work, they may engage otherwise in trade as they please, and are commonly treated mildly.

The *Toorkolanees*, who are brave, active, industrious, and cheerful, are all subject to one powerful chief, who exercises over them a very powerful authority.

The *Khyberees*, who possess the upper branches of the Rajgul or Speengur mountain, and derive their name from the formidable pass of Khyber, are the most rapacious and treacherous robbers of all Affghanistan: no previous agreement secures the traveller from their assaults; they watch the approach of the caravan, matchlock in hand, and choose their victims with certainty and security. They are a lean muscular race, capital marksmen, and carry swords and short spears in addition to their matchlock; they are altogether more uncouth than most of their countrymen.

The *Khuttuks*, occupying the banks of the Indus, from the Caubul River to the Salt range, are a tall, well-favoured people, as remarkable for honesty and orderly conduct as is their country for dreary and rugged barrenness.

The tribes of *Damaun* are said to be more simple and honest, less bigoted and litigious, less vicious and debauched, than the northern tribes. They are a more bony and fairer race than the Berdooranees, and universally wear long hair and beards. They owe the greater order which prevails in their oolooses to an establishment of magistrates, formed some fifty or sixty years ago, which has been eminently efficient.

The *Gundepoors* are a particularly thievish and quarrelsome race, in spite of a commercial turn, which leads many

* This looks like a relic of Jewish custom, and tends, *pro tanto*, to indicate the Israelitish descent they claim.

of them to make annual trading journeys to India and Khorasan.

The *Baboors* are a civilized tribe, much employed in merchandise. The *Stoorsanees* were shepherds till robbed of their pasture-lands by the *Caukers*, when they betook themselves to agriculture. These agricultural tribes shave all fakirs or villains, like the Eusufzehees.

Of the central division, the *Jaujees* and *Thorees*, hereditary enemies, live in the glens and valleys of the Solymaun range. The country of the former is colder, wilder, and higher than that of the latter; the mountain-sides are covered with pine. The *Jaudrans*, who dwell in a pleasant district westward of the rich plain of Bunnoo, are remarkable only for their disgusting vices.

The *Sheeranees*, who inhabit the borders of the Tukhtu-e-Solymaun, a wild, inaccessible country, are very poor and uncivilized, plunder every one, and are at war with all the world; yet they never break their word, and a single individual of their tribe suffices to secure the safety of a party: they are described as wild and savage in their appearance, as in their habits and modes of life. The *Zmurrees*, neighbours of the last, resemble them closely, but are less inveterately predatory. The *Vizeerees*, N.W. of the two last-mentioned tribes, live in little societies, among pine-covered mountains, and are equally uncivilized and addicted to plunder; yet the smallest escort ensures safety, and the chiefs, powerful khans, are, it is said, remarkable for their love of peace. The Vizeerees are divided into a fixed and erratic population. The long valley of Zawura, which opens on the plain of Tull and Chooteeallee, is inhabited by the white and black (*speen* and *tor*) *Zereens*, great carriers of merchandise between Upper Sinde and Candahar.

The two most noble and important tribes, however, are the *Dooranees* and Ghiljees. Their territory consists chiefly of high bleak downs, interspersed with hills, in some parts desert, in others sparsely cultivated; in all open, bare, and fit chiefly for pasture. They are, therefore, chiefly a pastoral people, with patriarchal habits, and live for the most part in tents of black wool. These (*kizhdees*) are from 20 to 25 feet long, by 10 or 12 broad, and eight or nine high, supported by a row of three poles, and closed all round with a curtain. In winter they are lined with felt, and are warm and comfortable. The country of the Dooranees is 400 miles long, by 130 broad, extending from the Paropamesan mountains to the Khojeh Amrân range. They were formerly called Abdallees, till the late Ahmed Shah, their chief and sovereign, changed the name, in consequence of the dream of a famous saint, he taking that of Shah Dooree Doorân. They may amount to 800,000 souls; the Suddoozehee, from whence sprung the king, is a subdivision of the Popalzehee. The king is their hereditary chief, and military commander of the whole: he claims a horseman's service for every plough of land; and the officers commanding them are the civil magistrates of their respective districts, besides being employed in offices of state at court, when there was a court. The internal government of the clans is better maintained than among other tribes, and the progress of improvement and civilization among the agricultural Dooranees has been correspondingly great. They are generally handsome, stout men, with good complexions and fine beards. They are brave and hospitable; and though not quite strangers to rapacity, still may be esteemed the worthiest of their race.

The *Ghiljees* occupy the upper valley of the Turnuk, and great part of the Caubul valley, to the Berdooranee country; a tract which contains some of the principal cities, with some fine districts of land, but the climate of which is cold. The Ghiljees were formerly the leading tribe of Affghanistan. It was a branch of them that conquered Persia and broke down the power of the Seffavean kings; and they are still a high-minded, brave, and numerous people.

The *Hotekee* and *Tokhee* are the noblest of their clans, having produced, the first, kings; and the second, their vizíers; and they are a hospitable and good people, ranking deservedly as the second of the Affghan tribes; they amount to about 100,000 families, and resemble much the Dooranees in appearance, customs, manners, and dress, though hating them, as their successful rivals, with an unquenchable hatred. They are perhaps the fairest and handsomest of all the Affghans.

There is yet another class, which, though not strictly Affghan, still, as amalgamated with that people, ought to be mentioned—the *Tâjuks*.* The word is used in opposition to that of *Toork*, the peaceable to the warlike; and it was applied to the subdued Persians by their Tartar masters. In Affghanistan they are supposed to be descendants of Arabs displaced by their conquerors, who now live scattered over the land which they might once have cultivated as their own. As tenants or servants, they are mild, sober, peaceable, and industrious, and live on good terms with the Affghans, who, though they regard them as inferiors, do not treat them with contempt. They are most numerous in and around the great cities, and are all zealous soonnies. Mr. Elphinstone calculates the Tâjuks as numbering 1,500,000 throughout the whole country.

Government Chiefships.—Affghanistan, it has been said, is now split into three principal chiefships. Dost Mohammed Khan, who resides at Caubul, rules the country from Bamian and the Hazara mountains to and including Ghiznee on the south, and to Neemla in the Caubul valley on the east. When Captain Burnes was there in 1831–2, his revenues amounted to 18 lacs, or £180,000 a year, and he maintained 9000 Affghan horse, well appointed, with 2000 foot, and 14 guns, besides auxiliaries and village troops, that is, contingents; and both revenue and military forces have increased since then. This chief is very attentive to business, superintending personally the distribution of justice; he encourages trade; his own country is safe to the merchant; he is zealously orthodox, remarkably intelligent and inquisitive, and of excellent manners and address. He is even now but little past forty; so that, with his great natural abilities and excellent disposition, he may be the author of much good to his country. Unfortunately he is on bad terms with his brothers, particularly with those at Kandahar.

These are, Kohn Dil Khan, Ruhm Dil Khan, and Meer Dil Khan, who rule Kandahar together; the first, however, being regarded as chief. His territory is less defined and less valuable than that of Caubul, extending south towards Cutch-Gundava and the Sindean frontiers. His revenues in 1832 were about eight lacs of rupees, or about £80,000 a year; his military force 9000 horse and six pieces of artillery; but this, were his government popular, which it is not, he might greatly increase, as Kandahar is close to the Dooranee country. He has none of the abilities of his brother at Caubul, and his acts of oppression will prevent his power or influence from increasing it.

Kamrân, son of the late Mahmood Shah, retains Herât, as we have said, and maintains the shadow of a court on the ancient Abdallee model. But it is rather in consequence of the claims set forward by Persia to this province, than his own intrinsic power, that he has been permitted to remain unmolested. The Affghans came forward, as is understood, to assist this last descendant of their kings in his late successful struggle with Persia, and Kamrân took the field with a considerable force. He is said still to possess some of the crown jewels of Caubul, and he derives a considerable revenue from the transit of goods through the city. Connolly states the nominal amount of duty levied in the city at £21,429 sterling, but says that much more is really extorted, and that Kamrân's annual revenues are £89,248 sterling. But he is a cruel, capricious, and rapacious tyrant, and not likely ever to consolidate any considerable share of power. (We are indebted for this valuable article to J. B. Fraser, Esq., the celebrated traveller.)

AFIUM-KARA-HISSAR (or *Black Castle of Opium*), a city of Asiatic Turkey, in Anatolia, cap. Sanjiack, 188 m. E. Smyrna, lat. 38° 45′ N., long. 30° 56′ E. It is situated on the declivity of a mountain range, and is defended by a citadel, built on a high and almost inaccessible rock. Pop. estimated by Kinneir at 12,000 families, or from 50,000 to 60,000 individuals. It is pretty well built; but the streets are exceedingly narrow, and in many parts very steep. Some of them are washed by streams that descend from the adjacent mountains. It has numerous mosques, two Armenian chapels, six khans, and five public baths; an extensive manufactory of black felts, fire-arms, short sabres or *yatagans*, with stirrups, bridles, &c. But it is principally celebrated for the great quantity of opium grown in its vicinity; from which, indeed, it derives its modern name. It is said by D'Anville to be the *Apamea* of the Greeks and Romans; but the latter was situated a good deal farther W. According to the Turkish annals, it was founded by Aladdin, one of the Seljuckian sultans. It was the patrimony of Othman, the founder of the Turkish empire, of which it has ever since formed a part. —(*Kinneir's Journey*, p. 229; *Olivier*, vi., p. 400.)

AFRAGOLA, a town of Naples, prov. Terra di Lavoro, 5 m. N.N.E. Naples, in a plain. Pop. 3000. It has manufactures of straw hats; and a great annual fair, which commences on the second Sunday of May.

AFRICA. A vast peninsula, one of the great divisions of the globe, situated to the S. of Europe, and to the W. and S. W. of Asia. It is separated from the former by the Mediterranean Sea and the Strait of Gibraltar; the two continents approaching at the latter within about 10 m. of each other. It is separated from Asia by the Red Sea, at whose southern extremity, the strait of Bab-el-mandeb, the shores of the two continents are only 16 m. apart. But at the most northerly extremity of the Red Sea, Asia and Africa are united by the isthmus of Suez; the Mediterranean being there about 72 m. from the Red Sea.

* In Persia, the inhabitants of great part of the northern provinces bordering on the Caspian Sea are *Tâjuks* or *Tâts*. They are held to be the aboriginal people of the country, and speak a peculiar language, supposed a mixed dialect of the ancient Persian.

The most southerly point of Africa, Cape das Agulhas (Cape Needles), is in lat 34° 52′ S.; and the most northerly, Cape Blanco, opposite Sicily, in lat. 37° 21′ N. Cape Gardafui, the most easterly point, is in long. 51° 30′ E., and lat. 11° 50′ N.; and Cape Verde, the extreme western point, is in long. 17° 33′ W., and 14° 43′ N. lat. The distance between the most southerly and most northerly points is consequently about 5000 m., and between the extreme eastern and western points not much less. The area probably falls little short, if it do not exceed, 12,000,000 sq. m.

I. Africa is distinguished from the other continents by its coasts extending mostly in continuous, unbroken lines, having but few indentations of the sea, and no extensive peninsulas; so that it forms a more compact and undivided mass of land. The uniformity of its outline seems to be in accordance with the uniformity of its interior. The surface of the latter does not present that endless succession of changes which are met with in Europe and southern Asia, and which are found in both Americas, but on a greater scale and at greater distances. It resembles rather the northern parts of Asia, exhibiting elevated table-lands and low plains, both of immense extent and of remarkable uniformity. The whole of Africa south of the equator, and north of it up to 10° lat., seems to constitute an extensive table-land, fringed in most parts by a comparatively narrow stripe of low land along the sea. North of this table-land, between 10° and 30° N. lat., extends an immense but low plain, the greater part of which is occupied by the Great Desert, or Desert of Sahara. A comparatively narrow tract of mountainous country, including Atlas and its dependencies, separates the desert from the Mediterranean. On the E. the desert does not reach the Red Sea; being separated from it by the mountains of Abyssinia and the rocky countries extending from them northward along the Red Sea to the shores of the Mediterranean.

1. *The elevated table-land* in South Africa is less known than any other portion of the continent, the nature of its surface rendering it extremely difficult to penetrate from the seacoast into the interior. We are only well acquainted with the southern extremity, which forms the Cape Colony. Here Africa presents to the Indian ocean a broad line of coast, running east and west nearly along the 34th parallel from 18° to 26° E. long., or from the Cape of Good Hope to Algoa Bay. Along this coast extends an undulating country, intersected with a few elevations deserving the name of hills. Its width varies between 10 and 50 miles. North of this the table-land rises in terraces. The first terrace, called the Long Kloof, is enclosed by the double ridge of the Zwarte Berge, or Black mountains, of which the northern, or the Groote (Great) Zwarte Berge, rises to about 4000 feet above the sea. North of this range is the second terrace, called the Great Karroo, which is about 100 miles across and 3000 feet elevated above the sea. It is bounded on the N. by the Nieunveld Bergen, a chain of which some summits are considered to rise to 9000 or 10,000 feet. On its northern side the table-land seems to have attained its mean elevation, which probably is not less than from 4000 to 5000 feet.

At both the eastern and western extremities the two abovementioned ranges run N. W. and N. E. parallel to the seashore, at a distance of from 30 to 200 miles; the intermediate space being likewise occupied by two or more terraces. The ranges along the W. shores do not extend farther than about 29° S. lat., where they terminate in isolated hills and with a high bank on the Gareep or Orange river. North of this river the coast, when seen from the sea, presents only high sand-hills without any traces of water, and is, consequently, entirely destitute of vegetation. It extends as far as Cape Negro (18° S. lat.). The interior east of the western ranges and of this coast is an elevated sandy desert, with few wells and little rain. Only that portion lying S. of Gareep river has been visited, the remainder, and by far the greater portion, is less known than the Sahara itself. This desert country, which presents a level without hills or mountains, extends over half the breadth of the continent as far as 24° E. long.

The eastern half of the table-land from the Cape Colony to 18° S. lat. offers a different aspect. A great number of mountain ridges, of moderate elevation, traverse it in different directions; and at the foot of these ridges the country is well watered and fertile; though here, too, extensive sterile tracts occur, but they are not continuous. We are, however, only acquainted with the southern part, up to 26° S. lat. Farther north, about 29°, a high mountain range is said to exist, called the Lupata mountains, but this is doubtful. The descent from the table-land to the Indian ocean is also formed by two or three terraces, the highest edge of it being about 90 or 100 miles distant from the shore. This edge, formed by a mountain ridge, prevents the rivers of the table-land from escaping to the Indian ocean; so that they either run westward, and fall partly into the Gareep river, or are partly lost in the sands of the desert.

North of the Zambese river (about 18° S. lat.), which appears to have the greatest part of its course on the table-land, the interior of its eastern part is entirely unknown. A lake, called Moravi, is reported to extend over many degrees of lat., but its existence is doubtful. The eastern descent of the table-land resembles that farther south, being formed by terraces. This, however, extends only to the equator, or the mouth of the river Juba; for farther north, up to Cape Gardafui, the coast itself is formed by high rocks, rising to 400 feet and upward, and no mountain ranges are visible from the sea. A few rivers, apparently of considerable size, break through the rocks along the coast.

It would seem that on the western side of the continent, between 18° and 40° S. lat., there is a considerable depression in the table-land. This country, which is known under the name of Lower Guinea, has low shores, behind which at a considerable distance the surface seems to rise, but not to a great height. Then follows an uneven plain, watered in its lower parts by numerous rivers, among which the Zaire or Congo and the Cuanza are the largest; but towards the sources of these rivers the country is mountainous, and it is even reported that some of the mountains are always covered with snow. In the plain numerous lakes of considerable extent are met with.

North of the river Zaire, at about 4° S. lat., the country again rises at no great distance from the sea to a great height. This high ground is called Serra Complide. Its W. declivity extends N.W., by degrees approaching nearer the Atlantic, till it reaches the innermost corner of the Bay of Biafra, where it comes close down to the sea and forms for more than 30 miles the shore, rising, under the name of Cameroon mountains, to 13,000 feet above the water. These great mountain masses seem to form the W. extremity of an extensive range, which at about 5° of N. lat. seems to traverse the whole continent, and of whose central parts we get some information from the Arabian geographers, by whom it is called Djebel-de-Kumri, or the Moon mountains. This range, which seems to constitute the higher edge of the table-land to the north, appears to stretch eastward towards the Strait of Bab-el-mandeb, until it unites to the mountain system of the Abyssinian Alps. North of this range, as far as about 10° N. lat., a mountainous country extends between 10° and 25° E. long., which may be considered as the terraces by which the table-land descends gradually to the low plain, which extends farther north.

The extensive mountain region which has obtained among us the name of Kong may be considered as a continuation of the high table-land of southern Africa, being separated from its northern terraces only by the narrow valley of the Quorra, between 7° and 8° N. lat., and farther south from the Cameroon mountains by the extensive delta of that river. East of the meridian of Greenwich it approaches by degrees nearer the sea, while its northern edge draws off in a N.W. direction, until between 4° and 5° W. long. it approaches 15° N. lat., so that between 5° and 12° W. long. it extends over 10° of lat. It terminates rather abruptly near 12° W. long., but its rocky masses come down close to the shore between cape Palmas and cape Sierra Leone. This mountain region, in which a great number of fertile valleys and plains are embosomed, is of very moderate height in its eastern and more narrow portion, rising hardly to more than 3000 feet; but farther west it is higher, and between 5° and 8° W. long. it is reported to be crowned by several peaks which pass the snow line. But only a very small portion of it has been visited by Europeans. In its western districts are the sources of the Quorra.

2. *The Great Plain*, which, on the south, is bounded by the high table-land of southern Africa and the Kong mountains, and hence stretches northward to mount Atlas and the ridges depending on it, contains two different countries—a fertile and a sterile. The former called Soodan, and the latter Sahara.

Soodan, under which name the lower terraces of the table-land seem also to be comprised, extends from the E. descent of the Kong mountains to the banks of the Bahr-el-Abiad (the W. branch of the Nile), occupying, inclusive of the lower terraces of the high table-land, the country lying between 5° and 15° N. lat. Its lower districts, which lie contiguous to the Sahara, are, according to a vague estimation, from 1000 to 1200 feet above the sea, but the terraces of the table-land rise to 3000 feet and upward. In many parts it is well watered by rivers, which descend from the table-land or originate in the low ridges by which the country is intersected; such districts are covered with immense forests, and are very fertile where cultivated. In other parts water is rather scarce, and some of them partake largely of the nature of the Sahara. Its climate is extremely hot; nevertheless it sometimes happens that during night the thermometer descends to the freezing point.

The Sahara, or sea of sand, covers perhaps nine-tenths of the whole plain. For on the west of the meridian of Greenwich, it extends from the foot of the Kong mountains (15° N. lat.) to that of mount Atlas (about 30°), occupying the whole width of the plain, which is here 1000 miles across

Farther east, where it is bounded on the south by Soodan, it is somewhat less wide, which is produced by some mountain ranges connected with the Atlas, extending in an E.S.E. direction. But its breadth is nowhere less than 750 miles. It is divided into two parts by a tract of stony country, by which it is traversed from N. to S., between 13° and 15° E. long., and which in parts offers some cultivable land, while in others the stony surface is covered with sand. By following this stony tract Messrs. Denham and Clapperton, who set out from Tripoli, succeeded in reaching Soodan. That portion of the desert which extends between this tract and the Atlantic ocean is called *Sahal*, and is almost entirely covered with a fine sand, which being agitated by strong easterly winds, appears like the surface of the sea, and often rises in the air in the form of sand spouts. Low hills and wells occur in a few places; and water, in many parts, is only found at a depth of more than 100 feet. In that division of the desert which extends between the above-mentioned stony tract on the one side, and Egypt and Nubia on the other, the surface is covered rather with gravel than sand, and in many places with a hard clay: elevations, and even ridges of low hills are here much more frequent, and, consequently, also wells. All the western part of the Sahara would, owing to its burning heat and the want of water, be totally impassable, were it not that it is here and there interspersed with verdant well-watered spots or oases, which appear like islands of the blessed in the midst of desolation. The ancients compared them to the spots on a leopard's skin. (*Strabo*, p. 120.) These oases are mostly of very limited dimensions; but some of them, particularly those on the east side of the great desert, are very extensive: the country of Fezzan, for example, is in fact an oasis. They are usually surrounded by higher land, which serves to account for the springs, and consequently the verdure, for which they are so celebrated. But there seems to be much probability in the shrewd conjecture of Major Rennell, that the oases are indebted for no inconsiderable portion of their reputed beauty and delicious freshness to the striking contrast between them and the parched desert by which they are surrounded.—(*Geography of Herodotus*, 8vo ed., ii., p. 185.) Those only who have toiled for days amid a pathless burning sand, can form a proper idea of the delight experienced in falling in with one of

> The tufted isles,
> That verdant rise amid the Libyan wild.

In England or France they might be thought nothing of; but in the Sahara they seem more than a paradise. The famous temple of Jupiter Ammon was erected in the oasis of Siwah, in the N.E. angle of the great desert, in lat. 21° 19′ N., long. 26° 18′ E.

3. *The Abyssinian Mountains*, which are little known to us, except in their north-eastern and northern declivities, where they approach the strait or Bab-el-mandeb and the shores of the Red Sea, and terminate at about 12° N. lat., seem to constitute an extensive mountain system, whose centre is placed between 8° and 9° N. lat. in the countries called Narea and Effat. In this part it seems to approach the snow-line, but not to rise above it. It is less elevated at the source of the Barh-el-Azrek of Blue river, one of the upper branches of the Nile, where it rises, according to Bruce, at from 9000 to 10,000 feet above the sea. We do not know whether or in what manner the Abyssinian mountains are connected with the Gebel-el-Komri, or whether they are separated from the high table-land, or constitute its N.E. boundary, which seems to be the more probable hypothesis. The valleys of this mountain system are fertile and well peopled.

From the northern declivity of the Abyssinian mountains extends along the shores of the Red Sea as far as the isthmus of Suez, a rocky country, which, between 12° and 20° N. lat., occupies in width an extent of between 300 and 400 miles, but farther north by degrees grows narrower. Between 23° and 30° N. lat. it is only from 150 to 200 miles across. Near its western border it has a deep, but comparatively narrow depression, in which the river Nile flows N. from the Abyssinian mountains to the Mediterranean. This long valley is mostly very fertile. The small portion of the rocky country which lies to the west of the valley, and which forms the eastern boundary of the Sahara, does not rise to a great height, rarely to more than about 1000 feet above the valley. But the countries east of the valley of the Nile and between it and the Red Sea are more elevated. They form a table-land, mostly of an uneven surface, which however in many places exhibits extensive plains, while in others it rises into ranges of high hills. Many of the plains are covered with sand, and resemble the eastern portion of the Sahara; other districts afford pasture ground, but very few places are fit for agriculture and cultivated.

This rocky country terminates on the banks of the Nile in the parallel of Kahira (Cairo), from the neighbourhood of which its northern boundary runs off in an E.N.E. and W. N.W. direction. The former constitutes the isthmus of Suez, and reaches to the Mediterranean between the lakes of Menzaleh and Ras Kazaroon in Syria; farther east it joins the mountains of Arabia Petræa. This rocky country lies to the E. of the delta of the Nile. On the W. of the delta the rocks run from Kahira W.N.W. to the Arabs' Gulf, where they approach the Mediterranean near the Arabs' Tower (31° N. lat. and 29° 30′ E. long.). From this line the rocky country extends westward with a width of about 70 miles at the outset, which, however, increases as it advances farther W., so as to occupy between 200 and 300 miles at 20° E. long., where it suddenly terminates. In the neighbourhood of the Egyptian delta, the rocks are hardly a hundred feet above the plain, but farther W. they rise into high hills and mountain ridges (Gerdobah mountains), and terminate with the high table-land of Barca, whose mean elevation above the sea is estimated to be about 1500 feet. Where the table-land of the Barca terminates with a rather abrupt descent (near 20°), a narrow strip of the Sahara comes up to the very shores of the Mediterranean, at the most southerly corner of the gulf of Sydra or Kibbir (the Great Syrtis), where it terminates on the beach with sand-hills. This strip of the Sahara separates the rocky region of the Nile from the mountain system of the Atlas.

4. *Mount Atlas and its dependencies*, by far the most celebrated of the African chains, occupy that portion of the continent most to the north and nearest to western Europe. It seems to begin on the E. near the eastern boundary of the country of Fezzan, whence two ridges of moderate elevation run W.N.W., and in the beginning are called Karush. Farther E., however, they receive other names. The mountainous country, which traverses the N. of Fezzan and the S. of Tripoli, is nowhere probably more than 120 miles in width; but the ridges of low hills which issue from it advance to the very shores of the Mediterranean, between cape Mesurata and the gulf of Cabes (the Lesser Syrtis), so that the whole region may be from 180 to 200 miles across. At the gulf of Cabes, however, the region of mount Atlas enlarges considerably towards the N., and thence to its western extremity on the shores of the Atlantic ocean its mean breadth exceeds 350 miles. The highest ridge seems to traverse the region in an oblique line, beginning on the east opposite Sicily, at capes Bon and Blanco, and terminating on the shores of the Atlantic at capes Geer and Non. The mountains which occur in that line do not appear to rise above the line of congelation, or at least only in a few insulated points. The country which extends N. of it to the shores of the Mediterranean is mountainous, and contains a number of fertile longitudinal valleys. Farther W. (about 5° W. long.), however, where its northern slope is diverted W. to the Atlantic ocean, it extends in large plains, which follow each other in the form of terraces. The tracts of country which lie to the S. of the highest ground cannot be called mountainous, their surface being formed by wide, broad-backed ridges, of very moderate elevation, and by slight depressions between them in the form of shallow valleys. These latter tracts partake of the hot and dry character which distinguishes everywhere the African continent; while the district situated towards the Mediterranean and the Atlantic ocean resembles more the countries of southern Europe. (See ATLAS.)

5. *Climate.*—By far the greater part of Africa lies within the torrid zone, those countries only which are situated towards its southern and northern extremities being beyond the tropics, or within the temperate zones. Owing to the vast extent of its arid plains, and the general want, in so far as we are able to discover, of the tempering influence of extensive inland lakes or seas, the temperature of Africa is decidedly higher than that of any other of the great divisions of the globe. The parts without the tropics are destitute of that regular succession of four seasons which is considered as a characteristic feature of the temperate zone. Here, as between the tropics, the year is divided into the dry and rainy seasons; but with this difference, that between the tropics the rainy season sets in when the sun approaches the zenith, whereas it occurs in the countries beyond the tropics when the sun approaches the opposite tropic, and, consequently, is at the greatest distance from their zenith. The rainless zone, or the space intervening between the countries which have the rainy season in summer and those which have it in winter, occupies in Africa a much wider extent of surface than in the other divisions of the globe. In the northern hemisphere, the tropical rains cease on the southern borders of the Sahara at about 16° N. lat., and the winter rains begin at its northern border about 28°; so that the rainless region here occupies twelve degrees of lat. In the stony country E. of the Sahara, the tropical rains cease between 18° and 19° N. lat., and the winter rains between 27° and 38°; here, therefore, the rainless season occupies nine degrees of lat. We are less acquainted with the climate of the countries lying contiguous to the southern tropic; but it is certain that on the western side of Africa, between 28° and 20° S. lat., a great sandy desert extends over the greatest portion of the table-land, in which there falls very little, if any, rain. The

eastern declivity of the table-land, which is exposed to the immediate influence of the north-east monsoon, has a regular succession of dry and rainy seasons.

The great extent of the rainless regions seems to be one of the principal causes of the high temperature of this continent. Nearly all the countries of Africa are hotter than those of Asia and America situated under the same parallels. The highest degree of heat is experienced in the Sahara and the countries bordering the great desert. It is, however, worthy of remark, that in Soodan, in about 10° N. lat., and at no great distance from the Sahara, the temperature sometimes descends at night to the freezing point.

6. *Rivers.*—Though Africa, being mostly situated between the tropics, has the full advantage of the abundant tropical rains, it is less favoured with running waters than the other divisions of the globe. This is partly ascribable to the great extent of the rainless regions, and partly to the elevation of the table-land occupying the southern half of the continent. The countries which are well watered are not numerous, and occupy but a small portion of the whole surface. Such are the northern declivity of mount Atlas, the countries embosomed within and lying contiguous to the Kong mountains, Soodan, the valleys of the Abyssinian mountains, the western coast between 40° and 18° S. lat., and the comparatively narrow strip of country lying along the east coast from the Cape of Good Hope to the equator; to which are to be added the deltas of the Nile and the Quorra.

The largest river is the Nile, which probably has a course of not less than 2500 m.; but as the source of its remotest branch, the Bahr-el-Abiad (the White river), is still unknown, its length cannot be determined with any degree of precision. It is equally impossible to determine the length of the Quorra or Joliba, the Niger of the ancients. For though its middle portion was ascertained by Mungo Park, and its lower by Clapperton and the Landers, its upper portion, which seems to traverse the high table-land enclosed by the Kong mountains, has not been visited. Its whole length does not probably exceed 2000 m. The course both of the Senegal and Gambia are known; the former running about 1000 and the latter 700 m. The rivers traversing the high table-land of southern Africa are only known at their mouths and a short distance inwards. These are the Congo or Zaire, and the Coanza, which fall into the Atlantic Ocean; and the Zambese, which falls into the channel of Mozambique. The river Gareep or Orange, which flows a short distance to the N. of the Cape Colony, is pretty well known in its whole course, and may run about 900 miles.

7. *Lakes.*—These are neither numerous, nor generally of great extent. In the older maps a large lake is laid down to the W.N.W. of Mozambique, called Moravi or Zambre; but its existence is problematical. The largest lake by far of which we have any certain account is that of Tchad, made known and partly explored by Messrs. Denham and Clapperton. It is situated almost in the centre of the continent, in Soodan, to the S. of the great desert, near the 15th degree of N. lat., and under the 15th degree of E. long. The lake Debo, or Dibbie, in the same lat., and under the 5th degree of W. long., traversed by the Niger or Joliba, though considerable, is of very inferior dimensions. Some lakes are met with in the ranges of mount Atlas, especially towards the gulf of Cabes, among which, that of Lowdejah is the most extensive. The greater number of lakes seem to occur within the depression of the table-land of southern Africa, between 4° and 18° S. lat.; but our information on this as on most other points connected with the geography of Africa is in the last degree vague and unsatisfactory. The lake of Demben, in Abyssinia, traversed by the Bahr-el-Azrek, or Eastern Nile, is also of very considerable magnitude.

8. *Minerals.*—The mineral riches of Africa are very imperfectly known; but the probability seems to be that in this respect it is but little if at all inferior to any of the other great divisions of the globe. Gold dust, principally obtained from the sands in the upper parts of the rivers, forms a principal article of import from Africa; and iron, the most useful of all the metals, is known to be very generally diffused. Salt is wanting in Soodan and some other very extensive districts; but on the other hand it is found in immense quantities both to the S. and N. of this central district.

II. *Races of People.*—Although we are accustomed to consider the inhabitants of Africa as being generally of the negro race, the actual number of varieties of the human family occupying this portion of the globe is not only much greater than those found in Europe, but the differences in colour, form, and stature are much wider. There are about *seven* ascertainable varieties, which may be enumerated as follows, beginning with the southern extremity of the continent; viz., the Hottentot, Kaffer, Abyssinian, Egyptian, Numidian, Nubian, and Negro. We shall give a brief description of each race in this order. In the *Hottentot* the colour of the skin is a yellowish brown, and has been compared to that of a "faded leaf." The cheek bones are high, and much spread out in the lateral direction; and from these the face is suddenly contracted below to a very narrow and pointed chin. Nose remarkably flat and broad towards the end. Colour of the eyes a deep chesnut; they are long, narrow, and removed to a great distance from each other. The hair of the head is of a singular nature; it does not cover the whole scalp, but grows in small tufts at certain distances from each other. When kept short, it has the appearance and feel of a hard shoe-brush; with this difference, that it is curled, and twisted into small round lumps about the size of a marrowfat pea. When suffered to grow, it hangs on the neck in hard twisted tassels like fringe. There is little beard; and the hair on other parts of the body is either scanty or altogether wanting. The stature of the Hottentot is very short, about four feet six inches being considered about the middle size for the men, and four feet for the women, which is about fourteen inches short of the average stature of Europeans. Their form is slender, delicate, and not ill proportioned; but altogether they may be pronounced a very ugly race. The sex is distinguished from all others of the human race by a pendulous rugose elongation of the *nymphæ* of from two to five inches long, and by a vast accumulation of fat over the *glutei* muscles, which invariably takes place after the first conception. Both these appearances are well ascertained to be natural, and in no way the result of art. The language of the Hottentots is as singular as their persons. Its pronunciation has been compared to the clucking of a turkey. There are numerous guttural sounds produced deep in the throat, and pronounced with a peculiar clack of the tongue, which is quickly struck against and withdrawn from the teeth or palate. The aspirated gutturals are combined with harsh consonants in a manner unpronounceable by Europeans, except those who have acquired the language in infancy. No portion of this race, unconnected with Europeans, has advanced beyond the rudest stage of the pastoral state of society. When discovered, they had domesticated the ox and the sheep, the flesh and milk of which afforded them food, and their skins, with those of wild animals, clothing; they knew nothing of tillage, had no fixed dwellings, and practised no mechanical art except that of fabricating the bow and arrow. The ancient country of the Hottentot variety may generally be described as that which now constitutes the British colony of the Cape of Good Hope.

The immediate neighbours of the Hottentots, and lying N. and N.E. of them, are the *Kaffers*—a very different race. The colour of the Kaffer is neither black, like that of the Negro, nor of the colour of a faded leaf, like that of the Hottentot, but of a deep brown. Hair short, curling, and woolly; but it is not of the woolliness of the Negro. Nose tolerably elevated; lips large and thick; but the lower maxillary bone does not project in the remarkable manner of the Negro, and, consequently, the facial angle is much greater. The body, instead of being, as in the Hottentot, diminutive and feeble, is muscular and athletic, and the stature is equal to that of the European race. The peculiarities of the female form in their southern neighbours have no existence among them, and the genius of their language is distinct and peculiar. In the useful arts they have made considerable progress. Besides domesticating the ox and sheep, they have also tamed the horse and goat; and their agriculture extends to the cultivation of barley and millet. It is a singular and distinctive trait that they practise universally the rite of circumcision. Of the origin of the practice they can give no account; and it has most probably been derived from intercourse, at some remote period, with some people by whom it was practised.

The *Abyssinian* race is entirely different from those previously mentioned. Their colour is nearly black; but the hair is long, and generally lank, like that of an Arab or Hindoo. Features regular, after the European model, and the nose often aquiline. The stature equals that of the European; and the whole person is generally well formed, and occasionally handsome. The nations comprehended under this race have made considerable progress in the useful arts. They have domesticated most of the useful animals, as the ox, sheep, horse, ass, and camel; and cultivate most of the common corns, as wheat, barley, and millet. They also work, with some skill, articles of iron, copper, and brass; and except the ancient Egyptians, and probably the Numidians, are the only native race of the entire continent who have invented an alphabet or possessed a literature.

The *Egyptian* race is represented by the Copts of Egypt. These have long hair, a yellowish dusky complexion, neither Grecian nor Arabian, a puffed visage, swollen eyes, flat noses, and thick lips; and, in short, according to Volney, much resemble mulattoes, or the mixed offspring of the European and Negro. It is almost unnecessary to add, that this was one of the earliest civilized races of mankind; and that at least thirty ages ago it had already tamed the useful animals, cultivated the most valuable plants, smelted the useful and precious metals, and erected architectural monuments which, for their durability, extent, and grandeur, still astonish the world. They were also among the first to invent hieroglyphic and alphabetic writing.

The next race to be named is the *Numidian*. The people, not yet mentioned, who inhabit the northern portion of Africa from about the 18° of N. latitude to the Mediterranean, and known by the various names of Moors, Berbers, Tuaughis, and Tibbaus, are, in some cases with an admixture of Arab blood, probably the aboriginal inhabitants of the country before the settlement of the Phœnicians, Romans, Vandals, or Arabs; that is, they are the descendants of the Lybians, Numidians, Mauritanians, &c. With this race the hair is long and black; eyes dark; the colour of the skin a light brown, little deeper than that of the inhabitants of Spain; the features are European, but the nose generally not very prominent, and never aquiline, as is often the case with the Arabian. Although apparently superior at all times in civilization to any Negro nation, this race appears at no period to have made any remarkable progress in arts or arms, and scarcely any in letters; for it has been ascertained only of late years, rather as a matter of curiosity than anything else, that they once possessed the art of alphabetic writing. Their language, indeed, is but the jargon of a rude people, destitute of terms to express the most common distinct ideas, such as *shortness*, *roundness*, *sloth*, *death*, *&c.* Such ideas are either expressed by circumlocutions, or, in more difficult circumstances, recourse is had to the Arabic language. Their inferiority is indeed most decidedly implied by the facility with which they have given way before every successive race of conquerors, during a period of at least 2500 years.

The next race to be described may be called the *Nubian*; and, with the exception of the Abyssinians, will comprehend nearly all the people of Africa from about 8° of N. latitude to the southern confines of Egypt, and from the Red Sea and Indian ocean on the east to about the 25° of E. longitude westward. In this race will be included the people called Barabra or Nuba, the people of Sennar, the Sumali, the Saukiag, the Bishari, the Ababdah, the Galla, and others. A long oval countenance; a carved nose, somewhat rounded towards the top; rather thick lips, but not protruding excessively, like those of the Negro; a retreating chin; scanty beard; lively dark eyes; strongly frizzled, but never woolly hair; a finely formed person of the middle size, with a bronze complexion—are the physical characteristics of this race. Some of the nations of this race have made considerable progress in the common arts of life, but they have no indigenous literature.

With the exceptions now mentioned, the rest of the African continent may be said to be peopled by the *Negro* race, which commences at the southern boundary of the great desert, and, embracing both the western and eastern coast, with the island of Madagascar, extends to about 20° of S. latitude.

The following are the leading characteristics of this well-known variety of our species: Skin and eyes black; hair black and woolly; scull compressed laterally, and elongated towards the front; forehead low, narrow, and slanting; cheek bones prominent; jaws narrow and projecting; upper front teeth oblique; chin receding; eyes prominent; nose broad, thick, flat, and confused with the extended jaw; lips, particularly the upper one, very thick; palms of the hand and soles of the feet flat; tibia and fibula convex; pelvis narrow; knees turned in, toes turned out. The stature and physical strength are equal to that of the European, while the latter exceeds that of any other race. Many of the Negro nations have made considerable progress in the necessary and useful arts; a progress which, it may be safely affirmed, greatly surpasses that made by any native nation of America. They cultivate many useful grains, roots, and fruits; have appropriated the services of the most useful of the domestic animals, such as the ox, horse, ass, camel, goat, sheep, and hog, all of which appear to be indigenous. It is singular, however, that no Negro nation, nor even any native African nation, has ever had the ingenuity to tame and train the elephant, a service to civilization which has been performed by almost every Asiatic nation to whose country this animal is indigenous, and which, there is abundant evidence to show, was done by the Carthaginian and Roman settlers in Africa.

It is a still more striking fact, that no Negro, and, indeed, no African nation, save the Egyptians, Abyssinians, and partially the Numidians, ever possessed a literature, or had ingenuity to invent any alphabet, however rude.

The general character thus sketched belongs, with more or less intensity, to the whole Negro race within the limits we have assigned to it; but it is not, at the same time, to be forgotten that there is much variety—a greater, perhaps, than exists among the European or any other family. We shall endeavour to describe a few of the most remarkable and best ascertained of these. The *Mandingoes* are a numerous people, occupying the mountainous country on the west side of the continent which lies towards the sources of the rivers Senegal and Gambia. They possess the true Negro features, but not in an exaggerated form. The colour is black, with a mixture of yellow; the person strong, symmetrical, and above the middle stature. Of all the Negro races the Mandingoes have exhibited the greatest aptitude for improvement. They are industrious, enterprising, and, compared with their neighbours, of an open and generous character. They have adopted the Mohammedan religion, and with it the letters and literature of Arabia. The *Foulahs*, or Paules, inhabit the same portion of Africa. The colour of the skin with this race is a sort of reddish black. Their countenances are regular, and their hair longer and not so woolly as that of the ordinary Negro. They are robust, courageous, industrious, and enterprising, and, like the Mandingoes, have adopted the literature and religion of Arabia. Altogether they make a considerable approach to the family which we have before described under the name of the *Nubian*. The *Sunniahs* are a squat robust Negro race, not exceeding five feet eight inches high. They are remarkable for their courage and hardihood, and have made considerable progress in the common arts of life, but have not adopted Mohammedanism or the Arabic letters. The *Jolofs* inhabit both the maritime and mountain country on the south banks of the Senegal, and are, in fact, the first Negro nation we encounter on the western side of the Continent after quitting the Berbers. Their complexion is a fine, transparent, deep black. With the exception of thick lips, and a nose much rounded at the end, their features make some approach to the European. The hair is crisp and woolly, the stature tall, and the figure good. To the south of the Gambia, and extending to Cape Palmas, we find the race called *Feloups*, of a deep black colour; with longish woolly hair; features so regular as to be thought to bear some resemblance to the Hindu; and of slight and short stature, but much agility. These are nearly in a savage state. To the south of the Feloups are the *Papels*, a race of very ugly Negroes, of dull, gross, and ferocious aspect, with very flat noses, and of a dirty livid colour. These and some other races resembling them are followed in proceeding southward by the *Bullom*, *&c.*, of a fine black colour, of good features, and well made, with persons above the mean stature. Proceeding southward, and more to the Gold coast and the country lying inland from it, we find the Intor, Fantee, and Ashantee nations, which appear to constitute another distinct variety of the Negro race. It is of the mean stature, and well proportioned. The face is of an oval form; the eyebrows lofty and thick; the lips fresh, red, and not hanging down as in the extreme forms of the Negro, and the nose not so flat. The hair is rather curled than woolly, and occasionally so long as to reach to the shoulders. Now and then are to be seen examples rather Asiatic than African. No nation of this variety has ever possessed the art of writing, either springing up among themselves or borrowed from strangers; and, although they have all made considerable progress in several of the common arts of life, they are in the habitual perpetration of cruel and ferocious rites, not to be paralleled by any other race of mankind. From the Bight of Biafra down to 20° S. latitude, where we encounter the Kaffers, there is comparatively little variation from our general description of the Negro family. In the interior of Africa, lying between the mountains of the Moon, which cross, or are supposed to cross, the entire continent in about 10° of N. latitude, and the great desert, we have, as far as our very imperfect information extends, little variety from the common type of the Negro. This is the country which the Arabs call Soudan; a word which means the country of "black men," and is exactly equivalent to the Persian word Hindostan. On the east coast of Africa, between the *Kaffer* and *Nubian* races, we have nothing but true Negroes. It is, however, to be observed of these, that although the woolly head, black skin, flat nose, thick lips, and projecting jaws are never absent, their excess which is found in general on the western coast does not exist. Under the same denomination, though shorter and feebler, is to be included the inhabitants of the great island of Madagascar, who, because their language contains probably about 100 or 150 words of Malayan, are absurdly supposed by some writers to be of the Malayan race, which they no more resemble than they do Europeans. The introduction of such terms has, in fact, been satisfactorily accounted for by the drifting of boats with crews of Malays from the shore of the island of Sumatra, two or three authentic examples of which have occurred within our own times. The fact of such occurrences having taken place is a sufficient answer to the apparent difficulty of open boats with their crews performing a voyage which cannot be less than 3600 nautical miles. The manner in which such events would take place is, we think, obvious enough. A trading or fishing boat with a few cocoa nuts, affording meat and drink to the crews, and known to be a constant sea-stock in such cases, driven from the coast of Sumatra in the height of the N.E. monsoon, would in due course be carried into the S.E. trade wind, and, going with a flowing sheet before the wind (the only course she could pursue), would be carried to the shore of Madagascar in a shorter time and with more safety than might at first be imagined.

Such is a brief and necessarily imperfect account of the races of men inhabiting Africa. The subject is, indeed, full of difficulty; not only from its extent, variety, and complexity, but also from the imperfect information, and, indeed, in most cases the entire ignorance, which exists regarding it. The number of different nations, and even of distinct languages, is proportional to the barbarism of the people; and there is no quarter of the globe, America excepted, in which the number of both is so great. In our inquiry we have been able to detect at least 200 languages, and, indeed, the empire of Bornou alone is said to contain no less than thirty.

Amount of Population.—There are no means whatever by which to form any estimate of the population of Africa. Hence the great discrepancy among the guesses that have been made of its amount. According to Balbi, it contains 60,000,000, whereas Malte-Brun gives it 70,000,000, and the Weimar Almanac 101,000,000.

III. *Animals of Africa.*—These, at its northern extremity, where it approaches Europe, and at its eastern, where it approaches, or, rather, joins Asia, are generally the same as those of these two portions of the globe; but throughout its greater part they are not only different from the European and African species, but equally also from the animals of the two portions of America, and from those of the Oceanic continent and islands. We shall confine our observations chiefly to those more immediately subservient to the uses of man.

Of 1270 known species of terrestrial *Mammalia* there have been discovered in Africa, although more imperfectly explored than any other portion of the globe, no fewer than 290, of which 242 are peculiar to this continent. Of the *Quadrumana*, comprehending apes, monkeys, and lemurs, there are fifty-five species, of which forty-eight are peculiar to it; not one of them being identical with the species found in Asia or America. The most remarkable of the whole tribe is the *Simia troglodytes* or chimpansee, which, after a careful anatomical comparison with the *orang utan* of Borneo, is now considered to make, in physical formation, a nearer approach to man than the latter, while it is unquestionably more lively and intelligent. Of the *Cheiroptera* or bats there are thirty species in Africa, four of which only are common to it with Europe and Asia. The carnivorous animals of Africa are sixty-six in number, of which fourteen only are found in other parts of the world. The most remarkable of these is the lion, which is known historically to have once existed in the east of Europe and west of Asia. With the exception of an inferior variety found in some parts of northern Hindustan, this animal, so renowned in the fable, poetry, painting, and sculpture of almost every nation of the Old World, from China to Spain, is now confined to Africa (*Leonum arida nutrix*), which it ranges from its N. to its S. extremity. Panthers, leopards, and many small species of the feline race also exist; and the cat has been domesticated, though it be much more rarely found in this state than in Europe, Asia, or even America.

Of the Canine family, Africa contains the dog, wolf, fox, jackal, and hyena. The dog has not been found there in the wild state, but many varieties exist in a semi-domesticated condition, living in troops in the towns and villages, as it does in almost all the countries of Asia. The Africans have never, that we are aware of, used it for food or labour, or even for the chase. Jackals and foxes are numerous. Africa may be considered the peculiar country of the hyena; for, of four existing species, one only, belonging to Hindostan, is found out of its limits. Of the *Viverra* or civets several species exist in Africa; among which is the true civet cat, domesticated by the natives to produce civet, and a species of the Mongoos, viz., the celebrated Ichneumon, or rat of Pharaoh. Of bears, which either still exist, or are known to have existed, in almost every country of Europe, Asia, and America, no example has yet been found in Africa.

The Marsupial order of animals, or that of which the females have a double womb, is wholly wanting in Africa, as it is in Europe and continental Asia. Of the Rodent Mammalia or gnawers, Africa yields many species of rats, squirrels, and four or five species of hare; while the rabbit is thought to have been originally brought to Europe through Spain from the African coast of the Mediterranean. The *Pachydermata*, or *thick-skinned* order, is very abundant; more so, indeed, than in any other part of the world. We find among these the horse, ass, zebra, dow, and quagga; the elephant, rhinoceros, hippopotamus, common hog, and lingallo or African boar. Although the horse cannot be asserted to be a native of Africa, not being found in the wild state, it has been domesticated there from the earliest ages of history. The Numidians had their cavalry when the Romans first became acquainted with them; and the horse does not appear to have been a stranger even to the ancient Egyptians; though among the mummies of quadrupeds found in the catacombs that of this animal does not appear. The most improved of the Negro tribes possess the horse, and have often a numerous cavalry; but, like Asiatics generally, the Africans do not apply the horse to draught or burden, and confine its use to war or pleasure. When the Arabs conquered Egypt and northern Asia, they introduced their own breed, which, mixed in some degree with the native one, constitutes the barb and Egyptian horse—little inferior to the pure Arabian blood itself. The Dutch and English introduced into the colony, at the southern extremity of the Continent, their respective national breeds; and the soil and climate of Africa being found generally congenial to the constitution of the horse, it has thriven and multiplied there as everywhere else.

The ass is most probably not a native of Africa, or we should still, in a country so little occupied by man, find it in its wild state, as we do in so many countries of Asia. It has, however, been introduced into Egypt and Barbary—possibly by the Arabs—and thrives extremely well in both. The zebra, the dow, and the quagga, quadrupeds peculiar to Africa, and beautiful, at least as to colour, are found in troops all over its arid plains and deserts. But from a natural indocility or waywardness of temper, or from the unskilfulness of the African people—probably, indeed, from both causes—and the possession of the horse and ass, they have never been tamed and applied to economical uses.

Ruminating animals are not less abundant than the *Pachydermata*. Of the 157 species of those which are ascertained to exist, seventy-three are found in Africa; and, with the exception of ten, all of them are peculiar to it. The dromedary, or single-humped camel, is now abundant in all the dry parts of Africa, and is the principal beast of burthen. In the earliest portion of Scriptural history it is mentioned as being employed in carrying on the trade between Syria, Arabia, and Egypt, and therefore it is fairly concluded that it was well known to the ancient Egyptians. It is also found sculptured on some of the earliest Egyptian architectural monuments. Egypt, however, from position, physical character, and civilization, was always more an Asiatic than an African country: and from the fact of the camel's existing there, its general diffusion over the country cannot be inferred. It does not appear to have been known in the portion of Africa lying along the coast of the Mediterranean during its possession by the Romans; and it seems not improbable, therefore, as some have conjectured, that its general diffusion over the continent was the work of the Arabs, after their adoption of the Mohammedan religion in the 7th century. The *Giraffe*, known to the Romans, and used in their games, is exclusively an inhabitant of the dry parts of Africa. Notwithstanding its size, strength, and gentleness, it has never been applied, in its domesticated state, to any useful purpose of man; and from its eccentric and awkward form and movement, is probably unfit for any.

Horned cattle, or oxen, of many varieties, are generally among all the more civilized tribes of Africa; and in Egypt the existence of the ox is coeval with the earliest records of the country. Mummies of this animal have been found in the catacombs, supposed to be not less than three thousand years old. Whether the original stock was imported or was indigenous, cannot be ascertained; but most probably the latter, for the common ox in the wild state is not known to exist in any part of this continent as it does in many parts of Asia and its islands, and as it is known once to have done in Europe. The buffalo (*Bos bubalus*) has been naturalized in Egypt since the middle ages, having been introduced from India through the conquests of the Arabs. One species of the ox family only is ascertained to be indigenous to Africa, and is peculiar to its southern extremity. This is the buffalo of the Cape, or *Bos Caffe*; an animal of great size and ferocity, which has never been tamed, and is probably untameable.

Sheep and goats exist throughout all the drier parts of the continent; but neither are found in the wild state, and have probably been introduced. The prevalent variety of the first is that with the fat tail, of from 10 to 30 pounds weight, the same which is so general in Persia, Arabia, and Tartary; and which, though long looked upon as a rarity and a monstrosity, is probably as extensively diffused over the globe as the variety more familiar to us. The wool and flesh of the fat-tailed sheep are greatly inferior to those of our own breed; but the flesh of the lamb is thought to be superior. There are said to be but two species of deer—one of which is the common deer—existing in this continent, and these are confined to the countries bordering the Mediterranean. This is compensated by the existence of not less than sixty species of antelope, all peculiar to it; a number far exceeding that of the genus found in every other part of the world. Some of the species, as the gazelle, do not exceed a foot and a half high, and are remarkable for the beauty and gracefulness of their form. Others are equal in size to a large ass or zebra; as the gnu, which has the body, tail, and paces of a horse. The most numerous species is perhaps the springbok; which, in the wide

plains of southern Africa, is said to be found in herds of 10,000, or even 50,000. Not one of the whole family has ever been domesticated for the purposes of food or labour by the natives, as the rein and fallow deer have been in Europe.

The elephant is found in all the wooded and low parts of Africa, from the northern limits of the great desert to the southern cape; and generally in greater numbers than any where else in the world, if we except Ceylon and the countries lying between Hindostan and China. The African elephant differs, specifically, from the Asiatic. The crown of the tooth is marked by a lozenge instead of ribbon stripes; the hind foot has *three* toes instead of *four;* the forehead is convex instead of concave, and the ears are longer. In point of size, general form, sagacity, and docility, there is probably no great difference. No native African people, that we are aware of, ever tamed the elephant. When an African is told that this is done in the East, he is as incredulous as a European would be if an African told him that his countrymen tamed the hippopotamus, and used it as a beast of burden. The only hint we have seen that such a thing may be, is given by Mr. Campbell, the African traveller, who informs us that he was told by a people of the interior whom he encountered, that another people more advanced in civilization than themselves, the Mahalasley, "wear clothes, *ride on elephants*, climb into their houses, and are gods." That the elephants used by the Carthaginians were of the African species there cannot, we think, be the least question. One of the conditions of the treaty forced upon them by the Romans after the battle of Zama implies this clearly enough. They were to surrender all the elephants which they had tamed, and to tame no more for the future.* It is obvious enough that had the elephants been Asiatic, they would only have been brought to Africa when already tamed. The Carthaginians being of an Asiatic, not an African stock, form no exception to our previous remark. The Egyptians, the only people of Africa from whose ingenuity we might have looked for the domestication of the elephant, had none to tame; nor was their highly-cultivated country well suited for their use, if they had. As a contrast to the Africans, it may be observed, that there is no people of Asia whose country produces the elephant by whom it has not been domesticated and used as a beast of burden, from the Hindoos, the most civilized, to the Malays, the least so. The Africans consider the elephant only as a beast of chase, and hunt it for its ivory, its flesh, and its hide; and the herds are so numerous, and the population so scanty, that the supply, according to present circumstances, appears for all practical purposes inexhaustible.

The two-horned rhinoceros, of a different species from the two-horned rhinoceros of Sumatra, inhabits the same localities as the elephant, is hunted with the same avidity by the natives for its tough and thick hide and its horns. Traces for ox-harness, but above all shields, are made of the former, which are in repute throughout all eastern countries; and the latter are used for their supposed medical virtues, and are a regular object of traffic. It may be observed of this species of rhinoceros, as well as of the two which belong to India and its islands, that their docility and capacity for domestication are not inferior to those of the elephant itself. The slow and sluggish movements of this animal make it, notwithstanding these qualities and its great strength, an unsuitable beast of burden, especially in countries where the elephant, the ox, the buffalo, and the horse exist; and, consequently, it has never been applied to such a purpose.

The hippopotamus is exclusively a native of Africa, inhabiting the rivers and fresh-water lakes of the whole continent, from the southern confines of the Sahara nearly to the extreme cape. It was well known to the Greeks and Romans as an inhabitant of the Nile; from which, however, it has now disappeared everywhere below the third cataract. In the rivers and lakes of tropical Africa it still exists in undiminished numbers, being from its locality difficult to come at by the hunter.

The common hog, in the wild state, is said to be found at the two extremities of the continent, where it approaches Europe and Asia, viz., Barbary and Egypt; but there is no evidence of the existence, anywhere else in Africa, of this animal, which was at one time general throughout Europe, and is still general throughout Asia and its large islands. Its place seems to be taken by the lingallo, or masked boar. This animal, which has teeth of a formation and growth resembling those of the elephant, and a large pendulous protuberance supported by a bony process on each cheek, giving it a hideous appearance, is not only found on the continent, but in Madagascar and the Canary Islands. It has never been domesticated, but the common hog has to a limited extent.

The native Ornithology of Africa does not present the same number of subjects subservient to man as that of Asia, or even of America. The common fowl, goose, and duck are all of them probably strangers, and there is no doubt that this is the case with at least the first. They are bred by the native inhabitants, but only to a very limited extent. The only bird which Africa has contributed to the poultry-yard is the Guinea hen; of this genus there are four or five species found abundantly on the western coast and its islands. This bird, as its Latin name, *Numida*, implies, was known to the Romans, and bred by them. Most probably they received it domesticated from the Carthaginians. It is very remarkable that it is now wholly unknown to any African people in the domestic state, except as imported by European colonists—a singular proof of apathy and dulness in the whole race. This bird seems to supply, in Africa, the place of the common fowl of Europe, the peacocks and pheasants of Asia, and the turkeys and alectros of America. The ostrich, which once extended to the nearest parts of Asia, is now confined to Africa; and the Arabs are said to have introduced the practice of breeding them in the domestic state, in order to obtain their feathers in greater perfection. Of our summer birds of passage many pass their winters in Africa; as the cuckoo and nightingale, some swallows, and the common quail and land-rail. The cheerful and active period of their lives, therefore, is passed among us, and the note of the cuckoo and song of the nightingale are wholly unknown to the people of Africa. The woods of tropical Africa abound with birds of the parrot family, from those which are no bigger than a lark, to some which are equal in size to a large falcon. As in South America, the Indian islands, and Australia, they are remarkable for the variety and brilliancy of their plumage, their dissonant and incessant notes, and their utter inutility to man. Proportional to the number of graminivorous and frugivorous birds, and of wild mammals and reptiles, is that of eagles, hawks, vultures, and other birds of prey.

Among Reptiles are to be found a great variety of the lizard family, from the chameleon up to the crocodile; and of snakes (a few poisonous, but the greater number harmless), some species not exceeding a few inches long, up to the python, which measures thirty feet in length. All the species of this class differ from those of Asia and America, not to say of Europe, or the Indian islands, or Australia. Africa, of course, abounds in the insect tribe. Of these the bee alone is directly useful to man, but has never been domesticated by the Africans. Africa yields no useful insect, such as the kermes of Europe and Western Asia, the lac of Eastern Asia, or the cochineal of South America.

IV. *Plants of Africa.*—In reference to its Flora, Africa may be divided into three regions, the Atlantic, the Equinoctial, and the Austral; to which we may add the principal islands on its western and eastern side, viz., the Canaries and Madagascar, with the Mauritius and Bourbon. The plants of the Mediterranean coast differ little or nothing from those of the opposite shore of Andalusia. Wheat, barley, maize, rice, the grape, the fig, and olive, thrive here in perfection, as does the date. It is not until we reach as far as Egypt that the Flora assumes a character intermediate, as it were, between European and Tropical; and here, to the plants already enumerated, may be added the sugar-cane, cotton, indigo, and coffee. In Upper Egypt, Nubia, and Abyssinia, we have a somewhat peculiar vegetation; and here we find the *acacias*, which produce gum-arabic, and the *cassias*, which yield the medical senna. In Abyssinia first appears the Scitamineous family of plants, the same which in the East yields ginger, turmeric, and cardamoms. The coffee plant still grows wild in the same region, which is, indeed, supposed to be its native country.

In the Equinoctial part of Africa a totally new vegetation presents itself, entirely differing from that of Europe, and almost equally so from those of tropical Asia and America. One conspicuous forest-tree of great size, however, the *Bombax pentandrum*, is common to the three continents. Another forest-tree of vast magnitude, the Baobab, or *Adansonia*, is supposed to afford examples of the oldest living organized matter on our globe; some specimens, by counting the number of their concentric circles, being estimated at near 6000 years old. The African oak, or teak, which, however, is probably neither the one nor the other, though its botanical place has not been as yet ascertained, is an inhabitant of the same region. The bamboo, so common and so useful in Asia and America, is unknown to Africa. Whole plains in this quarter are occasionally overspread with the papyrus-plant, to the exclusion of every other. Peculiar palms of course abound; among which, however, the date

* "Perfugas fugitivosque, et captivos omnes rederent Romanis, et naves rostratas, præter decem triremes traderent, *elephantosque, quos haberent domitos; neque domarent alios.*"—(Livy, lib., xxx., c. 37.) The elephants of Pyrrhus were, no doubt, Asiatic, and received through the Macedonian conquests. His invasion of Italy was but forty-seven years after the Indian invasion of Alexander; and therefore considering the long age of the elephant, the very individual animals in the army of Pyrrhus may have been the same which Alexander brought from the banks of the Indus.

is no longer found. The most useful of these is that which yields the oil of commerce, the *Elais Guineensis*. Whether from the barbarism of the natives or the uncongeniality of the soil and climate, corns are little grown, and their place is taken by hardy farinaceous roots, pulses, &c.; as the *Dioscoria* or yam, the *Arachis* or ground-nut, and the pigeon pea or *Cytisus cajan*. The fruits of tropical Africa, in comparison with those of Europe, Asia, the Asiatic islands, or America, are few in number and of indifferent quality. The most remarkable are the nitta or doana (*Parkia Africana*), a species of custard apple (*Anona Senegalensis*), the safu, the cream fruit, the negro peach (*Janocephalus laurina*), the monkey apple, pigeon plums (*Chrysobalanus*), the Rammee apple (*Mammea Africana*), and the star apple (*Chrysophyllum*). The pine apple, a native of America, grows luxuriantly in the forests, as if it were indigenous.

As we approach the southern extremity of the continent, a new form of vegetation presents itself, different essentially from that of every other part of the world, but bearing the nearest analogy to that of Australia. Its character is suited to the arid nature of the soil and climate; and the prevailing genera are euphorbias, aloes, crassulas, and heaths, of endless species, and often of great beauty; plants generally with fleshy leaves, and slender roots, which are nourished more by dew than by the moisture of the earth. The grasses are generally coarse, and forest trees are only found in the moister parts near the banks of rivers.

In the Canary Islands the species are for the most part European, but their growth and luxuriance is tropical. The great island of Madagascar has on its western side plants common to Africa, and on its eastern some that are common to the Indian Archipelago. But generally both here and in Bourbon and the Mauritius, the flora is peculiar and local.

From this brief sketch of the native flora of Africa, we shall be disposed to conclude, that although it may be equally varied, grand, and beautiful with those of Asia and America, it yields far fewer objects ministering directly to the uses of man. To Asia, or Egypt (a country African only by position), Africa probably owes the banana, the orange, lime, and lemon, the tamarind, the cocoa-nut, cotton, and sugar-cane. It may even be conjectured that it owes to the same source, and perhaps through the Phœnician settlers, wheat, barley, the grape, fig, and pomegranate. To America it unquestionably owes maize, tobacco, manioc, and the pineapple.

If Africa be excelled by Europe, Asia, and America, in its turn it immeasurably exceeds Australia, which yields neither useful corn, root, nor fruit.

V. *Religion.*—Fêticism,* in its most degrading and offensive form, is the religion of the greater number of the inhabitants of Africa, being professed by almost all the Negroes, and by nearly all the natives of Madagascar. They appear generally to admit a good and an evil principle, have their lucky and unlucky days; and their priests claim the power of preserving men and animals from the influence of evil spirits. Several of these nations have a national and supreme *fêtiche:* the people called Ouidah or Widah, for instance, worship the serpent, an order of priests and priestesses being set apart to minister to this reptile. The Bissagos worship the cock; and the tribes on the Bight of Benin, who regard their own shadow as a *fêtiche*, have a lizard for their principal divinity. Other tribes worship alligators, hyænas, leopards, &c.; and in some instances immolate to them human victims. The Agows, who reside near the sources of the Nile in Abyssinia, have, with less absurdity than most others, from time immemorial, offered sacrifices to the genius of that river. The narrative of the Moor Sydy Hamed represents the inhabitants of Wassenah and some tribes of Nubia, and in other countries in the region of the Nile and the interior of Africa, as worshippers of the moon; and those contiguous to Cape Mesurado in Guinea as worshippers of the sun. The Gallas hold as sacred certain trees and stones, the moon, and some of the stars. Sometimes the Negroes frame idols with a human countenance; and Capt. Tuckey and Dr. Smith were surprised to see, on the banks of the Zara in the interior of Africa, idols with European figures, and resembling the Egyptian, or rather the old Tuscan statues. The Betjouanas have a kind of high-priest, who ranks as the most important personage after the king. At Dagoumba, in central Guinea, there is a famous oracle, the resort to which renders it the entrepôt of a flourishing commerce. According to M. Douville (who, though referred to by Balbi, is a very doubtful authority), the Cassange, Molouas, Muchingi, Mououngame, and other nations of southern Nigritia, like many tribes in the centre, unite to idolatrous superstitions the horrible practice of human sacrifices; and though of an hospitable disposition, are said to be cannibals. Such are the dreadful aberrations to which uninstructed and uncivilized man is exposed.

Among these nations, human sacrifices, according to M. Douville, take place only on the accession of a sovereign or on the occurrence of some great epidemic. The victim is always selected out of the country, and, if possible, at a great distance from the place of sacrifice: it must be a young man or woman, and ignorant of the fate that awaits him or her till the moment of immolation. Should any one reveal the fearful secret, death is the inevitable penalty. During the interval between the selection and the sacrifice the victim is kept with the greatest care, and every possible means is adopted for the purpose of making him fat. On the arrival of the fatal moment, he is suddenly put to death in the midst of imposing solemnities, and in the presence of the king, grandees, and people assembled to witness the spectacle. His body is usually quartered, and immediately roasted, to be portioned out among the spectators according to their rank, and devoured on the spot. But enough of these brutalizing enormities perpetrated in the sacred name of religion.*

With the exception of Abyssinia and the colonies founded in modern times on some points of the African coast, where Christianity is professed, Mohammedanism prevails in all the countries of Africa not devoted to Fêticism and idolatry. It is very widely diffused, having extended itself over the whole of Barbary, Egypt, Nubia, &c., and being professed by a considerable number of the more advanced Negro nations. Its introduction has been, perhaps, the greatest boon ever conferred on Africa, and has tended materially to improve the habits and morals of the people. The Koran is the only recognized code in many countries; and, what is singular, the Arabic is everywhere throughout Africa, with the exception of Abyssinia, the language used by such of the natives as either read or write. It was introduced in the first age of the Hegira, and has participated but little in the improvements that have since been made upon it in Asia. Arabic has been for some centuries the language of the Copts or descendants of the ancient Egyptians.

The Christianity that prevails in Abyssinia is largely alloyed with debasing practices and observances; and the priests are as ignorant and worthless as can well be imagined. With the exception of the Cape Colony, the seats of Christianity in other parts of the continent are too trifling to deserve notice; but a considerable number of Christians of various denominations, and of Jews, are found in countries where Mohammedanism and Fêticism are prevalent.

VI. *Language.*—Balbi has given a classification of the people of Africa according to their languages. Perhaps it was impossible to have selected a worse standard. We know little, and sometimes literally nothing, of the people in some very extensive countries, and if it be possible we know still less of their languages. Our knowledge of the latter is indeed in most instances exceedingly imperfect; so that any classification of the people bottomed on it must necessarily be little else than a tissue of errors. The Arabic, as we have just seen, is the learned language of the entire continent. The Berber is the vernacular idiom of the Barbary states; the Sangoi is used in Guinea; and the Poul, the Iolof, &c., bear the names of the people by whom they are spoken. The Ambounda is the language of all the tribes between the Congo and the coast of Mozambique. As was to be expected from the low state of civilization of those by whom they are used, these languages are all miserably poor. The reader will find in the article Abyssinia some account of the languages of that singular portion of the African continent.

VII. *Government.*—Most forms of government may be found in Africa. Despotism, however, in its worst and most offensive shape, is by far the more prevalent. In some states there exists a sort of feudal aristocracy, and in others an aristocracy depending on the rude distinctions of superior strength and prowess in war, which participates to a greater or less extent in the rights of sovereignty, and in some they are occasionally shared by the people. Some large states consist of a kind of confederacy of petty chiefs, who, however, are very frequently at war with each other. In fact, with but few exceptions, slavery and anarchy reign triumphant throughout Africa. And it would be to no purpose, even if we were accurately informed as to the discrepancies in the forms of government established in different parts, to waste the reader's time by detailing in what respect one barbarous and generally fluctuating system of government differed from another.

VIII. *Industry* in Africa is at the lowest ebb. Except where they are associated with or have been instructed by

* *Fêticism* is the worship of natural objects, whether animate or inanimate. The word is derived from the Portuguese *Fetisso*,—something enchanted, sacred, or divine; and comes most probably from the Latin *fanum*, *fatum*, *fari*. Anything, however vile or worthless, may be a Fetiche, that pleases the fancy of a nation or an individual, and requires merely to be consecrated and set apart as a special object of adoration. When this is done it is regarded with every mark of the most profound veneration and respect—is referred to on all occasions of difficulty, sworn by, &c.—See the Treatise *Du Culte de Dieux Fetiches* (by the President Debrosses), 12mo, 1760, cap. 1, &c.

* Those who wish for farther details may consult Balbi, 3d ed., p. 848, &c.

Europeans or Arabs, the Africans have made little progress in the arts. All the more laborious occupations are devolved on females; and in some parts the wives of kings or petty princes are made to till the land for the support of their barbarian lords. Even the most necessary arts are in an extremely backward state. The ground, after being soaked with rain or covered with the mud brought down by the rivers during the inundation, is not ploughed, but merely scratched with a hoe. There are no doubt sundry exceptions to the extreme indolence, stupidity, and barbarism that seem to distinguish the bulk of the native races. The Mandingoes have made considerable advances in civilization, and are advantageously distinguished among the people of the west coast; but the Ovas of Madagascar are said to be in this respect discriminated from the others, and to be not only the most industrious people of that great island, but of the whole African continent, Egypt and Barbary excepted. The Ashantees, too, seem to be in this as in some other respects superior to the bulk of the Negroes; and this, indeed, is one of the grounds on which they have been supposed to be not of Negro but of Abyssinian or Ethiopic origin.—(*Bowditch.*) It is farther true, as has been remarked by Balbi, that the cotton and other manufactures of Egypt have recently attained to considerable importance. But their progress has been, as every one knows, forced and factitious. In point of fact, too, they are carried on wholly under the superintendence of Europeans, and are no evidence whatever of the improvement of the Africans in manufacturing industry.

It is a curious fact, that the smelting and working of metals, which would seem to require a degree of intelligence or of traditional knowledge hardly consistent with their backward state in other respects, is pretty extensively carried on by several of the Negro tribes.—(*Balbi*, p. 844.) Generally, however, the arts practised by the natives are of the most limited description, and are restricted to those necessary to supply the most indispensable wants. The tanning of leather, the weaving of cotton cloths, and the manufacture of mats are everywhere carried on; and in parts the articles produced are of a very good quality, and have much beauty. But the natives are for the most part ignorant of the use of the shuttle; and in weaving pass the threads of the woof between those of the warp one after the other, by the unassisted agency of the hand; taking a month or two to despatch as much work as a European could effect by means of his loom in as many hours! In all their works, in fact, they display little contrivance or design, but generally only a sort of indolent, stupid routine.—(*Mod. Universal History*, xiv., p. 31.)

IX. *Commerce.*—It may appear a singular and not easily explained fact, that notwithstanding the low state of the arts in Africa, and the difficulties of the country, an extensive intercourse has been carried on, from the remotest antiquity, between very distant parts of that continent. This, no doubt, has been owing to the natural productions in greatest demand being confined to certain localities; and to the facilities afforded for traversing the vast deserts which intersect Africa by the aid of the numerous oases with which they are studded; and the employment of the camel, or *ship of the desert*. Salt and dates are the principal articles conveyed from northern to central Africa. The extensive region of Soudan, to the south of the great desert of the Sahara, is completely destitute of these valuable articles. Both of them, but especially salt, are, however, in great demand in it; the latter being, in many parts, so highly prized and so scarce as to be employed to form the functions of money. This necessary article is found in various places in the desert, while dates are found in the greatest abundance all along its north frontier, the country adjoining to it being called from this circumstance Biledulgerid, or the *country of dates*. But, though destitute of these important products, central Africa has others; such as gold-dust, ivory, gums, palm-oil, feathers; and, above all, slaves, for which there has always been a ready market in Barbary and Egypt. In consequence of this natural adaptation of the products of one part of the continent to supply the wants of another, an intercourse has subsisted among them from the remotest antiquity. Even so early as the days of Herodotus, the merchants engaged in the interior traffic had penetrated as far as the Niger, or one of the rivers flowing into lake Tchad; which the venerable father of history correctly describes as a considerable river beyond a sandy desert, which it required many days to cross, flowing eastward, and infested with crocodiles! (II. § 32.) Egypt and different towns in the N. or Barbary states have always been, and continue to be, the great seats of this trade. It is carried on at present as it was 3000 years ago, wholly by caravans. These consist of an indefinite number of camels, seldom less than 500, and often as many as from 1500 to 2000. They do not follow a direct course across the desert from their point of departure to whence they are destined, but diverge to the oases, or verdant spots, whence they procure water and refresh themselves. If they be disappointed in finding water at one of these resting-places, or be overtaken by a land-storm, the consequences are often most disastrous. In 1805, a caravan proceeding from Timbactoo to Tafilet, not having found water at a resting-place, the whole persons belonging to it, 2000 in number, with about 1800 camels, perished miserably!—(*Jackson's Morocco*, p. 339. See also the excellent chapter in *Heeren*, on the Land Commerce of the Carthaginians.)

Exclusive of this internal commerce, Africa has carried on a considerable commerce by sea, since the discovery of her W. coast by the Portuguese; but the probability seems to be that she has lost more than she has gained by this commerce. Slaves have been the staple article of export from the African coast; and in some years as many as 110,000 or 120,000 have been carried across the Atlantic. It has been said, and no doubt truly, that the opening of this new and vast outlet for slaves was advantageous to Africa, by lessening the odious practice of cannibalism, and preventing the immolation of the captives taken in war. But, admitting this, it seems notwithstanding abundantly certain that the slave-trade has been productive of a far greater amount of misery than it has suppressed. Without stopping to inquire whether death might not be preferable to slavery, it has multiplied the latter in no ordinary degree. Formerly the peace of the country was comparatively little disturbed by wars; but now a wholesale system of brigandage and robbery is organized in many extensive districts; the bulk of the people being hunted down like game by the petty princes, and by the Mohammedans, who affect to believe that they are entitled to capture and sell the "idolaters," to serve as beasts of burden in another hemisphere. Hence it is that the suppression of occasional instances of cannibalism, and of the sacrifice of human victims, has been supplanted by a widely diffused system of rapine, productive of a total want of security, and subversive of every thing like good government and good order. Until this state of things be totally changed, it would be idle to expect that civilization should make any progress in the countries where it exists. Its abolition is indispensable as a preliminary measure to give them even a chance of emerging from the barbarism in which they have been so long involved.

There seems to be a reasonable prospect that the meritorious efforts of Great Britain for the suppression of the slave-trade will, at no very distant period, be crowned with success, in so far at least as the nations of Europe and America are concerned. But it is quite otherwise with the slave-trade carried on from the interior with the Barbary states, Egypt, and Arabia. There are no grounds for supposing that it will be speedily suppressed. Probably, indeed, it is destined for a while rather to increase. Luckily, however, it is much less extensive than that carried on from the W. coast, the entire export of slaves rarely amounting to so many as 10,000 in a single year, and it is not accompanied by so many disastrous results.

Exclusive of slaves, palm-oil, gold-dust, ivory, gums, teak, timber, wax, hides, feathers, &c., are the principal articles imported into W. Europe and America from Africa. The most exaggerated notions seem to have been always entertained of the value of the trade and of its capacity of extension. That it may be materially increased is, no doubt, true; but the fair presumption seems to be, that the wants of the native Africans, and their industry, are much too contracted to admit of their ever becoming extensive demanders of European produce.

Carthage, the first maritime power of antiquity, though situated in northern Africa, was a Phœnician colony, and her fleets were principally manned from her colonies in the Mediterranean. Since the fall of this powerful republic, no African people has had the smallest claim to be called maritime. The most advanced nations are at this moment, and have always been, nearly ignorant of the art of shipbuilding. It is to European engineers and carpenters that the Pacha of Egypt is indebted for his ships; and every one knows that this was formerly the case with the days of Algiers, Tunis, &c. In some few places the natives fit out a sort of large cutters; not, however, for the purpose of trade or fishing, but to engage in piracy.

Besides salt, to which we have already alluded, gold-dust or *tibbar* and cowries are the articles principally used as money in Africa. The latter, a species of small shell gathered on the shores of the Maldive islands, are used in small payments throughout Hindostan; but in the interior of Africa their value is about ten times greater than in Bengal.

X. *The social condition* of the people of Africa is as depressed as their industry and their science. But what else could be looked for where Fêtiçism, idolatry, and the most revolting superstition are so very prevalent? Polygamy may be said to be diffused all over Africa; and though forbidden in Abyssinia, the marriage tie in these so slight as hardly to have any sensible influence; and morals are, in this respect, in a state of almost total dissolution. That cannibalism

formerly existed to a frightful extent in many parts of Africa, cannot be doubted; and though it has greatly declined, partly because of the introduction of Mohammedanism, and partly, and principally, perhaps, because of the ready and advantageous markets that have long been opened in the West Indies and America for the slaves or captives taken in war, there seems to be no doubt that it still exists among certain tribes. Among some considerable nations the exposure of children, and the slaughter of those that are deformed or maimed, is not tolerated merely, but enforced. In some parts human blood is reported to be mixed up with the lime or mortar used in the construction of temples. And it is said to be usual among the greater number of the nations on the coast of Guinea for rich individuals to immolate human victims once in their lives to the manes of their fathers!—(*Balbi, Abrégé*, p. 849, 2d ed.) Atrocities like these are, however, principally confined to the least improved tribes of the Negro race. But, speaking generally, barbarism, cruelty, and the most degrading superstition are universally prevalent among by far the greater number of the nations of African origin.—(See art. ASHANTEE.)

As already stated, with the exception of Egypt and Abyssinia, all the science and literature to be found in Africa are of Arabic origin. The Arabs have schools established in Cairo, Merou, and Darfour, in the region of the Nile; in Morocco, Fez, Algiers, Tunis, &c., in Barbary; and there are schools among the Mandingoes, Foulahs, Jolofs, and other Mohammedan nations of central Nigritia or Soudan: these are placed under Mohammedan teachers, and assist in disseminating the rudiments of Arabic learning and science. The European colonies at the Cape, Algiers, and various other places along the coast, have been regarded as so many centres, whence the language and literature of Europe might be expected gradually to spread over the whole continent. But our anticipations in this respect are far from sanguine; and the presumption seems to be that if barbarism and ignorance are not to be immortal, they are, at all events, destined to a prolonged existence in Africa.

XI. *Causes of the Inferiority of the Africans.*—The low state of the arts in Africa, and the barbarism that so generally prevails in it, have been variously accounted for; and, perhaps, we are yet without the means of coming to any satisfactory conclusion in regard to either matter. But it would seem that the first, or the low state of the arts, is mainly attributable to the climate, which supersedes the use of many articles indispensable in regions more to the north and south. Manufacturing industry is principally devoted, in European and Asiatic countries, to the production of articles of clothing; but where clothes are an incumbrance, and most of the people are satisfied if they have a piece of coarse common cotton stuff to wrap round their middle, it would be absurd and contradictory to expect that this great department of manufacturing industry, and its many dependant and subsidiary arts, should make any progress. The agriculture, too, of the greater part of Africa is exceedingly unfavourable to the development of a spirit of enterprise and invention. The seasons differ but little from each other; and in those tracts not condemned to perpetual sterility, that is, in the tracts watered by the periodical rains or by the overflowing of the rivers, the rudest husbandry is sufficient, the heat of the sun operating on the moisture of the soil being all but enough to produce the most luxuriant crops. The houses, too, in tropical climates may be constructed at comparatively little expense; and, except for the cooking of victuals, fires would be a nuisance. It is idle, therefore, to wonder at the backward state of industry in Africa. It would be as reasonable to expect to find a manufactory of freezing-machines at the North Cape, as to expect to find extensive cloth-factories in Nigritia. The industry of a country always bears some proportion to the wants and necessities of its inhabitants; and few, comparatively, of those things which employ a large part of the industry of Europeans being wanted in Africa, they are but little produced.

It is true, that besides the great articles now referred to, there are others, such as articles of show and ostentation, arms, &c., for which it might be supposed the taste in Africa would be as strong as in Europe. But these are costly articles; and, in point of fact, are never found generally diffused in any country not distinguished by its industry. Men are not instinctively laborious or enterprising. Industry is with them only a means to an end: a sacrifice they must pay to obtain supplies of the necessaries and conveniences of human life. Wherever the sacrifice required to procure food, clothes, and other necessary accommodations is considerable, the population is generally industrious; and a taste for labour being widely diffused, those who are not obliged to apply themselves to the production of necessaries, engage in the production of superfluities. But wherever the principal wants of man may be supplied with but little exertion, indolence becomes the distinguishing characteristic of the population; and instead of employing their spare time in the production of articles of ostentation and luxury, they usually waste it in idleness and apathy.

In addition to the circumstances now mentioned explanatory of the low state of the arts in Africa, and the barbarism prevalent in it, the negroes and other African races have been supposed by some philosophers to be naturally inferior in point of intellect, and not to possess the same capacity for improvement as the Europeans, or people of the Caucasian variety. This supposition has, however, been vehemently denied; and it has been contended, over and over again, that the peculiar circumstances under which they have been placed sufficiently account for the condition of the Africans, for their want of literature and their low civilization. That great weight should be attached to the considerations now mentioned, is true; but still we do not think that they are sufficient wholly to account for the existing state of things. Egypt was, at a very remote period, the principal seat of science and of art; and various nations of Africa were in contact with, and had a pretty extensive intercourse with the Egyptians, and also with the Phœnicians, and afterward the Romans. But they seem to have profited little or nothing by this association. And while the people of Greece, Asia Minor, and Magna Græcia raised themselves in a comparatively brief period to the highest pitch of civilization and refinement, the nations of Africa continue, without a solitary exception, down even to the present day, immersed in the grossest barbarism. Surely, however, during the space of 3000 or 4000 years, opportunities must have been afforded to some of them to make some advances. But if so, not one has had sagacity to profit by them. Africa, in fact, does not seem to have produced a single great man. She has had no Hercules, no Minos, no Theseus, no Confucius, no Manco Capac. Among all the varieties of superstition that exist in it, we look in vain for hero-worship—for the divine honours paid in rude but improving nations in other parts of the world, by the public gratitude, to departed heroes, legislators, and authors of important discoveries in the arts.

With the exception of that of the ancient Egyptians and Ethiopians, whose descent is involved in the greatest uncertainty, almost all the civilization that exists in Africa seems to be of foreign origin. The introduction of Mohammedanism, though in a debased form, has, as previously stated, gone far to banish cannibalism from many countries; and some of them have also adopted the letters and literature of Arabia. But the progress they have hitherto made is not such as to lead to any very sanguine anticipations as to their future advancement; and it would not, indeed, be very philosophical to suppose that those who have been wholly unable to produce anything original should attain to much eminence in the practice of foreign arts and sciences.

It is unnecessary to enter into any examination of the *vexata questio* whether the varieties of the human race in Africa originally sprung from different sources, or whether they all belong to the same stock, but changed to the state in which we find them by the influence of circumstances in the lapse of ages. Whatever conclusion may be come to on this point cannot in anywise affect the question as to the comparative intelligence of the African people. The same circumstances that are supposed by those who contend for the original identity of the races to have so greatly affected their appearance and physical capacities, could hardly fail to have an equally powerful influence over their mental faculties. This in fact is substantially admitted by Dr. Pritchard, who has ably contended for their common origin, and the equality of their intellect with that of the other races. "The tribes," says he, "in whose prevalent conformation the negro type is discernible in an exaggerated degree, are uniformly in the lowest stage of human society; they are either ferocious savages, or stupid, sensual, and indolent. Such are the Papals, Bullooms, and other rude hordes on the coast of western Guinea, and many tribes near the slave coast, and in the Bight of Benin; countries where the slave trade has been carried on to the greatest extent, and has exercised its usually baneful influence. On the other hand, wherever we hear of a Negro state, the inhabitants of which have attained any considerable degree of improvement in their social condition, we constantly find that their physical characters deviate considerably from the strongly-marked or exaggerated type of the Negro. The Ashantee, the Sulems, the Dahomans, are exemplifications of this remark. The Negroes of Guber and Hausa, where a considerable degree of civilisation has long existed, are, perhaps, the finest race of genuine Negroes in the whole continent, unless the Jolofs are to be excepted. The Jolofs have been a comparatively civilized people from the era of their first discovery by the Portuguese."—(*Researches into the History of Man*, ii., p. 338, 3d ed.)

Here we have it distinctly laid down that the existence of the distinguishing features of the Negro race, in a strongly-marked degree, is uniformly associated with the lowest

state of barbarism; and that as they recede from this strongly-marked type, we find a greater degree of civilization and improvement. The inevitable conclusion is, that every variety of the Negro type, which comprises the inhabitants of almost all central Africa, is indicative of mental inferiority; and that ferocity and stupidity are the characteristics of those tribes in which the peculiar Negro features are found most developed. We believe that this is a perfectly correct statement; and we do not know that anything that can be said could show more conclusively the radical inferiority of the great bulk of the African people.

But we do not form our opinion as to their inferiority on their configuration and appearance, but on the fact, that while numberless European and Asiatic nations have attained to a high state of civilization, they continue, with few exceptions, in nearly primeval barbarism. It is in vain to pretend that this is the result of the unfavourable circumstances under which they have been placed. An intelligent, enterprising people contend against unfavourable circumstances, and make them become favourable. But the Africans, with the questionable exception of the ancient inhabitants of the valley of the Nile, have never discovered any considerable degree of enterprise or invention, or any wish to distinguish themselves either in arts or arms. From the remotest antiquity down to the present day they have been hewers of wood and drawers of water for others, and have made little or no progress; and the only legitimate inference from this lengthened induction seems to be, that they are incapable of making it; that civilization will not spring up spontaneously among them; and that if ever it grow up, it must be introduced from abroad, and fostered and matured under foreign auspices.

XII. *Divisions.*—Africa has been variously divided, according as one standard or another has been adopted. Owing to the barbarism of the people, our ignorance of the different states into which the continent is divided, and the revolutions to which they are perpetually subject, any distribution of the country founded on its political divisions would be almost impossible; and, however accurate at the time, would speedily become quite obsolete. A better method would be to distribute it according to the races of people by which it is principally occupied; but as these are in parts very much blended, and it is sometimes no easy matter to say which predominates, it seems, on the whole, the better way to distribute it according to the great natural features of the country. On this principle, Africa may be distributed as follows, beginning with the North:

1. The *Barbary States*, including the whole country N. of the desert of Sahara, and W. of the 25th degree of E. long.
2. *Sahara*, or the Great Desert.
3. The *Region of the Nile*, including Egypt, Nubia, Abyssinia, Sennar, Kordofan, and all the country drained by its affluents.
4. *Nigritia*, which may be subdivided as follows, viz.:
   a. *Soudan*, or N. Nigritia, being the country to the S. of the Sahara and N. of the Kong mountains, watered by the Senegal, Gambia, Niger, and the rivers flowing into the great lake of Tchad.
   b. *Central Nigritia*, being the region between the Kong mountains and the N. shore of the gulf of Guinea to the Bight of Biafra.
   c. *Southern Nigritia*, including the countries from the Bight of Biafra along the coast to cape Negro, and inwards to the sources of the rivers flowing through it to the coast.
5. *Southern Africa*, or the region S. of cape Negro on the W., and of the Zambese river on the E.
6. *Eastern Africa*, or the region N. of Zambese river, round by the sea coast to the confines of Abyssinia and the Gebel-el-Komri, or Mountains of the Moon.
7. *The islands of Africa*, including the Madeira, Canary, and Cape de Verde islands on the W. coast, with those of St. Helena, Ascension, &c.; and on the E. coast the great island of Madagascar, the isles of France and Mauritius, Socotra, &c.

XIII. *Progress of Discovery.*—Africa, among the quarters of the globe, has always been the chief object of curiosity and discovery. Her Mediterranean coast, indeed, was well known to the ancients, and included in their circle of civilized states. But her eastern and western limits, stretching an indefinite extent southward, long baffled the attempts to reach their termination and that of the Continent; while immense deserts barred the access into the interior. A peculiar difficulty was also found in tracing the source, and sometimes the termination, of the mighty rivers by which its inland regions are watered.

Tyre, the earliest seat of a flourishing commerce, might be expected to seek a route to the distant parts of Africa. In the curious account given by Ezekiel, Tarshish is mentioned as both the most remote and most important place with which she trafficked. The learned, however, have been much divided respecting its site; but the Tarshish to which the Tyrians sailed down the Mediterranean, whence they imported iron, silver, lead, and tin, the products of Spain and Britain, was most probably either Carthage, or the S. part of Spain. Carthage made violent efforts to prevent other commercial powers from penetrating beyond Sicily, thus seeking to monopolize the exclusive trade of the remoter countries, of whose products her merchants would, of course, keep an assortment.

Mention, however, is made of another route to Tarshish, by the Red Sea, which has singularly perplexed geographers. It was opened by Solomon, during the most prosperous period of the kingdom of Judea, and aided by an alliance with Hiram, king of Tyre. To reconcile these two voyages, M. Gosselin supposes the term to mean "the ocean," as distinguished from inland seas or gulfs: so that one voyage was to the Atlantic, the other to the Indian ocean. But all the modes in which Tarshish is mentioned—the fare of a vessel thither, its merchants, its kings—seem inconsistent with so very vague a sense; nor does there appear any room to think the Jews ever viewed the Mediterranean as an inclosed sea. We are disposed, therefore, to prefer the suggestion of Mr. Murray, in the *Encyclopædia of Geography*, that the Tyrians gave the name of Tarshish to the whole continent, of which it formed for them the most important part. Tarshish, in this larger sense, becomes nearly synonymous with Africa; the one voyage was along its northern, the other along its eastern coast.

Ophir is another country much celebrated in the Jewish scriptures, particularly for its gold. Many learned men have sought it in India, though gold was not then an article of export from that country, but the contrary; and no one staple of Indian trade is mentioned as brought from Ophir. Indeed its position seems clearly fixed, when we find the Red Sea voyage to Tarshish described elsewhere as one to Ophir. The latter, then, was on the eastern coast of Africa, where gold is nowhere found north of the Zambese. Here, accordingly, we find Sofala, long the chief emporium of that river; and it may be observed that Ophir is called in the Septuagint Soopheira, while the modern Arab term is indifferently Zofar or Zofoat.

This intercourse did not survive Solomon, whose successors, weakened by the division of the kingdoms, were unable to maintain it.

Our next information is derived from Herodotus, who, during his residence in Egypt, made very careful inquiries of the priests and learned men. He gives a very curious report of no less an exploit than the entire circumnavigation of Africa. Necho, one of the greatest Egyptian princes, engaged for this purpose Phœnician mariners, who descended the Red Sea, and having reached the ocean, landed, sowed a crop, reaped it, and renewed their voyage. Thus they proceeded for two years, and in the third entered the Pillars of Hercules. They remarked that, in rounding Africa, they had the sun on the right, that is, on the south, which must have been correct. This brief relation has given rise to a mass of controversy, greater, perhaps, than the slight narrative can well support. The curious reader may consult Rennell in favour, Gosselin against it.* On the whole, we are disposed to conclude in favour of its authenticity. The time is adequate; and, as Rennell observes, the flat-bottomed vessels of the ancients, keeping always close to the shore, might avoid dangers that arrested larger ships in the open sea. That the event should be afterward forgotten or discredited, would be only a common occurrence in those early periods, when knowledge was very little diffused.

Herodotus has given a detailed account of the wild and wandering tribes behind the Atlas ridge, extending to and somewhat beyond Fezzan. He adds an interesting narrative† of an expedition to explore the interior, undertaken by some youths from the country of the Nasamones lying inland from Cyrene. They passed, first, a verdant and cultivated territory; then a wild region filled with wild beasts; next entered into an arid, dreary desert. Here, while plucking some wild fruits, a party of black men surprised and carried them along vast marshes and lakes to a city situated on a river flowing eastward. These last features, after they were within the desert, could not be found short of central Africa; but it is doubtful whether they refer to Timbuctoo and the Niger, as supposed by Rennell and Heeren, or to the lake Tchad, and the Yeou or river of Bornou.

Another singular circumstance mentioned by Herodotus relates to a traffic for gold carried on by the Carthaginians with a people beyond the straits, and managed in a peculiar manner, without the parties seeing each other. There is no gold in Africa north of the Senegal or Niger; but whether the Carthaginians penetrated thither, or the gold was brought by natives across the desert, there seem no means of certainly determining.

* Herodotus, iv., 42. Gosselin, Geographie des Anciens, i., 199-216. Rennell, Geog. Herodotus, c. 34, 35. † Herodotus, lib. ii., 32.

AFRICA.

The records of Carthage, which would have thrown so much light on ancient commerce and geographical knowledge, have unfortunately perished. There remains only one valuable document, the narrative of a voyage by a commander named Hanno, sent to found colonies on the western coast, and to push discovery as far as possible. He is said to have carried with him sixty vessels, and no less than 30,000 men, women, and children. After passing the straits, he founded successively four colonies in convenient situations; then sailing three days along a desert coast, came to Cerne, a small island in a bay. In its vicinity he visited a lake through which flowed a large river; and another stream full of crocodiles and hippopotami. Then, returning to Cerne, he sailed twelve days along the coast of the Ethiopians, a timid race, who fled at the approach of strangers. His party then reached and sailed for several days along a coast, where they observed many striking objects. In one place the earth was so hot that it could not be trodden; torrents of flame were seen to roll along it and rush into the sea. During the day there appeared only a vast forest; but in the night, the air was filled with the sound of musical instruments and of human voices. Landing on an island, they found a singular race of beings, in human shape, but with rough skins, leaping from rock to rock with preternatural agility. Towards the close of their voyage, there appeared a very lofty mountain, seeming to reach the skies, called the Chariot of the Gods.

This voyage has been the subject of elaborate dissertation by learned men, who have differed very widely as to its extent. Bougainville carries it to cape Three Points on the Gold coast, Rennell to Sierra Leone; while Gosselin restricts it to the river Nùn in Morocco. The first space exceeds 3000 miles; the latter falls short of 700. The difficulties are very great; not a single name coincides; the descriptive features are too slight to fix any one spot with precision. The period, estimated only at thirty-eight days, seems scarcely adequate to so long a voyage of discovery along an unknown coast. Yet the aspect of man and nature; the Ethiopians or black races; the gorillæ, evidently large apes, whose form resembled the human; the great rivers, full of crocodiles and hippopotami; the conflagration, apparently occasioned by the still prevalent custom of burning the grass at a certain season; silence during the day, with music and gayety in the night—all these strongly suggest tropical Africa. Gosselin indeed maintains that the coast of Morocco, in its then comparatively rude state, would much more than now resemble the Negro countries; but this seems scarcely to account for all the above particulars.*

The Persians, who entertained an almost superstitious dread of the sea, were little likely to extend maritime knowledge. Yet Xerxes showed some interest in the subject. Having condemned to death Sataspes, a Persian nobleman, he was persuaded to commute the sentence to that of circumnavigating Africa. Sataspes passed the straits, but soon terrified by the stormy ocean and rocky shores, he returned, and declared to his sovereign that the vessel had stopped of itself, and could not be got forward. The monarch indignantly rejected this apology, and ordered the original sentence to be executed.† The attempt was not renewed; and under this empire, the knowledge of Africa seems to have on the whole retrograded. When Alexander sent an expedition down the Persian gulf to seek its way into the Red Sea, it returned without success; whence the inference was made that no communication existed.

Under the Ptolemies, though they were an enterprising dynasty, and a learned school of geography was then formed, little progress was made. The prevailing hypothesis of an uninhabited torrid zone at once indicated the limited amount of knowledge, and tended to perpetuate it. The map of Eratosthenes makes Africa an irregular trapezium, of which the N. and S. sides were nearly parallel, and the whole terminated N. of the equator. The coasts beyond the Straits of Gibraltar and cape Gardafui, being observed on both sides to converge, were supposed to continue in that direction and meet. A navigator named Eudoxes, partly aided by Ptolemy Evergetes and by the merchants of Cadiz, made several spirited attempts to perform this voyage, of which he did not suspect the extent; but he returned always without success.‡

The Romans did not much advance the knowledge of interior Africa. Mela, without any additional information, adopts the system of Eratosthenes, with some fanciful additions. Pliny, however, had access to all the information collected by the Roman chiefs and commanders. Scipio had sent Polybius to explore the western coast, which was surveyed by that officer for about 800 miles, consequently not beyond the limits of Morocco. Suetonius Paulinus had penetrated into the regions of Atlas, describing its lofty and rugged steeps richly clothed with forests. Under Vespasian, Cornelius Balbus made an expedition into the desert, receiving the submission of Cydamus (Gadamis), and Garama (Germa), but we can scarcely identify Boin with Bornou.*

Alexandria meantime, under the impulse given by the luxurious consumption of Rome, acquired a great extension of commerce. She opened a regular communication with India, and also to a considerable extent along the eastern coast of Africa. Both are described in an important commercial work written in the first century, called the *Periplus of the Erythræan Sea*. The African course terminates at Rhapta, a promontory and flourishing port, the position of which, however, from the usual causes of changed names and vague descriptions, is open to controversy. Vincent fixes it at Quilos, while Gosselin makes it Magadores, not quite a third part of the distance from the ascertained point of cape Aromata (Gardafui). But the former has one conspicuous feature; five successive large estuaries, which Gosselin owns himself unable to find within its limits, but which actually occur a little north of Quoile, in the mouths of the great river Quillimanci. There seems little room to hesitate, therefore, in fixing Rhapta at Quilos. The gold of the Zanzebes had not reached this port, the exports from which consisted only of ivory, tortoise-shell, and slaves.†

About a century after Ptolemy published his geographical work, the most complete of any in ancient times. On the eastern coast he adds to that described in the Periplus an additional range, stretching south-east from Rhapta to another promontory and port called Prasum; considerably south-east from which lay a large island, Menuthias, evidently Madagascar. According to Gosselin, Prasum is Brava, while Vincent makes it Mozambique; but the south-easterly direction of the coast seems to limit it to cape Delgado. This too would harmonize with Ptolemy's singular theory of a great austral continent extending from Prasum to the coast of the Sinæ (China), thus making the Indian ocean an immense inland sea.

In regard to the W. boundary, Ptolemy's ideas seem by no means very precise. His graduation shows an extent of coast which would reach far into tropical Africa; yet the Canaries are placed opposite to his most southern limit, which would thus seem to have scarcely reached beyond Morocco. Gosselin accuses him of having employed the materials afforded by three different voyages along the same line of coast, supposing them to apply to separate and successive parts, thereby trebling its extent; but we must hesitate in imputing to this eminent geographer an error so flagrant.‡

On the side of central Africa, Ptolemy delineates a very extensive region, reaching far south, which he names Interior Libya. It contains two spacious lakes, the Libyan and the Nigritian, receiving the great rivers Gir and Niger, derived from chains of lofty mountains. A number of cities are inserted which cannot be recognised by modern names. But the remarkable circumstance is, that these objects appear contiguous to, and even connected with others, that unequivocally belong to northern Africa. Hence Gosselin and other writers conclude that his interior Lybia was not central Africa, but merely the region along the northern borders of the desert. We must observe, however, that the former, described as a region of mountain, river, and lake, all on a great scale, bears very little resemblance to the desert border of northern Africa. Our impression is that Ptolemy, receiving his intelligence from caravans coming E. from Bornou to the Nile, not from those crossing the great desert, was ignorant of the extent of the latter, and, consequently, of the interval separating northern from central Africa: and that he hence supposed and delineated the two as almost in contact. Yet this geographer had received intelligence of two marches, one by Julius Maternus from Cyrene, the other by Septimus Flaccus from Garama, who during periods respectively of three and four months, had penetrated into the country of the Ethiopians. Ptolemy scarcely gives credit to routes of such an extent; but he lays down Agysimba (perhaps Agadiz), into which they penetrated, as the most southerly known region. As it contains neither rivers nor lakes, it cannot be central Africa; but if, in the manner above supposed, he was ignorant how far south that region lay, the length of the marches would necessarily oblige him to protract Agysimba beyond it.§

In the seventh century a grand revolution changed the face of the world. The followers of Mohammed, inspired by fanatical zeal, issued forth from Arabia, and not only shook the Roman empire, but spread their conquests and settlements over countries never visited by the Roman arms.

* Hannonis Periplus, in Hudson's Geog. Græc. Min., tom. i. Rennell, Geog. Herodot., sect. 16–28. Gosselin, Geog. des Anciens, i., 61–164. Bougainville, in Memoires de l'Academie des Inscriptiones, xxvi., 10.

† Herodotus, iv., 43.

‡ Strabo, ii., 67–8, and xvii., passim. Gosselin, Geographie des Grecs.

* Plin., Histor. Nat., lib. v., cap. 1–8.

† Periplus, in Geog. Græc. Minor., tom. i. Gosselin, Geog. des Anciens. Vincent, Periplus of the Erythræa Sea.

‡ Ptolomæus, lib. iv., 9. Gosselin, Geographie des Anciens. Vincent, Periplus.

§ Ptolomæus, i., 8, 10; iv., 6. Gosselin, Geog. Anc., tom. iv.

To Africa particularly they gave an entirely new face. Along its Mediterranean coast, they established several flourishing and civilised kingdoms. Their wandering habits, and the use of the camel, an animal expressly formed for sandy deserts, enabled them to overcome obstacles that baffled the Romans. The Sahara, across which no regular route appears to have been known to the ancients, was penetrated by them in different directions. Their dispersion was aided by the great schism between the dynasties of the Abbassides and Ommiades. The vanquished party, in large bodies, crossed the desert, and formed settlements, where, under the title of Fellatas or Foulahs, they still exist as a race entirely distinct from the Negroes. Their possessions extended along a great river called by them the Nile of the Negroes, which, however, was not, as long supposed, our Niger, but a tributary flowing into it from the east, termed by Clapperton the Quarrama or Zirmie. Ghana, the modern Kano, was then the chief seat both of empire and commerce. The sovereign displayed a pomp unrivalled in Africa, having his throne adorned with a mass of pure gold, indicating the commerce by which the city was enriched. This gold was found in a country to the south, called Wangara, intersected by numerous branches of the Nile, and where the metal was extracted from alluvial earth. There is evidently some confusion here, as gold, in alluvial deposits, is only found in countries far to the west: the error probably arising from the channel by which it was brought. Farther east, on the Nile of the Negroes, Edrisi represents Berissa and Tirka, which seem to have been recognised by Clapperton in Berahee and Girkwa, still considerable towns. Farther in that direction, Kuku, a great and flourishing kingdom, is evidently Bornou, the capital of which still bears that name; while Kaugha, twenty days to the south, and distinguished by its arts and industry, appears pretty clearly to be the Loggun of Denham. Returning to Ghana, and proceeding down the river, we are conducted to Tocrur, an inferior, yet large and powerful kingdom. It appears evidently to be Soccatoo, which, in a document quoted by Clapperton, is even called Takrur. Sala, two days' journey lower, cannot now be identified. Farther west, the knowledge of the Arabians became most imperfect. They considered the ocean as only 500 miles beyond Tocrur, when it is nearly 2000. They notice in that direction the island of Ulil, at the mouth of the great river, whence all the countries on its banks were supplied with salt. This was pretty evidently suggested by Walet, the great mart for the salt of the northern desert; and its being reached across the great lake Dibbie might attach to it the idea of an island.*

About four centuries after Edrisi, central Africa was visited and described by Leo, a Moslem Spaniard, who was even surnamed Africanus.† A great change had now taken place, Timbuctoo having risen to be the most powerful city, the chief seat of commerce and splendour, the mart for gold. The neighbouring states, including even Ghana, called now Kano, had become its tributaries. This writer mentions Bornou under that name, and adds for the first time other states that still subsist—Cassina, Guber, Zegzeg, and Zanfara. Eyeo, under the name of Gago, is justly described as a large and fine kingdom, 400 miles south-east of Timbuctoo. In a western direction, Ghinea or Gheneoa, distinguished for its great commerce, is the Jenné of Park. Thus all this part of the continent had assumed nearly the shape which it has ever since retained.

Soon after began that grand career of maritime enterprise, which terminated in the circumnavigation of the African continent and the discovery of a passage to India. It was carried on entirely by the Portuguese, and proceeded by gradual steps, from the rounding of Cape Bojador in 1433 by Gilianez, to the memorable passage of the Cape of Good Hope, in 1497, by Vasco de Gama. During this long period, at every successive point, vigorous efforts were made to penetrate into the interior. These were inspired, not only by the report of gold mines and other objects of commerce, but still more by the hope of reaching the court of a mysterious personage named Prester John. This name appears to have originated in reports brought by Rubruquis and other early travellers of a ruling Nestorian bishop in central Africa. When, however, notices arrived of a Christian prince in Abyssinia, the name Prester John settled down upon him; and, ignorant of the breadth of the Continent, they supposed that, at no very great distance from the western coast, his dominions might be found. The commanders were therefore instructed on every new discovery to make their first inquiry concerning Prester John; and though total ignorance was everywhere professed, they persevered, and really appear to have sent embassies even to Timbuctoo. Di Barros has given a pretty correct account of the position of that city, and of Genni (*Jenné*), its rival. The English and French found a considerable Portuguese population on the Senegal and Gambia, and many words of that language current among the people of Bambouk. Yet nothing was done to correct the Arabian idea of the Niger rolling westward into the ocean; and the Senegal was, therefore, considered as forming its lower course, though Di Barros expresses wonder that after passing through so many regions, it should not have rolled a greater body of waters.

The Portuguese formed leading settlements at Elmina on the Gold coast, and at the mouth of the river Formosa, which has now proved to be that of the Niger. They learned that the rulers here, on their accession, were accustomed to send ambassadors about 250 leagues into the interior to the court of a prince named Agané, from whom, as from a superior lord, certain symbols were received, which formed the prince's investiture. This potentate, during the interview, was screened from view by a silk curtain, and only at the close his foot was put forth, to which they did homage.* Major Rennell, with seeming reason, presumes this to be the king of Ghana; and in the maps of the sixteenth and seventeenth centuries there appears a very large lake named Guardia, which, from the site and a rude resemblance of name, we suspect to be the Tchad; but D'Anville, finding no authority in its support, expunged it. The Portuguese also formed considerable settlements on the coast of Congo, which to a certain extent they still retain: and their missionaries penetrated to some distance inland. After passing the cape, and on the way to India, they sailed along nearly the whole of the eastern coast as far as Melinda and Mombasa. The king of Portugal had previously sent out two envoys, Covilham and De Payva, to reach India by way of the Red Sea. Their notices and observations, coupled with those of the circumnavigators, first conveyed to Europe a full view of the outline and circuit of this vast continent.

Govilham, in returning, settled in Abyssinia, and transmitted such accounts as induced his sovereign to send thither a succession of missionaries, through whom copious accounts were received of that remarkable country, scarcely at all known to the ancients. They did not, however, carry discovery far into the interior of the continent; and indeed such ignorance prevailed on the subject, that in the maps of the seventeenth century Abyssinia and Congo are brought nearly into contact, while the Nile rises almost in the vicinity of the cape of Good Hope.

In Europe meantime a growing interest was excited respecting the course of the Niger, the country of gold, and the trade of Timbuctoo. It was heightened by the conquest of that city by the emperor of Morocco in the end of the sixteenth century.† In 1618, an English company was formed for the purpose of penetrating thither, by ascending the Gambia, supposed one of the mouths of the Niger. They sent out Captain Thompson, who, leaving his vessel at Kassan, went in a boat to Tenda, which no European had yet reached; but he was killed in a contest with the natives, another body of whom, instigated by the Portuguese, attacked and massacred most of the men in the vessel. Another crew, sent to reinforce him, fell almost all victims to the climate. In 1620, Captain Richard Jobson came out with a larger armament, and, undismayed by these evil tidings, made his way considerably higher than his precursors. He even supposed, on erroneous information, that he was near Timbuctoo, and returned with the intention of actively resuming his researches, but was prevented by a quarrel with the merchants, who lost courage, and dropped the undertaking.‡

A century elapsed without farther effort, till the Duke of Chandos, director of the African Company, entertained the idea of enlarging its scanty profits by opening a communication with the country of gold. He sent out, in 1723, Captain Bartholomew Stibbs, who, having procured canoes, pushed vigorously up the river. On passing the falls of Barraconda, however, the stream became in many places so extremely shallow, that even his little boats could scarcely be dragged upward. He was finally obliged to stop nearly at the point which Jobson had already reached. His information led him to conclude that "the original or head of the river Niger is nothing near so far in the country as by the geographers has been represented." The Gambia, at a little distance upward, was described as dwindling into a mere rivulet. It had no communication with the Senegal, or with any lake. He nowhere heard the Niger named, and had great doubts if such a river existed. Moore, a zealous agent of the company, strenuously repelled this conclusion, and endeavoured to overwhelm him by quoting Pliny, Ptolemy, Leo, and other high authorities; but Stibbs, though unable to meet him on this ground, continued not the less steadily to affirm what he had seen with his own eyes.§ In fact, notwith-

* Geographia Nubiensis (Edrisi), in Latinum versa a Gabriele Sionita et Joanne Hesronita. Climate, i., parts 1, 2, 3, 4. Notices des MSS. de la Bibliothèque du Roi (Paris, 1789). The passages of these writers relating to central Africa transl. in Murray's Discoveries in Africa, App. (2d ed.) ii., 519–33.

† In Ramusio, tom. i. Purchas, ii.

* Di Barros, Asia, b. iii., ch. 3–12.

† Hackluyt, vol. ii., pt. ii., p. 192.

‡ Jobson, Golden Trade, or a Discovery of the River Gambia. Lond., 1623.

§ Moore, Travels in the Inland Parts of Africa. Lond., 1738.

standing one or two other attempts, the English made no farther discoveries in this quarter, nor obtained any intelligence of the real Niger.

The French meantime were making greater exertions on the Senegal, which they early chose as their place of settlement. About 1630, a commercial intercourse had been opened by some merchants of Rouen and Dieppe, without any settlement, the crews merely erecting temporary huts during their stay.* They were obliged, however, in 1664, to give way to the great West India Company, whose privilege included also western Africa. In nine years, however, it fell; and on its ruins was erected a second, succeeded by a third, fourth, and fifth, which last was merged in the Mississippi scheme. These, like similar mercantile associations, were all disastrous; but each had its interval of activity, during which a good deal was done to extend discovery and trade. The chief efforts were made by the Sieur Brue, appointed governor in 1697. From Port St. Louis, where a settlement was now formed, he immediately sailed up the river, with a view to adjust some differences with the Siratik or king of the Foulahs, and open a trade with its upper regions. He succeeded in his negotiations, and had hoped to reach Galiam, but was obliged to stop at Giorel, where he erected a fort. In 1698 he reached Galiam, and arrived at the rock of Felu, which stops the navigation for large barks. At Dramanet he fixed on a position for a fort, which was soon after erected under the name of St. Joseph, and became the centre of French interior trade. Through the exertions of one Compagnon, he acquired a full account of Bambouk, and its gold mines, the most productive in Africa. He laid before the company a plan for conquering the country, which he undertook to effect with 1200 men, but could neither obtain the requisite authority nor means. He made diligent inquiries respecting the regions beyond, and obtained pretty distinct accounts of Bambarra, the lake Maberia (Dibbie), and Timbuctoo. Respecting the Niger, two opposite statements were made. According to one, it flowed westward, and divided into the three branches of the Gambia, the Faleme, and the Senegal; while others asserted its course to be eastward. The former continued to be the popular belief; but D'Anville, who bestowed much attention on the subject, and had access to the best documents, became convinced that there was a great river quite distinct from the Senegal, which flowed eastward, and was the one that passed by Timbuctoo. Upon this principle he formed his map of Africa, a wonderful effort of sagacity and ability, and which, in fact, is still tolerably correct as to a great part of that continent.† By restricting Abyssinia and Congo to their true limits, and obliterating imaginary features, this great geographer first exhibited that vast interior blank which so strongly excited the curiosity and enterprise of Europe.

The spirit of African discovery slumbered in Britain till 1788, when it burst forth with an ardour which led to the most splendid results. In that year was formed the African Association, composed of a number of distinguished individuals, among whom Sir Joseph Banks and Mr. Beaufoy took the lead. Ledyard was sent to penetrate by way of Egypt, and Lucas by that of Tripoli. The former, who, with an iron frame, had travelled great part of the world on foot, excited great expectations; but unhappily a fever carried him off before leaving Cairo. Mr. Lucas, long vice-consul at Morocco, had the advantage of understanding perfectly the African languages. He found no difficulty in obtaining the concurrence of the Pacha of Tripoli; and had set out for Fezzan, but was arrested by an insurrection among the Arab tribes. Valuable information, however, was obtained from several intelligent natives, confirmed by the testimony of Ben Alli, a merchant, who happened to be in London, and had travelled far into the interior. From these sources pretty copious accounts were received respecting the great countries of Bornou and Cassina, the latter of which had become the chief among the states of Houssa. The informants described also a great caravan route across the continent, from Tripoli to Asiente or Ashantee, behind the Gold coast. In this course it crossed the great central river, described, however, as flowing to the westward. It was, in fact, the Arabian Nile of the Negroes, the Quarrama of Clapperton, which in that direction proceeded to the main river, of which it is only a tributary. Rennell, having these materials put into his hands, and not being aware of any central river but one, reversed the direction given by D'Anville to the Niger, making it flow westward to the ocean by the channel of the Senegal. At the same time Bornou, understood to be described as bordering on Nubia, was carried far to the north and east of its real position, and the bordering countries displaced in consequence; so that this map, though ably drawn up, formed decidedly a retrograde step in African geography.*

The Association now turned their attention to W. Africa, and engaged Major Houghton, for some time consul at Morocco, to proceed from the Gambia. He went on foot, imprudently loaded with a quantity of valuable articles. He passed unmolested through Medina and Bambouk; but on reaching the territory of the Moors, he was seduced by that people into the desert, where he was either killed or abandoned to perish.†

On receiving this intelligence, the Association lost no time in seeking a substitute, and were fortunate enough to engage Mr. Mungo Park. That gentleman, in December, 1795, set out from the Gambia, and passed through Medina, Bondou, Galiam, Kasson, and Kaarta. Having suffered on the way severe spoliation, he was seized and detained long in captivity by the Moors of Ludamar. He contrived to escape, and, though in extreme distress, made his way through the kingdom of Bambarra to Sego, its capital. This formed a crisis in African geography, for he there saw "the long-sought majestic Niger, glittering in the morning sun, as broad as the Thames at Westminster, and flowing slowly to the eastward." The extent of the city, its crowded population, and the numerous canoes on the river, presented altogether a scene little expected in the heart of Africa. Mr. Park penetrated down the Niger as far as Silla, but his destitute condition, and the formidable accounts of the bigotry prevailing at Jenné and Timbuctoo, deterred him from proceeding farther.

This traveller's arrival in England in December, 1797, with accounts of such important discoveries, raised higher than ever the enthusiasm for African discovery. He retired into private life; but the Association obtained the services of Hornemann, a German, who possessed many requisites of a traveller. He went by way of Egypt to Fezzan, thence into central Africa, and appears to have penetrated by way of Cashna to Nyffe on the Niger, where he fell a victim to the climate. The same fate befel Mr. Nicholls, who attempted to reach the Niger by way of the gulf of Benin. Some years before, Mr. Browne, an enterprising individual, by his own resources had penetrated by way of Egypt into the interior country of Darfour, about midway between Abyssinia and Bornou. He obtained there some important detached notices respecting the neighbouring nations, and the origin of the White river, or main branch of the Nile, said to rise in the mountainous territory of Donga.

Meantime Park's mind was intensely bent on Africa; and through his acquaintance with Mr. Maxwell, who had commanded a vessel employed in the Zaire or Congo, he became persuaded that that river was the termination of the Niger. Being invited by government to lead an expedition on a large scale, he readily accepted it, and its arrangements were adjusted with a view to his hypothesis. On the 4th of May, 1805, he departed from the Gambia, with a well-appointed party of upwards of forty; but the harassing attacks of the natives, with the pestilential influence of the rainy season, reduced them to seven before they reached the Niger. He proceeded downward, however, and at Sansanding obtained materials for constructing a schooner forty feet long, which he named the Joliba; and on the 17th November, 1805, set sail to explore the mysteries of interior Africa. It appears that he passed Timbuctoo, and made his way down the river to Boussa, where the king of Yoori, indignant at having received no presents, pursued with a large body of men, and attacked him in a narrow and rocky channel. Park and his companions, unable to resist, threw themselves into the water, attempting to reach the shore, but were drowned. His papers are reported to be still in the king's possession, having never been recovered.

A German named Roentgen attempted to penetrate by way of Morocco, and set out in 1809 from Mogadore; but he appears to have been murdered by his guides. Some intelligence was gleaned from Adams and Riley, two Americans, who were successively shipwrecked on the coast of Sahara; but much uncertainty attaches to their statements. In 1809, the Association engaged the services of the celebrated Burkhardt, who undertook to accompany the interior caravan from Cairo. While preparing himself for the expedition, he made excursions through Nubia, and also through Syria and Arabia, his observations on which have been published, and are extremely valuable. In 1817, however, when about to set out on his main destination, he fell a victim to dysentery.

The public mind continued to be intently fixed on African discovery; partly from a wish to learn the real state of countries so difficult to explore and so different from those of the temperate zone, and partly, and perhaps principally, from absurdly exaggerated ideas as to the value of the commerce that might be carried on with the natives. At length government, on the suggestion of Sir John Barrow,

* Tannesina, Voyage de Libye. Paris, 1645.
† Labat, Afrique Occidentale, 5 tom. Paris, 1728. Golberry, Fragmens d'un Voyage en Afrique, 2 tome. D'Anville, sur les Rivieres dans l'Interior de l'Afrique. Academie des Inscriptions, tom. xxvi., 64.

* Proceedings of the African Association. London, 1790.
† Ib. Lond., 1797.

determined to make a more extensive effort than ever. Following up the hypothesis of the identity of the Niger and Congo, two expeditions were prepared; one to ascend the latter river, another to descend the former. Captain Tuckey, who commanded the first, sailed from England in February, 1816, and arrived in June at the mouth of the Congo. The party proceeded for some time with great spirit; but being obliged by the cataracts to leave their boats, and proceed on foot through a rugged country affording little shelter, they became exposed to the baneful influence of the climate. Severe sickness soon assailing the whole party, obliged them to stop short, and ultimately proved fatal to all the officers, including the commander. The other expedition, destined to go down the Niger, was commanded by Major Peddie, who endeavoured to reach the interior through the country of the Foulahs. Having died before the march began, he was succeeded by Captain Campbell, who reached the Foulah frontier; but the sovereign, jealous of their designs, detained them under various pretexts, till exhausted supplies and general sickness obliged them to return. Immediately after Captain Campbell died, and his fate was shared by Lieutenant Stokoe, just as he had planned a new expedition. Captain Gray of the Royal African corps penetrated by another route Gallam, but could not obtain permission to proceed through Bambarra.

All this series of disaster did not shake the perseverance of the British government. A new opening was afforded through the Pacha of Tripoli, who, inspired with a desire of improvement new in this quarter of the world, cultivated European connexion, and, through the judicious conduct of consul Warrington, was rendered friendly to Britain. Holding Fezzan tributary, and having a commanding influence over the central states, he could secure the safe passage of a traveller through a great part of Africa. Under his auspices, in 1819, Mr. Ritchie and Lieutenant Lyon reached Fezzan; but through the climate, and the treacherous ill treatment of the sultan, they incurred such severe illnesses as proved fatal to the former, and obliged the latter to return.

This failure did not prevent the speedy formation of another expedition, for which a more fortunate destiny was reserved. Its chiefs, Major Denham, Lieutenant Clapperton, and Dr. Oudney, arrived at Tripoli in November, 1821. Next spring they proceeded to Fezzan; but through the neglect of the sultan were unable to procure camels, which obliged Denham to return to Tripoli. Here he received assurances of protection from Boo Khalloon, a great Arab slave-merchant, who was setting out for the very countries which he sought to explore. Under his guidance, the party, in the end of 1822, began their route through the great desert, passing between the territories of the two remarkable native tribes, the Tuaricks and the Tibboos. They then travelled for a fortnight amid hills of moving sand, without the slightest vestige of life or vegetation. Soon after they entered Kanem, the northern province of Bornou. At Lari they came in view of lake Tchad, the great interior sea of Africa, 200 miles long, receiving two great rivers, and containing numerous islands. In proceeding along its eastern shore they visited most parts of Bornou and its chief cities of Kouka (Kuku of Edrisi), New Birnie, and Angornou. This kingdom, once the most powerful in central Africa, had about thirty years before been conquered and dreadfully ravaged by the Fellatas from Houssa; but a private individual, by valour and ability, had reasserted its independence and driven out the enemy. That person, under the title of Sheik, exercised all the real power, while he suffered the legitimate king to reign in empty pomp. Major Denham also visited the smaller kingdom of Mandara, bounded by an almost interminable range of mountains filled with savage tribes, who are hunted down for slaves. In Loggun, situated along the great river Shary, which falls into the Tchad, he found a people more ingenious and industrious than those of Bornou.

Meantime Clapperton and Oudney were making an expedition through Houssa, the most interesting region of central Africa. It was found inhabited by the Fellatas, a people having nothing of the Negro features, but apparently descended from the great body of Moslem Arabs, who had migrated many centuries ago. They were quite superior to the Bornouese both in aspect and character, cultivating the land with greater skill and diligence, and manufacturing very fine cottons. The sway of Ghana, and even of Cassna, had been transferred to Sackatoo (Tocrur), the sultan of which, about the beginning of the present century, overran all Houssa, and for some time occupied Bornou. Ghana, however, under the name of Kano, was found great in its decay, and still the chief seat of commerce. The transactions were extensive and well arranged; but slaves were the staple commodity. Sackatoo was found considerably larger than Kano, and the traveller was hospitably received by sultan Bello. The river Quarrama was observed traversing this country, and flowing westward into the Niger, which, at the nearest point to Sackatoo, had a southward course; but accounts varied, whether continuing in that direction it reached the sea, or making a great circuit emptied itself into the lake Tchad. The traveller, having in vain solicited the means of proceeding to the river and the coast, returned to Bornou by a new route, which enabled him to see Cassina, a capital now greatly decayed. Dr. Oudney died early on this journey.

The British government determined to follow up these extensive and important discoveries. Clapperton was employed to land on the coast of Guinea, thence to penetrate to Sackatoo, and on his way explore the termination of the Niger. Instead of attempting to ascend the river of Benin, he was advised to proceed by land from Badagry; but from imprudent exposure to the climate two companions died, and he became sickly. He soon, however, reached the Yarriba, or Kingdom of Eyes, which he found populous and flourishing; and the natives, not imbued with Mohammedan bigotry, courteously received him. In traversing it he crossed the chain of the Kong mountains, peopled to the summit. Leaving Yarriba, and passing through the large cities of Kiama and Wawa, he reached Bouissa on the Niger, where he received a confirmation of Park's death, and even an invitation from the king of Youri, who promised to give him that traveller's books and papers; but this visit was delayed till he should return from Sackatoo. On his way thither he passed through Nyffe, a highly improved territory, though dreadfully laid waste by the Fellatas; and through Zegzeg, also very populous and well cultivated. At Sackatoo, or Soccatoo, an expedition against the rebel territory of Goober enabled him to procure farther information. The sultan, however, prepossessed with groundless jealousies, treated him with a harshness, which, with previous sickness, brought this spirited traveller to a premature grave. His servant, Lander, after doing the last duties, conceived the plan of himself exploring the termination of the Niger, but was forcibly prevented.

The information attained on this journey afforded the strongest reason to suppose that the Niger terminated in the sea. Lander on his return submitted to government a plan for proceeding to Boussa, and thence navigating the stream downwards. Government agreed to furnish the means, though promising only a very slender reward. In March, 1830, accompanied by his brother, he arrived at Badagry, and proceeded by nearly the former route to Boussa. Thence he visited Youri, which proved a very rich and populous country; but the king treated him ill, and he had no success as to Park's books and papers. On the island of Patashie, below Boussa, he procured, with great difficulty, two canoes, afterwards exchanged for one of larger size, and thus began the navigation down the Niger. He soon found it expand into a most magnificent river, about three miles broad, and bordered by noble forests. The large island of Zagoshi presented an active scene of industry and navigation, and by a large force of armed canoes maintained its independence of the neighbouring states. On the adjoining shore appeared a very large town, named Rabba. Farther down, Egga, another great port on the river, terminated the comparatively civilized territory of Nyffe; below which were only detached states of a very turbulent and lawless character, among which serious dangers were encountered. The next striking object was the influx from the westward of the great river Tahadda, three or four miles broad, and with a current so strong that they soon gave up the attempt to ascend it. They learned, however, that three days' journey up was Fundah, of whose importance they had often heard. It became more and more evident that their voyage was to terminate in the sea, and that the numerous river branches which opened into the gulf of Benin are the delta of the Niger. Near the large town of Kirree, they passed the one which runs towards Benin. Here the natives were almost entirely clothed in the manufactures of Europe, and had fleets of large canoes adorned with European articles. The travellers, however, were made prisoners, and carried down to Eboe, the great mart for slaves and palm oil, with which trade the natives, who are rude and dissolute, do not hesitate to combine piracy. With great difficulty, and the promise of a high ransom, they succeeded in getting arrangements made for conveying them to the sea. They reached it by the channel called by the Portuguese Nun, by the English Brass River; not the largest of the estuaries, but that which comes in the most direct line from the main trunk. Thus, by very humble agency, was solved that grand problem in African geography, in the search after which so many abortive efforts had been made.

This important discovery, opening a water communication into the very centre of the continent, made a strong impression on the mercantile world. Mr. M'Gregor Laird, and some other gentleman of Liverpool, entered into an association for forming a settlement and opening a trade on the Upper Niger. Two steamers, the Quorra and Alburkah, were fitted out; while the Columbine, a larger sailing ves-

sels was laden with goods. They arrived in the mouth of the Nun in October, 1832, but suffered severely from sickness amid the swamps of the delta; and though before the end of the year they reached a healthier station, the survivors did not regain their health. In the course of the next two years, Mr. Laird ascended the Tshadda, and reached Fundah, nine miles inland, which he found a large city, with nearly 40,000 inhabitants, situated in a very extensive and beautiful plain. Its commerce, however, had been much injured by war, and by the tyranny of its ruler, from whose power Mr. Laird had some difficulty in escaping. Mr. Oldfield in the Alburkah sailed about 100 miles up this river, but neither found its banks so fruitful nor the commerce so active as on the Niger. He also visited Rabba, which proved equally extensive with Fundah. The streets were crowded and dirty, but the markets spacious and well arranged. The state of the vessel frustrated the attempt to ascend to Bousse. Lander had unfortunately died of wounds received in a contest with the natives. The expedition was unfortunate in a commercial view, the only valuable article being ivory, in too small quantity to pay the expense of the voyage. As the natives, however, are active and eager for gain, Mr. Laird conceives that this and other articles could be supplied to almost any extent, if a steady demand were once understood to exist for them.

From the southern extremity of Africa, interesting discoveries have also been made. It was not till 1650 that the Dutch formed a colony at the Cape of Good Hope, which quickly became flourishing. Beyond the Karroo desert they settled rich grazing farms, at the foot of the high interior ranges of the Nieuweld and Sneuwgebirge, compelling the natives to labour as slaves. Towards the end of the eighteenth century. Sparrman and Vaillant brought interesting accounts of the scenery of this tract, and its natural productions, both animal and vegetable. The settlement having been captured by Britain, Mr. Barrow, as secretary to Lord Macartney, made, in 1797, an excursion into the interior, and gave striking pictures of the pastoral life of the Caffres, and of the miserable aspect and condition of the Boujesmans or mountain Hottentots. In 1801 Messrs. Trutter and Somerville passed the Sneuwgebirge, discovered the large stream of the Orange river, with the pastoral tribe of the Koranas, and finally arrived at Lattakoo, capital of the Boshuanas, a more industrious and improved people than any yet known in southern Africa. On receiving this intelligence, Lord Caledon sent Dr. Cowan and Mr. Donovan, with a party of twenty, to attempt to penetrate as far as Mozambique; but after proceeding considerably beyond Lattakoo, they were surprised and killed by a party of natives.

The Rev. Mr. Campbell, in his zealous pursuit of missionary objects, considerably extended our knowledge of this part of Africa. Beyond Lattakoo, he passed through a succession of towns always rising in importance. Kurrechane, the last, was estimated to contain 16,000 inhabitants, who, besides agriculture, showed considerable skill in adorning their habitations, tanning skins, and smelting iron and copper. Dr. Lichtenstein and Mr. Burchell made important observations on the Boshuana people; but neither penetrated so far as Mr. Campbell. In 1823, while Mr. Thompson was at Lattakoo, these districts were invaded by a numerous and formidable Caffre people, from the vicinity of Cape Natal. These, it was discovered, had been driven from their country by a still more powerful tribe, the Zoolas, whose chief, Chaka, could muster 100,000 fighting men. Yet there was found to be in that quarter a large extent of fertile territory, to which a number of Dutch farmers were induced to emigrate; but having been involved in hostilities with this savage tribe, they have of late suffered dreadfully, and many of them have perished.

During the years 1822 to 1826, Captain Owen was employed by government in making a very careful survey both of the eastern and western coasts. He obtained much information respecting the former, which had hitherto been very imperfectly known. In 1837, Sir James Alexander, under the auspices of the Geographical Society, performed an expedition to the northwest from the Cape, into the country of the Damaras, where he penetrated farther than any former traveller.

After all that has recently been done to explore Africa, there still remain very important points involved in obscurity. The most important relates to the courses of the Tshadda and the Shary, flowing respectively into the Niger and lake Tchad. It is a favourite hypothesis with some, that both are one stream, pursuing an unbroken course from the lake to the river; but the fact observed by Denham, that the Shary flowed into the Tchad, renders this physically impossible. It has been recently conjectured that the Yeou may be identical with the Tshadda, and thus unite the two great receptacles; but the travellers, who crossed that river and went a great way along its banks, could not well be mistaken in their belief of its flowing into the Tchad. It seems more probable that these two great rivers have their sources in the mighty chain to the south of Mandara; that their sources, and perhaps some of their branches, may be at no great distance from each other.

Another object should be to connect lake Tchad and the surrounding countries with Nubia and Abyssinia, exploring on the way the source and early course of the Bahr-el-Abiad, or principal branch of the Nile. This wide interval has as yet been only broken by Brown's journey into Darfour, and some notices procured by him respecting the adjacent countries. An expedition, we understand, is at present projected from Egypt to the head of the Nile.

There remains still farther to the southward a great mass of unknown territory, between the Portuguese settlements on the eastern and western coasts. The people in these have formed a few stations on the Zambeze, with a view to the traffic in gold and slaves; and they have others on the eastern coast, whence merchants, with similar objects, penetrate to some distance in the interior. Still the great body of the country remains unexplored. The intimations received represent it as occupied by numerous tribes, who have made some progress in culture and the arts. To explore it with any degree of completeness, two expeditions would be necessary; one from the Cape northward as far as Bornou and Houssa; the other across the continent, between Congo and Mozambique. Both, however, would be accompanied with considerable difficulty and danger; and though they could hardly fail to add to our knowledge of the physical structure of the country, we incline to think that they would be of little or no importance in other respects.

AFRICA, or MAHADIAH, a sea-port town of Barbary, E. coast reg. Tunis, 110 m. S.S.E. Tunis, lat. 35° 32′ N., long. 11° 16′ E. It may contain about 3000 inhab., and is at present a wretched place, surrounded with broken down walls, and without shops or bazars. Formerly, however, it was a sea-port and fortress of very considerable importance. In 1550 it was besieged by a powerful armament, under the orders of the viceroy of Sicily and of Doria the famous admiral of Charles V., who took it after an obstinate and desperate resistance. But being found to be untenable it was subsequently abandoned. (*Temple's Algiers, &c.*, i., p. 137.)

AFRIQUE (ST.), a town of France, dep. Aveyron, cap. arrond., on the Sorgue, lat. 43° 57′ N., long. 1° 47′ 15″ E. Pop. 4757. It is situated in a fine valley. Streets broad, but houses mostly old and ill built. It has tribunals of original jurisdiction and commerce, a communal college, and an agricultural society; with manufactures of coarse cloth, coverlets, cotton yarn and hosiery, tanneries, &c.; and a very considerable trade in wool, cheese, &c. It was formerly fortified.

AGABLY, a town of the desert of Sahara, cap. of an oasis, on the caravan road from Tripoli to Timbuctoo, lat. 27° 44′ N. long. 4° 25′ E.

AGADIR, or SANTA CRUZ, a sea-port town of Morocco, on the Atlantic ocean, and the most S. in the empire, lat. 30° 29′ 35″ N., long. 9° 35′ 56″ W. It is built on the declivity of a hill on the shore of a gulf or large bay of the same name, well defended from the winds, and affording good anchorage for shipping. Agadir belonged at one time to the Portuguese, by whom it was surrounded by walls. It was taken from them by the Moors in 1536, when its fortifications were farther strengthened. It was for a considerable period the centre of an extensive commerce; but having rebelled against the government in 1773, the principal part of its population was transferred to Mogadore; and it had so much declined that it is said by Mr. Jackson, in 1809, not to have had more than 300 inhabitants. The vast sandy deserts of N. Africa commence immediately to the S. of Agadir; and hence its bay is aptly termed by the Arabs *Bab-Soudan*, that is, *Gate of the Blacks*.—(*Jackson's Morocco*, p. 115; *Ritter's Géogr., Trad. Franc.*, iii., p. 161.)

AGDE (an. *Agatha*), a town of France, dep. Herault, on the river of that name, near where it is traversed by the canal of Languedoc, about 3 m. above where the former falls into the gulf of Lyons, and about the same distance from where the latter is united with the lake Thau, lat. 43° 18′ 40″ N., long. 3° 28′ 10″ E. Pop. 7965. Ships of 200 tons burden come up to the town by the river, near the mouth of which is fort Briscou. It has a considerable coasting and some foreign trade, with ship-building, manufactures of verdigrise and soap, and distilleries. Being entirely built of black basaltic lava, and surrounded by a wall and towers of the same material, it has a grim appearance, and is called by the country people the *Ville Noire*. It made a part of *Gallia Narbonensis*, and was in 506 the seat of a council summoned by Alaric.—(*Hugo, France Pittoresque, dep. Herault.*)

AGEN (an. *Aginum*), a town of France, cap. dep. *Lot-et-Garonne*, on the right bank of the Garonne, nearly half way between Bordeaux and Thoulouse, lat. 44° 12′ 22″ N., long. 0° 39′ 35″ E. Pop. 19,851. It is ill built; streets nar-

row, crooked, and dirty. The hotel of the prefect is worth notice, and there is a fine bridge over the Garonne of eleven arches; it is the seat of a *cour royale* for the depts. Lot-et-Garonne, Lot, and Gers, has a college and several literary institutions, a public library with above 12,000 vols., and a theatre. Its situation, though rather unhealthy, makes it the entrepôt of the commerce between Bordeaux and Toulouse. There is here a sail-cloth manufactory, which recently employed above 600 work-people, and produced annually 130,000 metres of canvass for the navy: there are also manufactures of serges, printed cloths, cottons, braziers' ware, pottery, soap, spirits, &c. Environs beautiful; the *promenade du Gravier* is one of the finest in France. Agen is very ancient, and under the Roman emperors was a prætorian city.—(*Hugo, France Pittoresque, dep. Lot-et-Garonne; Briand, de Verst Dictionnaire de la France, &c.*)

AGGERHUUS, a bishopric of Norway, and one of the most important divisions of that kingdom; which see.

AGGERSOE, a small Danish island in the Great Belt, near the E. coast of the island of Zealand, lat. 55° 12′ N., long. 11° 12′ E.

AGHRIM, or AUGHRIM, an inconsiderable town or village of Ireland, co. Galway, 82 m. W. Dublin. One of the greatest battles ever fought in Ireland took place in the vicinity of Aghrim in 1691, when the troops of William III., commanded by Ginkell, afterwards Earl of Athlone, gained a complete and decisive victory over those of James II., commanded by St. Ruth, who fell early in the action.

AGINCOURT, or AZINCOURT, a village of France, dep. *Pas de Calais*, 13 m. N.W. St. Pol; famous in history for the great victory gained near it in 1415 by the English monarch, Henry V., over a vastly superior French force.

AGLIE, or AGLIA, a town of the Sardinian states, Piedmont, 10 m. S.W. Ivrea. Pop. 3940. It has a collegiate church, and a magnificent palace with a considerable library.

AGNES (ST.), one of the Scilly islands (which see), being the most S. of the group. It contains about 300 acres, and had in 1831 a pop. of 289. It is celebrated for its lighthouse with a revolving light, in lat. 49° 53′ 37″ N., long. 6° 19′ 23″ W. The lantern is elevated 126 feet above high-water mark.

AGNONE, a town of the Neapolitan dominions, prov. Sannio, 18 m. N.N.E. Isernia, in an elevated healthy situation. Pop. 7000. It has an immense number of churches, a hospital, and five monts-de-piété, which make loans of seed-corn to the peasants. It is the seat of the principal copper manufactures in the kingdom. Some writers have affirmed that it occupies the site of the ancient *Æquilonia* of the Samnites.

AGOA DE PAO, a sea-port town of St. Michael, one of the Azores, 12 m. E. Punta del Gada. Pop. 3000.

AGON, a small sea-port town of France, dep. La Manche, 7 m. W. Coutances. Pop. 1462.

AGOSTA, or AUGUSTA, a maritime town of Sicily, cap. cant., prov. Syracuse, on its E. coast, 12 m. N. Syracuse, lat. 37° 13′ 35″ N., long. 15° 14′ E. Pop. 8667. It stands on a peninsula, and was built in the 13th century by the emperor Frederick, who peopled it from Centurissa, which was razed for sedition. It was nearly destroyed by the earthquake of 1693, when numbers of people were crushed to death under the ruins of their houses, and a sulphurous vapour finding its way to the principal powder magazine, it blew up with a tremendous explosion. Streets regular and parallel, with some tolerable municipal edifices and magazines for articles of commerce; but the houses are low and mean, and the inhabitants have an air of dejection and poverty. Their whole existence depends on the export of salt, and a little oil, honey, and wine. It is strongly fortified both on the land and sea sides. The harbour, though rather difficult of entrance, is deep, spacious, and secure: but in E. and S. gales there is often a heavy swell. The holding ground is excellent.—(*Smyth's Sicily*, p. 139; and *App.*, p. 14.)

AGOWS, a people of Abyssinia, inhabiting the territory to the E. of the sources of the Bahr-el-Azrek, or Abyssinian Nile. This district is uncommonly fertile, particularly in cattle and honey, with which it almost exclusively supplies Gondar. The country is also very populous; and though of limited extent, can bring a considerable force into the field. There is another tribe of the same people, called Tcheretz Agows, inhabiting a district along the N. bank of the Tacazze.

AGRA, one of the *subahs*, great divisions, or provinces into which Hindostan, or India N. of the Nerbuddah river, was divided by the emperor Acbar. It lies chiefly between 23° and 28° N., and may be computed to contain about 45,000 sq. m., and from 6 to 7 millions of inhabitants. These subahs or provinces of the Moghul empire were in fact equal in extent and population to kingdoms. The province of Agra lies in the alluvial plain of the Jumna and Ganges, with an elevation but a few hundred feet above the level of the sea; and the finest portion of it, well known under the name of the Doab, or country of the "two rivers," lies between these streams. By far the greater portion of its surface is a dead flat. Although watered by three great navigable rivers, the Chambul, Jumna, and Ganges, the country is characterized in general for its drought, the greater part of its irrigation being effected by means of deep wells. It may also be described as eminently deficient of timber. From March to June the climate is dry, and extremely sultry; from June to October, sultry and rainy; and from November to February inclusive, serene, dry, and cold, the thermometer almost every morning falling below the freezing point. With the exception of a few woody portions of the province lying towards its W. extremity, and here only during the seasons of the periodical rains, the climate is healthy. No metallic mines exist in the province; and its only valuable minerals are the red sandstone, of which nearly all the monuments of the cities of Delhi and Agra are constructed; and a species of tufous limestone, called *kaugher* in the language of the country, and which is the only source from which lime is obtained for economical purposes. There are commonly two harvests; the greater crops being reaped before the setting in of the rains in May and June, and the lesser in December and January. The principal corn crops are those of wheat and barley. Rye is not known, and oats hardly so, and rice is not cultivated for want of a sufficiency of water. Of the smaller kinds of corn, those chiefly cultivated are two species of millet, viz., *Holcus Sorghum*, called in the language of the country *Jowar*; and *Holcus spicatus*, called *Bajera*. These two constitute the chief bread-corn of the labouring people, who seldom taste wheat. Great quantities of pulses are raised as a winter crop for the food of man and cattle, the most common of which is the *Cicer arietinum*, called grain by Europeans. Mustard seed is raised for oil, and the sugar cane is cultivated for the manufacture of sugar. Cotton is cultivated to a very considerable extent, and indigo is produced more extensively in this province than in any other part of upper India. It was, indeed, from hence that the drug, in the earlier periods of European commerce, was procured for the trade of Europe. The great mass of the inhabitants are Hindoos; among whom the two first classes in rank, the Brahminical and Military, are more frequent than to the eastward, or to the south. To the W. of the Jumna, chiefly, are found two nations or tribes well known in the history or upper India, the Jauts and the Mennattles, both distinguished by their warlike and predatory habits. It is remarkable of a country so long subject to Mohammedan rule, and the immediate seat of power, that the proportion of the Mohammedans found in this, as indeed in the neighbouring provinces, is smaller than in the more remote one of Bengal. The inhabitants, of whatever denomination, are of more robust frames and a far bolder spirit than those of the last-named country. The language of the people throughout is the Hindi or Hindustany. The basis of this language is the Hindoo dialect, which was spoken in the kingdom of Kanoje, which is within the limits of this province, on the first Mohammedan invasions. The Persian, the most cultivated tongue, spoken by the conquerors, has been superadded to this local tongue, in the same way as Norman French has been added to the Anglo-Saxon; so that, in short, the history of the formation of the Hindi is exactly a parallel case to that of English. Another Indian dialect, now nearly extinct, was the ancient language of the country near the town of Agra.

AGRA, the name of a zillah, or district, constituting a judicial and fiscal division of the last-named province, lying on both banks of the Jumna. Its computed area is 4500 Eng. sq. m.; and if it be equally populous with the neighbouring province of Delhi, of the population of which some estimate has been made, and it is probably somewhat more so, it contains 273 inhabitants to the square mile, or near one million of absolute population. In 1813, ten years after this district came into British possession, it was estimated to contain 2,458,214 begahs of land, each equal to near one third of an English acre, of which there were under actual culture 1,222,667; fit for culture 330,807; and waste or uncultivable 902,740. Half the area of the whole district, therefore, was under actual tillage. The land-tax as assessed to the land under culture was at the rate of two rupees and two anas a begah, or near 13*s.* an acre; a very high or rather oppressive land tax, for a poor country just recovering from long disorder and anarchy.

AGRA, a city of Hindostan, cap. of the above province and district, on the S.W. bank of the Jumna, which, during the season of the floods, is here about half a mile broad, and at no season fordable, in lat. 27° 11′ N., long. 77° 53′ E. It is distant from Calcutta 930 m., Madras 1190, and Bombay 850. Agra, like other considerable towns of India, is built of bricks, the houses having terraced roofs; the streets being extremely narrow, and never paved or flagged. Much of it is at present in a state of ruin. No census of its population,

that we are aware of, has been taken; but, judging by the amount of the town duties, which have been about 60,000 rupees a year, or £6000, it would appear to be about equally populous with Dacca, Bareilly, and Mirzapore, and may contain about 65,000 inhabitants. It is very conveniently situated for the commerce of W. India and E. Persia, and is the mart of a very considerable inland and frontier trade. The trading communication is carried on by boats on the Jumna and Chumbul; and by horses, camels, bullocks, and bullock carts by land. The goods comprising the imports consist of shawls, horses, camels, rock-salt, and the dry and fresh fruits and drugs of Persia; cotton wool and coarse cotton fabrics from the S., with European commodities by the Jumna and Ganges. The chief exports consist of raw silks, indigo, and coarse sugar. In 1832, the custom duties levied on these, commonly at the rate of from 7½ to 10 per cent. on the value, were, for the exports 292,980 rupees; and for the imports 1,100,495 rupees. In 1818 the amount of the joint export and import duties was 1,032,157 rupees; so that in fourteen years' time the increase was 34 per cent. Agra, in remote times, appears to have been a fortified town of some consequence; but it was not until the year 1504 that it was made the seat of Mohammedan empire. This was effected by the Afghan emperor Sihundur Lodi. About half a century later, the place was greatly embellished by Acbar, by far the most illustrious of all the Indian emperors. It continued to be the seat of government during his reign and that of his son; and Delhi was not restored as the metropolis until the reign of his grandson, Shah Jehan, in the year 1647. When Acbar fixed the seat of his government at Agra, he changed its name to Acbarabad, which continues to be its Mohammedan designation. It contains many fine monuments, all of Mohammedan origin. The fortress is of great extent, the double rampart and bastions being built entirely of hewn red sandstone, and at least 60 feet above the level of the Jumna, on the bank of which it stands. The most remarkable structure, however, is the Taj Mahal, literally the "Crown of Empires." This stands about 2 m. below the fortress, and on the bank of the river. It is a mausoleum, built by the emperor Shah Jehan in honour of his empress, the Begum Narr Mahal; a building of white marble raised on a terrace, and in the ordinary form of a Mohammedan mosque with minarets. The mosaic ornaments of the interior, including even the marble pavement, are extensive, rich, and elaborate, the flowers and arabesques being composed of no less than twelve different stones, such as agates, jaspers, lapis lazuli, and various coloured marbles, and the numerous quotations from the Koran being in black marble. A garden with fountains and highly ornamented gateways surrounds the mausoleum; and the *tout ensemble* is supposed, whether for extent, symmetry, *matériel*, or execution, to surpass anything in the world of the same description. This is the uniform opinion even of those who have seen the master-pieces of Italian art. "It is possible," says the celebrated and accurate Bernier, "I may have imbibed an Indian taste; but I decidedly think that this monument deserves much more to be numbered among the wonders of the world than the pyramids of Egypt—those unshaped masses, which, when I had seen them twice, yielded me no satisfaction, and which are nothing on the outside but heaps of large stones piled in form of steps, one upon another; while within there is very little that is creditable either to human skill or to human invention." The architect was a Mohammedan native of Sahar, and the whole building is said to have cost £750,000. It is kept in excellent repair by the British government, which assigns a handsome annual revenue for this object. The tomb of the emperor Acbar at Secundra, 6 m. from Agra, would be considered a splendid building in any place that had not the Taj Mahal to boast of. It was constructed by his son the emperor Jehangire. A marble palace of Shah Jehan exists within the fortress; and the neighbourhood of the town, for miles, contains the ruins of palaces and tombs of costly materials and workmanship. Agra, with the district to which it belongs, was conquered by the chief Madhajee Sindiah in 1784, and formed a portion of the jagheer assigned by this prince for the maintenance of the army, organized on the European system, and officered by Europeans, by means of which he maintained his supremacy in upper Hindostan. In the course of the military operations which deprived the Mahrattas, in 1803, of nearly the whole of their possessions in Hindostan, Agra was besieged by Lord Lake, and surrendered after a practical breach had been effected in one of the bastions. Since that time it has continued in our occupation, and constitutes our only depôt or military magazine on the N.W. frontier. The fortress has always a considerable garrison, and about 2 m. beyond its walls is a cantonment where a much larger military force is stationed. Agra was the birthplace of Abul Fazel, the famous prime minister of the emperor Acbar.

Agra, the name of a new government in British India, founded under the charter act of 1833. The unwieldy size of the Bengal presidency, which is far greater in extent, and contains more than double the population of both the presidencies of Madras and Bombay, along with the additional duties assigned by the act in question to the governor-general of India, suggested the convenience of erecting a new presidency, and the historical reputation of Agra suggested the name. The new presidency was to have had a governor and council, but all the civil and military establishments were to have been borrowed from Bengal. The inconvenience of this arrangement in this respect soon became obvious in practice, and, accordingly, an act of parliament was obtained doing away with the new presidency, and substituting for it a lieutenant-governor, named by and subject to the governor of Bengal. By this change the essential administration rests with the latter authority, but local details are conducted by the lieutenant-governor. The authority of this officer extends over all the territories N. and W. of Allahabad inclusive, conquered or obtained by cession since 1801. The names of the districts subject to the lieutenant of Agra are as follows: Allahabad, Futtehpore, Bundlecund North, Bundlecund South, Benares, Ghazeepore, Gurruckpore, Juanpore, Azimghur, Mirzapore, Agra, Allyghur, Furruckabad, Bareilly, Shahjehanpore, Seharunpore, Meerut, Cawnpore, Etawah, Moradabad, and Bolundshuhur. These are computed to contain 66,510 sq. m. The authority of the lieutenant-governor, however, also extends to other districts possessing a less regular form of civil government, as the hill districts ceded by the Nepalese, which are computed to contain 18,000 sq. m. The population of all the territories now enumerated has been reckoned at 30,000,000. It has farther, however, jurisdiction over the districts ceded by the Mahrattas on the Nerbudda in 1817, estimated to contain 29,800 sq. m.; and by the rajah of Berar in 1826, calculated at no less than 55,900 sq. m. No estimate of the population of these two last territories has been made, but they are known to be very thinly inhabited. The political correspondence with the chiefs on the W., N., and S. frontiers of his jurisdiction is also under control of the lieutenant-governor of Agra.

Authorities for these *four* articles, viz., Agra province, Agra district, Agra city, and Agra government: *Hamilton's Description of Hindostan; Hamilton's East India Gazetteer; Bernier; Return of the Population of British India made in 1831 to the House of Commons; Briggs' Ferishta; Trevelyan's Report on the Inland Customs of Bengal.*

AGRAM, or ZAGRAB, a fortified city of the Austrian empire, cap. Croatia, and the residence of the governor-general, on a hill on the banks of the Save, lat. 45° 49′ 2″ N., long. 15° 4′ E. Pop. 17,000. Agram is the seat of a bishoprick and of a tribunal of appeal for Croatia, the Bannat, and Slavonia. It has a superior academy, a gymnasium, a Franciscan convent, and a considerable commerce, particularly in the tobacco and corn of Hungary.

AGREDA, a walled town of Spain, prov. Soria, at the root of mount Cayo, celebrated by Martial. Pop. 3200. It is ill built, has six churches and four convents, with tanneries and potteries.

AGREVE (St.), a town of France, dep. Ardeche, cap. cant. Pop. 2500.

AGUAS CALIENTES, a town of Mexico, prov. Guadalaxara, 100 m. N.E. Guadalaxara, lat. 22° N., long. 101° 45′ W. It is situated in a fertile district, has a fine climate, and is one of the handsomest of the Mexican towns. Being intersected by several great roads, it has an active and considerable commerce. It is celebrated for its great cloth manufactory, which employed, in 1825, 350 hands (Ward), and the hot springs in its vicinity, whence it derives its name. Its pop. may probably amount to 18,000 or 20,000.

AGUILAR DE LA FRONTERA, a town of Spain, prov. Cordova, 22 m. S.S.E. Cordova.

AGUILAR DEL CAMPOS, a town of Spain, prov. Palencia, on the Pisuerga, 40 m. N.W. Burgos. Pop. 1600.

AHANTA, a territory on the Gold Coast of Africa, between the rivers Ancobia and Suberin.

AHMEDABAD, a town of Hindostan, presid. Bombay, prov. Gujrat, cap. district of same name, on the navigable river the Sabermatty, lat. 22° 58′ N., long. 72° 37′ E. Pop. 100,000? About the middle of the 15th century it was a flourishing city, celebrated for the magnificence of its mosques, palaces, and streets; but it has since fallen greatly to decay. It is surrounded by a high wall flanked with towers; and is a great resort of itinerant players and poets. It suffered severely from the plague in 1812, and from an earthquake in 1819. The district of which Ahmedabad is the cap. produces a land revenue of about £120,000 a year.

AHMEDPORE, a town of Hindostan, prov. Orissa, 11 m. S. Juggernaut.

AHMEDNUGGUR, a city and fortress of India, presid. Bombay, prov. Aurungabad, cap. district of same name, on the river Seena, 70 m. N.W. Poonah, lat. 19° 5′ N., long. 74° 55′ E. The town, founded in 1493, is enclosed by a stone wall, and has a handsome market-place and some

pretty good streets. At present it is the head station of a civil establishment, and has about 20,000 inhab., exclusive of the garrison. The fortress, a little way from the town, is oval-shaped, and about 1 m. in circ: it is built entirely of stone, and is surrounded by a broad and deep ditch. It surrendered to general Wellesley (now duke of Wellington) in 1803.

The district or collectorate of which Ahmednuggur is the cap., contains an area of 9910 sq. m., with a pop. of about 667,000. The land revenue amounted in 1827–8 to £181,584, the average rate of assessment being 1¼ rup. per begah. The total revenue for the same year was £203,400.—(*Parl. Papers on Indian Affairs; Revenue, Appendix*, p. 660.)

AHMOOD, a town of Gujrat, 20 m. N. by W. Broach, lat. 22° 3′ N., long. 73° 6′ E.

AHRBERG, a town and castle of Bavaria, circ. Rezat, 10 m. S. Ansbach. Pop. 3300.

AHRWEILER, a town of the Prussian states, prov. lower Rhine, cap. arr., on the Ahr, 23 m. W.N.W. Coblentz. Pop. 2100.

AHUN, a very ancient town of France, dep. Creuse, cap. cant., 10 m. S.E. Gueret, on a mountain at the foot of which flows the Creuse. Pop. 2183.

AHWAZ, or AHWUZ, a town of Persia, prov. Kuzistan, on the Karoon, 48 m. S. Shuster. In former times this was a large and flourishing city, cap. prov. of same name, and the winter residence of the Persian kings. It is now a wretched place, with 600 or 700 inhabitants. Some ruins of the old city are still to be seen. Of these the most worthy of attention are the remains of a bridge over the river, and of a royal palace. The portion of the wall of the latter now standing is built of large blocks of hewn stone, and is about 300 feet in length, and 14 or 15 feet high. A little below Ahwaz, at the deserted village of Sabia, are the remains of a remarkable mound or dam made across the river to procure water for the irrigation of the surrounding country.—(*Kinneir's Per. Emp.*, p. 89.)

AIAB, or AJASSO, a ruined sea-port of Asiatic Turkey, on the N. shore of the gulf of Iskenderoon.

AICHACH, or AICHA, a town of Bavaria, circ. Upper Danube, on the Paar, 12 m. E.N.E. Augsburg. Pop. 1600. It is surrounded by walls and ditches.

AID, t., Lawrence co., O. It has three schools, 78 scholars. Pop. 600.

AIGLE, a town of Switzerland, cant. Vaud, cap. district same name, on the torrent Grande-Eau, near the Rhone. Pop. 1750.

AIGLE (L'), a town of France, dep. Orne, cap. cant., on the Rille, 16 m. N.N.E. Mortagne. Pop. 5454. Though old and surrounded by the remains of old walls, it is well built, neat, and clean, and is distinguished by its industry. The needles and pins manufactured here are celebrated all over France, and it has also fabrics of iron and cotton wire, wire gauze, nails, &c. It has withstood several sieges.

AIGNAN (St.), a town of France, dep. Loire et Cher, cap. cant., 24 m. S. Blois. Pop. 2856. There is in the vicinity the only quarry of gun-flints in France. The quantity annually manufactured is estimated at from 35,000,000 to 40,000,000. Those for the use of the army are kept in depôt in the castle of Amboise.

AIGRE FENILLE, a village of France, dep. Charente Inférieur, cap. cant., 13 m. N.N.E. Rochefort. Pop. 1700.

AIGUE PERSE, a town of France, dep. Puy de Dome, cap. cant., 11 m. N.N.E. Riom. Pop. 3115. Near it is the Château de la Roche, the birthplace of the chancellor de l'Hôpital.

AIGUES MORTES, a town of France, dep. Gard, cap. cant., 20 m. S.W. Nismes, lat. 43° 33′ 58″ N., long. 4° 11′ 28″ E. Pop. 3240. Though now about 4 m. inland, Aigues Mortes was formerly a sea-port, and was, in fact, the place where St. Louis embarked on his two expeditions to Africa. At present it is connected with the sea by a canal, which is prolonged to Beaucaire on the one hand, while it is united on the other with that of Languedoc. It is fortified, and, from its position, is an important post for the defence of the coast. Owing to the retrogression of the sea, the town is surrounded by marshes (whence its name *Aqua Mortua*), and is very unhealthy. The salt lake of Peccais, in the neighbourhood, is celebrated as well for the quality as for the quantity of the salt obtained from it.—(*Hugo*, art. "Gard.")

AIGUILLE (L'), a celebrated mountain in France, dep. Isere, 4 m. N.W. Corps, height 2000 mètres (6365 feet). Its under part has the appearance of a truncated cone, and its upper part is of a cubical form. It was long supposed to be inaccessible, and was hence called *Mons Inaccessus*; but in 1492 an officer of Charles VIII. reached its summit.

AIGUILLON, a town of France, dep. Lot et Garonne, at the confluence of the Lot and the Garonne. 17 m. N.W. Agen. Pop. 2919. It was unsuccessfully besieged by John duke of Normandy in 1345; when, it has been said, but incorrectly, first cannons were first made use of.

AIGURANDE, a town of France, dep. Indre, cap. cant., 12 m. S.W. Châtre. Pop. 1945. It is the centre of an extensive cattle trade; and has, or had, an octagonal monument, believed to be very ancient, but of which the object is unknown.

AILAH, or ELANA, a decayed town of Arabia, on the gulf of Akabah; which see.

AILSA, an insulated rock in the Frith of Clyde, 10 m. W. Girvan. Its base is elliptical, and it rises abruptly from the sea to the height of 1098 feet. It consists of columnar trap. The N.W. side is almost perpendicular, being formed of successive tiers of immense columns. It is frequented by innumerable flocks of sea fowl, and is a very striking object from every part of the Ayrshire coast. It gives the title of marquis to the noble family of Kennedy.

AIN, a frontier department in the E. of France, having the Rhone, which separates it from Savoy on the E. and S., the Saone on the W., and the depts. of Saone et Loire, Jura, and part of Switzerland, on the N. and N.W. Area 592,674 hectares. Pop. 346,188. Exclusive of the Rhone and Saone, by which it is partly bounded, it is divided by the Ain, whence it derives its name, into two nearly equal parts; that to the E. being rugged, mountainous, and principally adapted to pasturage; whereas that to the W., though in parts marshy, is generally level and fit for cultivation. There are in the S.W. portion of this dep. a great number of lakes or ponds, some of which are subjected to a very peculiar species of rotation. It is usual to drain and cultivate them for a season; and when the crop has been gathered, they are again filled with water, and with different sorts of fish, according to the nature of the pond; and, after being occupied in this way for two years, or thereby, are again dried and subjected to the plough. The extent of the ponds so employed is estimated at nearly 16,000 hectares. This is found to be a very profitable species of cultivation; though, from the humidity it occasions, it is said to render the climate unhealthy. Oxen, of which large numbers are bred, are generally used in tillage. Produce of corn crops sufficient for the consumption. Vintage considerable, three fifths of the produce exported. Woods very extensive, amounting to about 120,000 hectares. Near Belley are produced the best lithographic stones in France. Manufactures inconsiderable. Great numbers of the inhabitants emigrate annually after harvest to seek for employment in the contiguous departments. Ain returns five members to the Ch. of Deputies, and has 1203 electors. Public revenue of the dep. in 1831, 6,258,042 fr. Chief towns Bourg, Nantua, Trevoux, Belley, and Gex. But the most celebrated place in the dep. is Ferney, long the residence of Voltaire.—(*Hugo, France Pittoresque, dep. Ain; French Official Tables.*)

AIN-TAB, a large town in the N. of Syria, on the S. slope of the Taurus, lat. 36° 58′ N., long. 37° 13′ 17″ E., 70 m. N. Aleppo, and 30 m. W. Bir, on the Euphrates. Pop. has been estimated at 20,000, which, if the town be two thirds the size of Aleppo, as stated by Maundrell (*Journal*, 216), can scarcely be considered as exaggerated. The inhabitants consist of nearly equal numbers of Armenian and Greek Christians, Curds, and Mohammedans, among whom a spirit of toleration and unity prevails unparalleled in most other Eastern societies. They use the Turkish language. Houses well built, of a fine stone resembling porphyry, flat-roofed, and generally of only one story. There are five mosques, and several large and well-supplied bazaars. In the centre of the town is a castle on a mound, resembling, in every respect, that of Aleppo, but much smaller. Water abundant, many of the streets having streams flowing through them. On the S. is a large burial-ground, which, at a short distance, resembles an important suburb, and is perhaps not much inferior in extent to the town itself. Manufactures of goat-skin leather, cotton and woollen cloths, are carried on to some extent; and there is some trade in raw and tanned hides, cloth, honey, and tobacco.

Ain-Tab may be regarded as the capital of a limited, but very fine country, consisting of small hills and valleys among the roots of the Taurus. The towns and villages in this little district are very numerous, the most important being Adjia, Siliam, and Klea. At Adjia, 6 or 7 m. distant, is the source of the Koeik (the river of Aleppo); and within 10 yards of this stream there runs another, the Sejour, the banks of which are thickly set with trees and villages. The Sejour has a good bridge over it, about 2½ m. from Ain-Tab. The air is good and the soil fertile; but cultivation is not much followed, the majority of the rural population being shepherds. Principal agricultural products corn and tobacco. Bees are very plentiful.

Ain-Tab was taken and plundered by Timur Bec in 1400; but its favourable site and the tolerant spirit of its inhabitants have kept the district remarkably free from the usual Eastern casualties. The Turkish pachas, notorious as they are for exaction and oppression, respect the homes and rights of these hardy mountaineers. They have, indeed, been

taught this forbearance by some severe lessons, having experienced, in every attempt at tyranny and extortion, a firm and successful resistance. The last of these attempts was made in 1780, when the Turkish forces were completely defeated; since which the men of Ain-Tab and its vicinity have been suffered to enjoy the produce of their fields, flocks, and bees in undisturbed tranquillity. According to Maundrell, Ain-Tab is identical with the *Antiochia-ad-Taurum* of the ancients; but this is doubtful.—(*Maundrell's Journey*, p. 209; *Volney*, ii., 137; *Browne's Travels*, 210.)

AIR, t., Bedford co., Pa. It contains one store, one woollen factory, two flouring-mills, two grist-mills, three saw-mills. Pop. 1453.

AIRDRIE, a bor. and m. town of Scotland, co. Lanark, pa. New Monkland, on a rising ground between two little rivulets, 12 m. E. Glasgow. Pop. 12,416. It consists principally of two parallel streets joined by cross streets, the houses of the labouring population being well built and comfortable. In the early part of last century Airdrie contained only one solitary house. It owes its rapid rise to the coal and iron mines in its immediate vicinity, and to its contiguity to the Monkland canal, to which it is united by railways. The Calder iron works in the neighbourhood employ a number of hands; and within the town there are two iron foundries, at which machinery is made, with distilleries, breweries, malt barns, &c. But the weaving of cotton goods on account of the Glasgow manufacturers has hitherto been the principal source of employment; though this will probably soon cease to be the case, a large cotton factory having recently been erected. It was constituted a royal borough in 1833. The Reform Act united Airdrie with Hamilton, Lanark, Falkirk, and Linlithgow in the return of a member to the H. of C. £10 houses in 1831, 130; parl. constituency, 1841–37, 859.—(*Boundary Report*, p. 121, &c.)

AIRE, a river of England, important from its navigation and the numerous canals with which it is connected. It rises in Yorkshire, in the central mountain ridge, a little to the E. of Settle. It pursues a S.E. course, till, passing Leeds, it is joined by the Calder at Castleford; its course is thence E., with a good many windings, till it falls into the Ouse, a little above Goole. From Leeds to Ferrybridge the Aire flows through one of the richest plains in the kingdom.

AIRE (an. *Vicus Julii*), a decayed city of France, dep. Landes, cap. cant., on the Adour, 80 m. S.S.E. Bordeaux. Pop. 4028. This is a very ancient city, and has been since the 5th century the seat of a bishopric. The Goths became possessed of it in the 6th century, and it was for some time the residence of Alaric II. It suffered much in the wars with the English, and still more in the religious contests of the 16th century. The fortifications by which it was once surrounded have now wholly disappeared. It is pretty well built, has a cathedral, a college, and a secondary ecclesiastical seminary. A bridge has been recently built over the Adour.—(*Hugo*, art. "Landes.")

AIRE, a fortified town of France, dep. Pas de Calais, cap. cant., at the confluence of the Lys and Laquette. Pop. 5610. It is pretty well built; has several public fountains; with manufactures of linen, hats, soap, Dutch tiles, geneva, &c. In a military point of view, it is of considerable importance for the defence of the country between the Lys and the Aa.

AIRVAULT, a town of France, dep. Deux Sevres, cap. cant., on the Thoué, 15 m. N.N.E. Partenay. Pop. 1923. It is well built, and has the remains of an old castle and monastery, destroyed in the 16th century.

AISCHUM, county, Mich. Situated in the N.W. part of the state, and contains 576 sq. m. It is unorganized.

AISNE, a dep. in the north of France, between 48° 50′ and 50° 4′ N. lat., and 2° 56′ and 4° 12′ E. long.; the principal town, Laon, in its centre, being 75 m. N.E. Paris. Area 728,530 hectares. Pop. 527,095. It is traversed by the Aisne, whence its name, the Oise, Marne, and by several canals. Surface generally flat or undulating, but in parts hilly; soil fertile. The cultivated land amounts to about 500,000 hectares, about 100,000 being occupied with woods, and 42,000 with meadows. Agriculture good; and after providing for the inhabitants there is a large export of corn, as well as of sheep, oxen, horses, and pigs. It also produces flax and hemp, hops, rape, beet-root, potatoes, &c. In the southern part wine is made; but the ordinary drink of the inhabitants is wine and beer. This dep. is celebrated for its manufactures, at the head of which must be placed the cottons, laces, lawns, shawls, table-linen, &c. of St. Quentin; the mirrors of St. Gobain; and the bottles, of which Folambry furnishes about 3,000,000 a year, for the wines of Champagne. It has also cast iron and iron plate foundries, brick and tile works, manufactures of chemical products and of beet-root sugar, bleach fields, &c. It is divided into seven electoral arrond.; returns seven m. to the Ch. of Deputies; and had, in 1838, 3160 electors. Public revenue, in 1831, 18,739,067 f. Chief towns, Laon, St. Quentin, Soissons, Château-Thierry, Vervins, &c.—(*Hugo, France Pittoresque*, art. "Aisne;" *French Official Tables*, &c.)

AIX, an ancient city of France, dep. Bouches du Rhone, cap. arrond. and cant., formerly cap. Provence, in a plain at the foot of some hills, 16 m. N. Marseilles, lat. 43° 31′ 25″ N., long. 5° 26′ 47″ E. Pop. 18,240. It was founded by Caius Sextius Calvinus, a Roman general, 120 years B.C., and received the name of *Aquæ Sextæ*, from its famous hot springs. It is a well-built handsome town. Streets generally well paved, wide, and clean. It has a beautiful public promenade, and some good squares ornamented with fountains. A side of one of the squares is formed by what is called the *Palais*, an old building containing some spacious halls, formerly occupied by the parliament of Provence and other public bodies. It has also a town-hall, containing a valuable collection of antiquities, a magnificent cathedral, a museum of pictures, a theatre, and other public buildings. Previously to the Revolution, Aix was the seat of a university; and at present it has a royal academy equivalent to a university, with faculties of theology and law, and a valuable library containing above 90,000 vols. It is also the seat of a *cour royale* for the depts. of the Bouches du Rhone, Basses Alpes, and Var, and of an archbishopric; and has several learned societies. Aix has manufactures of silk, wool, and cotton, and its industry and commerce have materially increased within the present century. Inhabitants said to be decidedly aristocratical, while those of Marseilles incline strongly to democracy. The mineral springs, from which the town took its ancient name, were accidentally discovered in 1704, and were identified by the medals, inscriptions, and other Roman monuments then dug up. The establishment of the baths belongs to the hospital. Tournefort, celebrated as a botanist, and one of the best of the travellers that have visited the Levant, was a native of Aix; as were Vanloo and Adanson.—(*Hugo*, art. "Bouches du Rhone.")

AIX, an ancient town of the Sardinian States, Savoy, 8 m. N. Chamberry. Pop. 2900. It is celebrated for its hot baths, which were in vogue among the Romans, and are still extensively resorted to. The king of Sardinia has constructed a large and convenient building for the accommodation of visiters.

AIX D'ANGILLOW (LES), a town of France, dep. Cher, cap. cant., 12 m. N.E. Bourges. Pop. 1414.

AIXE, a town of France, dep. Haute Vienne, cap. cant., 6 m. S.W. Limoges. Pop. 2645. It has some remains of Roman antiquities.

AIX-EN-OTHE, a town of France, dep. Aube, cap. cant., 18 m. W.S.W. Troyes. Pop. 1707. It has a cotton factory.

AIX-LA-CHAPELLE (the *Aachen* of the Germans, and the *Aquisgrana* of the Italians), an old and well-built city of the Prussian states, prov. Lower Rhine, near the confines of the Netherlands, lat. 50° 47′ N., long. 6° 15′ E. It was formerly a free imperial city, and is now the cap. of a reg. of the same name. It is divided into the inner and outer town, and contained, in 1835, 38,383 inhab. It is the seat of a bishop, of a court of appeal, a tribunal of commerce, and has an exchange, a gymnasium or college, a school of arts, a picture gallery, and a public library with above 10,000 volumes. Manufactures considerable, and recently increased. The most important are those of broad-cloth and cotton; and next to them the famous needle-works, which employ and support large numbers of individuals; watch-making, jewelry, &c. are extensively carried on; and there are also print-works and tan-works. Exclusive of the cathedral, there are eight Catholic churches, a Protestant church, and a synagogue. It had at one time twenty-one monasteries and convents, but most of them have been suppressed. Among the public buildings, the most remarkable are the town-house, enriched with portraits of the different ministers present at the negotiation of the treaty of 1748; the cathedral, founded by Charlemagne; the theatre, the fountain in the principal market-place, &c. Handsome private houses are to be met with in every street. Aix-la-Chapelle was the favourite residence of Charlemagne, and for some time the capital of his empire; hence it was long customary to hold the coronation of the emperors of Germany in this town; and till 1794, when they were carried to Vienna, the regalia used on the occasion were to be seen in the convent chapel. Strangers are still shown a sabre of Charlemagne, a copy of the gospel written in gold characters, and an immense number of relics.

Aix-la-Chapelle is celebrated for its hot baths, which issue from six different springs. The most celebrated is that called the *Source de l'Empereur*. The water is strongly impregnated with sulphur, and has a temperature of 143° Fah. The baths are generally opened, with much ceremony, on the 1st of May. Two celebrated treaties of peace have been concluded in this city; the first in 1668, between France and Spain; and the second in 1748, between the different powers engaged in the wars of the Austrian succession. Here also a congress was held in 1818.

The *Salle des Redoutes*, one of the most splendid gambling-houses on the Continent, is thus noticed in Mr. Murray's *Handbook*: "The lower story is occupied by print and

inside shops, by a restaurant, and a reading room, where the principal European newspapers are to be found. In the grand suit of apartments, balls are given once or twice during the season; but they are principally devoted to gambling. Games of hazard, rouge et noir, &c. are carried on in them, almost without interruption, not only by night but by day, beginning at 10 or 11 in the morning. The tables are open to all comers, except inhabitants of the town and officers of the Prussian army, who are expressly forbidden by a police order to play at the table. Before 10 P.M. the lowest stake allowed is a kron-thaler; after 10, half a kron-thaler is the lowest sum. Public gaming is not tolerated anywhere else in the Prussian dominions. The tables are let out to a company, who are compelled to apply a large portion of the gains to the improvement of the town and the walks in the neighbourhood."

AJACCIO, a sea-port town of the island of Corsica, of which it is the cap., on its W. coast, and on the N. side of a gulf to which it gives name, lat. 41° 55' 1" N., long. 8° 44' 4" E. Pop. 9003. It has a citadel, built in 1554; is the seat of a bishopric; has a royal court and other judicial establishments, a college, a model school, a public library, a good theatre, and a fine promenade along the bay. The latter is spacious and commodious, but exposed to the W. gales. Streets straight and broad, and houses good; but it labours under a deficiency of good water. It has a considerable trade, exporting wine, oil, and coral. Ajaccio will be memorable in all time to come, from its having been the birthplace of by far the most extraordinary, and, perhaps, also the greatest, man of modern times. Napoleon Bonaparte was born here on the 5th of August, 1769. He was descended of a respectable family long settled in the island. —(*Hugo*, art. "Corse.")

AJMERE, a town of Hindostan, cap. district belonging to the British, in Rajpootana, 225 m. S.W. Delhi, lat. 26° 31' N., long. 74° 25' E. It is a well-built moderate-sized town, on the slope of a high hill, at the summit of which is a fortress, formerly deemed impregnable, and which, with a little improvement from European skill, might easily be made a second Gibraltar. Ajmere is a holy city, having the good fortune to possess the tomb of a saint, whose miracles are renowned all over India. The emperor Acbar made a pilgrimage on foot to the shrine of the saint; and it continues to be resorted to by devotees from all parts of India. It is not uncommon, in Malwa, for pilgrims who have been at Ajmere to set up a brick or a stone, taken from the sanctuary, near their dwelling, and to become saints themselves, and have pilgrimages made to them! A strong detachment of troops is usually stationed at Ajmere, and the neighbouring town of Nusserabad.

At a short distance W. from Ajmere is the celebrated Hindoo temple of Pooshkur, on the banks of a sacred pool nearly a mile in circuit. It is annually visited in October by crowds of pilgrims from all parts of India.—(*Heber*, ii., p. 440–443.)

AKABAH (GULF AND CASTLE OF). The gulf of Akabah is a deep narrow inlet, uniting with the N.E. extremity of the Red Sea. It extends in a N.N.E. direction from 28° to 29° 32' N. lat., a distance of above 100 Eng. m.; being, where broadest, 16 or 17 m. across. It communicates with the Red Sea by channels on each side the isle of Tiran at its S. extremity. This gulf, the *Sinus Elaniticus* of antiquity, so called from the port of Elana or Elath, forms the E. boundary of the peninsula occupied by Mount Sinai. It has the appearance of a narrow deep ravine, the cliffs rising in some places 2000 feet perpendicularly from the sea; and has been very little frequented in modern times. Being exposed to sudden and heavy squalls, and encumbered in parts with coral reefs, its navigation is not a little dangerous.

The castle of Akabah, from which the gulf takes its modern name, is not a place of any strength. It is situated about 150 yards from the beach, on the E. side of the gulf, and about 2½ m. from its extremity, in lat. 29° 30' N., long. 35° 7' E. It has a supply of good water, and there are several Arab huts within its walls. The garrison consists of about 30 Egyptian soldiers, kept to guard the corn deposited in it for the supply of the caravans, in their journey from Cairo to Mecca.

Akabah has been supposed to occupy the site of Elan or Elath, from which an extensive intercourse was carried on in the earliest ages with Rhinoculura, now El Arish, on the Mediterranean, only 116 m. distant. There are, however, no ruins of any kind at Akabah, and no port. It would, therefore, seem more probable that the situation of Elath is identical with that of Jezirat Faroun, on the W. side of the gulf, and about 6 m. from its extremity. There are there very extensive ruins, and a natural harbour. Dr. Shaw supposes, apparently with much probability, that Meenap-el-Deahabie, i. e., the *Golden Port*, on the W. coast of the gulf, and nearly opposite to mount Sinai, occupies the site of *Eziongaber*, whence the ships of Solomon sailed to fetch gold from Ophir. It is said by Lieutenant Wellsted to be the only "well-sheltered" harbour in the gulf.—(See *Shaw's Travels in Barbary, &c.*, 4to ed., p. 322; *Laborde's Arabia Petræa*. Eng. trans., p. 94; *Wellsted's Travels in Arabia*, ii., passim.)

AKERMAN (an. *Tyras*), a town of Russia in Europe, in Bessarabia, on the W. side of the estuary or *liman* of the Dniester, near its junction with the Black Sea, lat. 46° 12' N., long. 30° 24' E. The statements as to its pop., even in works whose authors may be supposed to have had access to the best sources of information, differ extremely. Probably, however, it may be estimated, suburbs included, at nearly 12,000. The citadel, surrounded by a deep ditch, was constructed by the Genoese during the time that they were masters of the Black sea. The Dniester being rapid and not well suited for internal navigation, the commerce of the town is not very considerable. The exports consist principally of salt, the produce of the salt lakes in its vicinity, which, in 1833, yielded 1,396,000 poods of salt to government, and 2,227,048 poods to individuals. Their produce, however, is said sometimes to amount to 7,000,000 poods. The salt is sold by government at 66 copecks per pood. The basin of the Dniester having only from 5 to 7 feet water, the larger class of vessels anchor outside the bay, in the Black sea, about 16 m. from town.

Akerman is distinguished in recent diplomatic history by the treaty concluded here in 1826 between Russia and the Ottoman Porte, by which Wallachia, Moldavia, and Servia were emancipated from all but a nominal dependence on the latter.—(*Schnitzler la Russie, &c.*, p. 741; *Hagemeister on the Commerce of the Black Sea*, p. 81, 131, &c.)

AKHISSAR (an. *Thyatira*), a city of Turkey in Asia, Anatolia, the seat of one of the Apocalyptic churches, 58 m. N.E. Smyrna. It stands on an eminence elevated but little above the surrounding marshy and alluvial plain. Messrs. Smith and Dwight, the American missionaries, state that, having suffered severely from fire a few years ago, it is now mostly of wood; that its aspect is poor and mean, with but few remains of ancient grandeur; and that the pop. is not supposed to exceed 1000 families (5000 individuals), of whom 1500 may be Greeks.—(*Missionary Researches in Armenia*, p. 5, &c.) Mr. Elliott's account is not so unfavourable. He states that, being situated on the direct road between Constantinople and Smyrna, it wears an appearance of comfort superior to that of Anatolian towns in general; that the bazars are large and amply supplied; the khan handsome, clean, and well ordered; and that it contains 1740 houses, of which 400 belong to Greeks, and 40 to Armenians. If we suppose each house to lodge, at an average, 6 individuals, the town would, according to Mr. Elliott, have a population of about 10,400!—(*Elliott's Travels*, ii., p. 111.) Perhaps the truth may lie midway between these conflicting statements. There is in the town a Greek school, attended by 150 children of both sexes.

AKHLAT, a town of Turkey in Asia, in Koordistan, on the N.W. shore of lake Van, at the foot of the Seiban-dagh. It is very ancient, and was formerly a place of considerable importance; but it is now greatly decayed, not having more than 1000 houses, or perhaps 6000 inhab. Its territory is filled with gardens and vineyards.—(See *Kinneir's Persian Empire*, p. 328, where it is noticed under the name *Argish*; and the *Dict. Géographique*.)

AKHTYRKA, a town of Russia in Europe, govern. of Kharkoff, 60 m. N.W. Kharkoff. Pop. 12,000. It has a pretty considerable commerce; and among its churches is one that attracts a good many pilgrims to visit a miraculous image of the virgin.—(*Schnitzler la Russie, &c.*, p. 477.)

AKISKA, or AKHALZIKH, a city of Asiatic Russia, prov. Georgia, formerly the cap. of a Turkish pachalik, on an affluent of, and at a short distance from, the Kur, 115 m. W. Tiflis, lat. 31° 45' N., long. 43° 1' E. Pop. has been estimated at above 20,000, but at present it does not probably reach half that amount. It is an open town; but is defended by a strong castle situated on a rock. It is remarkable for its fine mosque of Sultan Ahmed, built in imitation of St. Sophia, and for the college and library attached thereto. The latter was reckoned one of the most curious in the E.; but the Russians have removed about 200 of the rarest and most valuable works to Petersburgh. Akiska is also the seat of a Greek archbishopric, and has about 60 Jewish families and a synagogue. Its environs are productive of silk, honey, and wax; and it has some manufactures. It was formerly a principal seat of the slave trade. The slaves sold in its markets were brought from Georgia, Mingrelia, Imeritia, &c.; and being conveyed to the nearest ports on the Black sea, were shipped for Constantinople and Alexandria. This commerce is now entirely suppressed. Many of the Turkish inhabitants have left the town since its occupation by the Russians.—(*Balbi Abrégé*, 3d ed., p. 809; *Missionary Researches in Armenia*, p. 100.)

AKRON, p. v., Portage t., cap. of Summit co., O. Situated on the Ohio canal at the junction of the Pennsylvania and Ohio canal 38 m. S. Cleveland. At this place the Ohio canal suddenly rises, by a succession of locks, to the Portage

summit. A great water power is concentrated here, by means of the Little Cuyahoga river, and the waste water of the canal, which, by a great descent, is used several times over; and the water power will be increased by bringing the water of the Great Cuyahoga river in a canal discharging itself by a high fall into Cuyahoga river. This place is finely situated for trade and manufactures, and contains a court-house, jail, three churches, one Methodist, one Presbyterian, and one Universalist, thirty-four stores, four furnaces, four fulling-mills, three woollen-factories, three flouring-mills, one grist-mill, two distilleries, one powder-mill, one oil-mill, one machine-shop, two printing-offices, three weekly newspapers, one academy, 9 students, six schools, 269 scholars. Pop. 1665. Portage t., exclusive of Akron v., has 718.

AKSERAI, a town of Turkey in Asia, in Caramania, cap. sanjiack of the same name, on the S.W. arm of the Kizil Ermak, 90 m. N.E. Konieh (an. *Iconium*). Pop. uncertain. It has a castle, and its territory is productive of corn and fruits.

AC-SHEHR (the *White City*), a city of Asiatic Turkey, Caramania, cap. sanjiack of the same name, 55 m. E.S.E. Afium Karahissar, lat. 38° 13′ N., long. 31° 30′ E. It is situated near the S. extremity of a considerable lake, at the foot of a mountain chain, in a rich and well-watered country. Its position is said to be identical with that of the ancient *Thymbrium*, visited by the younger Cyrus; and, according to D'Anville, it was denominated *Antiochia ad Pisidiam*, from its being on the confines of Pisidia, of which prov. it afterwards became the capital. It is mentioned in Turkish annals as the place where Bajazet was confined by Timour, and where he expired. It is supposed by Mr. Kinneir to have about 1500 houses, with many fine gardens in the vicinity. Its principal ornament is a handsome mosque and college, dedicated to the memory of Bajazet. The streets are cleaned by means of streams from the neighbouring mountains that run through them.—(*Kinneir's Journey through Asia Minor, &c.*, p. 226; *Olivier*, vi., p. 396.)

AKYAB, a marit. town of India beyond the Ganges, cap. prov. Arracan, and of a dist. of same name, on the E. side of the island of Akyab, lat. 20° 8′ N., long. 92° 54′ E. It is built of wood; has broad streets, and markets for grain, and European and Indian goods. Its harbour, though inferior to that of Kyouk Phyos, is safe; and it is, in most other respects, superior to the last-mentioned town as a place of trade. The vicinity is level, fertile, free from jungle, and traversed by several roads. It is the residence of a British commissioner, and is garrisoned by two companies of Sepoys.—(*Pemberton on the E. Frontier of India*, p. 87; *Journal Geog. Society*, i., p. 175.)

ALA, a small town of the Tyrol, on the Adige, 7½ m. S. Roveredo. Pop. 2400. It has a gymnasium, and a Capuchin convent.

ALABAMA, one of the Southern United States, is bounded N. by Tennessee; E. by Georgia; S. by Florida and the gulf of Mexico; and W. by Mississippi. It is between 30° 10′ and 35° N. lat. and 85° and 88° 30′ W. long.; and between 8° and 11° 30′ W. long. from W. It contains 46,000 sq. m., or 28,160,000 acres. In 1800, the population was only 2000; in 1810, 10,000; in 1820, 127,901; in 1830, 308,997; in 1840, 590,756, of whom 253,532 were slaves. Free white males, 176,692; do. females, 158,493; free coloured males, 1030; do. females, 1009. Employed in Agriculture, 177,439; in commerce, 2212; in manufactures and trade, 7195; navigating the ocean, 256: do. canals, rivers, &c., 758; learned professions, 1514. It contained, in 1840, forty-nine counties, which, with their population, were as follow:

Northern District.

Counties.	Total Pop.	Counties.	Total Pop.
Benton	14,260	Limestone	14,374
Blount	5,570	Madison	25,706
Cherokee	8,773	Marion	5,847
De Kalb	5,929	Marshall	7,553
Fayette	6,942	Morgan	9,841
Franklin	14,270	Randolph	4,973
Jackson	15,715	St. Clair	5,638
Lauderdale	14,485	Talladega	12,587
Lawrence	13,313		
		Total	185,776

Southern District.

Counties.	Total Pop.	Counties.	Total Pop.
Autauga	14,342	Macon	11,247
Baldwin	2,951	Marengo	17,264
Barbour	12,024	Mobile	18,741
Bibb	8,284	Monroe	10,680
Butler	8,685	Montgomery	24,574
Chambers	17,333	Perry	19,086
Clarke	8,640	Pickens	17,118
Conecuh	8,197	Pike	10,108
Coosah	6,995	Russell	13,513
Covington	2,435	Shelby	6,112
Dale	7,397	Sumter	29,937
Dallas	25,199	Tallapoosa	6,444
Greene	24,024	Tuscaloosa	16,583
Henry	5,787	Walker	4,032
Jefferson	7,131	Washington	5,300
Lowndes	19,539	Wilcox	15,278
		Total	404,980

The capital is Tuscaloosa, situated on Black Warrior river. Mobile is the most populous and commercial place in the state. The other principal towns are Huntsville, Florence, Wetumpka, Montgomery, Cahawba, and St. Stephen's.

Near the gulf of Mexico, the country is low and level, with many swamps and savannas; the soil is sandy, and the prevailing timber is pine. The central part is an elevated table land, with a deep, rich, and productive soil, and a mild and healthy climate. Toward the N., the country becomes hilly and mountainous, beyond which is the valley of Tennessee river, on which, in some parts, the bottom land is low, and, near the Muscle Shoals, unhealthy.

Cotton is the chief production of the state, of which there were produced, in 1840, 117,138,823 pounds. Of wheat, 828,052 bushels; of Indian corn, 20,947,004; of oats, 1,406,353; of potatoes, 1,708,356; of tobacco, 272,302 pounds; of rice, 149,019. The exports, in 1840, amounted to $12,854,694; and the imports to $574,651. There were 152 stores engaged in foreign trade, with a capital of $3,355,012, and 899 retail stores, with a capital of $5,642,885. Domestic or family manufactures amounted to $1,656,119; and the total capital employed in manufactures was $2,130,064.

Mobile is the principal river, and is formed by the junction of the Alabama and Tombigbee rivers, and enters Mobile bay by two mouths. The Alabama is navigable for vessels requiring 6 feet of water, 60 m. above its junction, and has 4 or 5 feet of water 150 m., to the mouth of the Cahawba; and to the junction of Coosa and Tallapoosa, of which it is formed, it has, in its shallowest places, 3 feet of water. The Tombigbee, the other constituent of Mobile river, is navigable for schooners 120 m., to St. Stephen's; and for steam-boats to Columbus, Mississippi. Black Warrior, a large branch of it, is navigable by steam-boats to Tuscaloosa. The Chattahoochee, for a considerable distance, separates this state from Georgia on the E. The Tennessee curves southwardly from the N.E. to the N.W. corner of the state, and is navigable for steam-boats to Florence, at the foot of the Muscle Shoals. Mobile bay sets up 30 m. from the gulf of Mexico, with an average breadth of 12 m. The principal literary institution is the university of Alabama, at Tuscaloosa, which has been amply endowed by the state, and is flourishing. La Grange college was founded in 1830 by the Methodists; and there is a Roman Catholic college near Mobile. The chief religious denominations are Methodists, Baptists, Episcopalians, and Roman Catholics.

There are two banks in this state, with an aggregate capital of $3,962,000, besides a state bank with four branches, the capital of which in state bonds amounts to $11,235,431. The state debt amounts to $10,859,558.

This state has not neglected works of internal improvement. *Muscle Shoals canal* is designed to overcome an obstruction in Tennessee river, and extends from Florence 35½ m., and cost $571,835; and when completed to Brown's ferry, at the head of the shoals, is estimated to cost $1,361,057. *Huntsville canal* extends 16 m., from Triana on Tennessee river to Huntsville. *Montgomery and West Point rail-road* extends 87 m., from Montgomery to West Point, at the head of the rapids on Chattahoochee river, 30 m. above Columbus. *The Tuscumbia, Cortland, and Decatur rail road* extends from Decatur, 44 m., to Tuscumbia. The Selma and Tennessee rail-road extends from Selma on Alabama river, 170 m., to Gunter's landing, on Tennessee river. *The Wetumpka rail-road* extends from Wetumpka, at the head of steam-boat navigation on Alabama river, 56 m., to Fort Williams, at the head of the great falls on Coosa river, and is designed to unite with the Selma and Tennessee rail-road. *Cahawba and Marion rail-road* connects the two places, 35 m. distant.

The executive power is vested in a governor, elected biennially by the people. The legislative power consists in a senate and house of representatives; the former contains 30 and the latter 100 members. The legislature meets annually at Tuscaloosa, on the first Monday of November. The secretary of state is elected for two years, and the comptroller and treasurer annually, by the joint ballot of both houses of the legislature. The right of suffrage is possessed by every white male citizen of twenty-one years of age, who has resided within the state one year immediately preceding an election, and the last three months within the county, city, or town in which he offers his vote.

This state was originally included in the territorial limits of Georgia, except the part which belonged to Florida. In 1802, Georgia ceded all her territory W. of Chattahoochee river to the Mississippi river, to the United States, and in 1817 it was constituted the Mississippi territory, and Alabama continued a part of this territory until it was admitted to the Union and became an independent state in 1820.

ALABAMA, p. t., Genesee co., N.Y., 263 m. W. by N. Albany, 388 W. Pop. 1798.

ALABAMA RIVER, Ala., United States, gives name to the state in which it runs, and is formed by the junction of the Coosa and Tallapoosa rivers, both of which rise in

Georgia. They are rapid streams, and not navigable for any considerable distance above their junction. The Alabama pursues a very winding course in a W. and S.S.W. direction to the S.W. part of the state, where it unites with Tombigbee river to form Mobile river, 48 m. above Mobile bay. See the article ALABAMA.

ALABASTER, or ELEUTHERA, one of the Bahama or Lucayo islands, which see.

ALACHUA county, Flor., is situated on the W. side of the peninsula, bounded S.W. by the gulf of Mexico, and contains 2500 sq. m. It contains much good land, and its extensive prairies feed large herds of cattle. Suwannee river bounds it on the W. Watered by Wakassassee and Withlacoochee rivers. The surface is level towards the coast, in other parts rolling. It had, in 1840, 5665 neat cattle and 9441 swine, and produced 27,365 bushels of Indian corn and 2000 pounds of sugar. Pop., whites 1719, slaves 522, free-coloured 1; total, 2242.

ALAIS (an. *Alesia*), a town of France, dep. Gard, cap. arrond., on the Gardon d'Alais, at the foot of the Cevennes, 25 m. N.W. Nismes, lat. 44° 7′ 29″ N., long. 3° 4′ 26″ E. Pop. 11,749. It is ancient, and pretty well built. During the religious wars of France the inhabitants were distinguished by their attachment to the Protestant party, and to bridle them Louis XIV. constructed a fort in the town. It has a communal college, a tribunal of primary jurisdiction, a theatre, a public library, a consistorial Protestant church, &c. It has, also, manufactures of strands, silk stockings, and gloves; with a glass-work, potteries, copperas works, &c. Besides its own products, it has a considerable trade in the raw and dressed silks, oil, grain, &c. of the surrounding country. There are mines of iron and coal in the vicinity. —(*Hugo*, art. "Gard;" *Dict. Géographique.*)

ALAND (ISLANDS OF), a group of islands at the entrance of the gulf of Bothnia, between 59° 29′ and 60° 32′ N. lat., and 19° 10′ and 21° 7′ E. long., consisting of more than 80 inhabited and upwards of 200 uninhabited islets and rocks (*Skären*), occupying an area of about 470 sq. m., and divided into three oblong clusters by the straits of Delet and Lappvik. The Baltic bounds them to the S.; on the W. the straits of Alandshaf separates them from Sweden, its width being about 24 m.; and on the E. the straits of Westerhifvet, which are scarcely two m. broad where they are narrowest, and about 14 where they are broadest, interpose between them and the Finland shore. Pop. 14,000, of Swedish extraction. Most of the islands stand at a considerable elevation above the level of the sea, and are intersected by chains of granite rocks, which occasionally rise into peaks, and are full of hollows. There are no rivers, but many small lakes. The surface is either a thin layer of clay or rich mould, slate-stone, or sand. The climate, though keen, and at times severe, is more temperate than that of Finland. There are extensive forests, chiefly of birches and pines; the pasture grounds are very poor, excepting near some parts of the coast; and the arable land, on which rye and barley are mostly grown, produces a sufficiency for domestic consumption, the best yielding seven-fold. Hops, cabbages, parsnips, carrots, and other roots, potatoes, and a little flax are likewise raised. Nuts form an article of export. The horned cattle, of which there are upwards of 12,000, are small in size, and few of the cows have horns; the latter furnish the "Aland cheeses," which are much sought after, and made principally in the island of Fagloe. Of sheep there are above 13,000, the wool of which is converted into coarse stuffs and sail-cloth; horses and goats are also bred in considerable numbers. The fisheries are productive, particularly of (*strömlings*) herrings and seals, of the first of which 6000 tons and upwards are salted. Waterfowl abound. The exports consist of salt meat, butter, cheese, hides and skins, dried and salted fish, wood for fuel, &c.; and the imports of salt, colonial produce, iron ware, woollens, cottons, and other manufactures, &c. The Alanders are excellent seamen, and navigate small vessels of their own that trade with the adjacent parts; they are Swedes in their language, manners, and usages. There are a number of good harbours, many of which have been fortified by the Russians, who keep up a disproportionately large military force in the islands, as well as a numerous flotilla, called the "Skärenflott." The islands contain 8 parishes and as many churches, and 7 churches or chapels of ease. Aoland, the largest island, is nearly circular, being about 17 m. in length and 16 in breadth; it contains above 9000 inhabitants, and has an excellent harbour at Ytternesse, on the W. side. It is divided by a narrow strait from Ekeroe, the westernmost island, which has a telegraph. On the E. coast of Aoland is the old castle of Castleholm, now in ruins. Kumlinge has a pop. of 3000. These islands were wrested by Russia from Sweden in 1809; and give the former a position from which they may easily make a descent on the Swedish coast.

ALA-SHEHR. (The exalted city, an. *Philadelphia.*) A city of Turkey in Asia, prov. Natolia, famous as the seat of one of the Apocalyptic churches. It is situated 68 m. E. Smyrna, near the Cogamus, partly in the plain, and partly on one of the roots of Tmolus, which, separated by a valley from the posterior range, and rising to a very considerable elevation, is the site of the Acropolis. The old wall of the town, formed of small stones, held together by a strong cement, and strengthened with towers, is broken down in many places, and the Acropolis is also in ruins. The modern houses are mean and irregular, and the streets narrow and filthy. The ruins of the church of St. John are of great antiquity, and ancient relics meet the eye at every step. "Here, a broken Ionic column forms the angle of a house, and an architrave its step; there fragments of a rich cornice are built into a wall; a modern mosque is supported by the truncated shafts of antique columns; and sacred sarcophagi are desecrated by conversion into common water troughs: fountains in the dirtiest streets, and the very pavement on which one treads, teem with vestiges of antiquity; and in a neglected spot, near the S wall of the city, amid dirt and rubbish, we remarked two venerable marble pillars lying unheeded on the ground."—(Elliott.) According to Mr. Elliott, Ala-Shehr contains nearly 3000 Turkish and 250 Greek houses; so that, supposing this statement to be correct, the pop. may be estimated at from 15,000 to 18,000. It is the seat of a Greek archbishop, and divine service is regularly performed in five Christian churches. The Greeks, at present, as in the time of Chandler, are exceedingly ignorant; and though few of them know any language except Turkish, the Liturgy is always read in the language of their forefathers. The country round is very fruitful;—the waters are said to be excellent in dyeing; and being situated on one of the most frequented roads to Smyrna, it is much resorted to by caravans, and has a good deal of trade. It is held so sacred, even by the Turks, that they occasionally convey their dead thither for interment, from Constantinople; and apply to it the epithet of *Ala*, or the exalted.

Philadelphia derived its name from Attalus Philadelphus, brother of Eumenes, by whom it was founded in the second century B.C. Strabo says that it suffered much from repeated shocks of earthquakes; and it was one of the fourteen cities which were partially or wholly destroyed by a subterranean convulsion in the reign of Tiberius. Anciently, indeed, it was matter of surprise, that it was not abandoned; but it continues to be a considerable place; and the church of Philadelphia is still erect, "a column in a scene of ruins." It was the last city of Asia Minor that submitted to the Turks. "At a distance from the sea, forgotten by the emperors, encompassed on all sides by the Turks, her valiant citizens defended their religion and freedom above fourscore years; and at length (in 1390), capitulated to the proudest of the Othmans (Bajazet)."—(*Chandler's Asia Minor*, 4to ed., p. 286; *Elliott's Travels*, ii., p. 85; *Gibbon*, cap. 64.)

ALASSAC, a town of France, dep. Corrèze, 5 m. N.N.W. Brive. Pop. 4020. There are vineyards in its vicinity.

ALASSIO, or ARRACI, a sea-port town of the Sardinian States, prov. Albenga, cap. district, 5 m. S.S.W. Albenga. Pop. nearly 5000 industrious, active, and daring seamen. There is good anchorage opposite to the town, which consists of a long, narrow street. Fine coral is fished on the coast. A good harbour for the largest class of vessels might be formed between cape Mele and the island of Gallinara; but this has always been discouraged by the Genoese, the former masters of this part of Italy.—(*Rampoldi Corografia dell' Italia*, art. "Alassio.")

ALATAMAHA, or ALTAMAHA, a river of Georgia, formed by the junction of the Ocmulgee and the Oconee rivers. It runs S.E., and falls into the Atlantic between Sapelo and St. Simond's islands, 60 m. S.W. Savannah. It is navigable on the Oconee branch for vessels of 30 tons and for steam-boats 300 m., to Milledgeville. The bar at its mouth has 14 feet of water at low tide. The whole length to its source is about 500 m.

ALATRI, a city of Italy, Papal States, prov. Campania, deleg. Frosinone, 6 m. N.E. Frosinone, lat. 41° 44′ N., long. 13° 12′ 15″ E. Pop. *circa* 8000. It is the seat of a bishopric, has a cathedral, a collegiate church, and some convents. Antiquities are frequently dug up in the environs, which abound in olives and vines.

ALATYR, a town of Russia in Europe, gov. Simbirsk, at the confluence of the Alatyr with the Sura, 90 m. N.N.W. Simbirsk. Pop. 3000. It is built of wood, has tanneries, a glass-work, and a considerable trade in corn.

ALAYA (an. *Coracessium*), a sea-port town of Turkey in Asia, Anatolia, cap. sanjack of the same name, on the E. side of a lofty promontory, lat. 36° 31′ 51″ N., long. 32° 9′ 24″ E. Pop. 1500 or 2000. The promontory on which this town is built bears a striking resemblance to that of Gibraltar. It is joined to the continent on the N. by a low sandy isthmus, from which it rises abruptly; and its W. and S. sides consist of perpendicular cliffs 500 or 600 feet high. The E. side, on which the town is built, is also so steep that the houses seem to stand on the top of each other. "In short, it forms a natural fortress that might be rendered im-

pugnable; and the numerous walls and towers prove how anxiously its former possessors laboured to make it so." At present it is of trifling importance. Streets and houses miserable; mosques few and mean. When visited by Captain Beaufort it had no signs of commerce. The bay is open to southerly winds, and the anchorage indifferent.

Coracesium shut its gates against Antiochus when all the other towns of Cilicia had submitted; and at a subsequent period it was the place selected by the pirates at which to make a last stand in their struggle with Pompey.—(*Beaufort's Karamania*, p. 172, &c.)

ALBA, a town of the Sardinian States, in Piedmont, cap. prov. same name, on the Tanaro, 32 m. S.S.E. Turin. Pop. 7000. It has a tribunal of original jurisdiction, a cathedral, three parish churches, a college, and a considerable trade in cattle.

ALBACETTE, a town of Spain, prov. Murcia, 9 m. N.W. Chinchella, agreeably situated in a vast and fruitful plain. Pop. of town and suburbs 11,508. It has manufactures of coarse cloth and soap. Great quantities of wine and saffron are collected in its vicinity; and a great cattle market is annually held in September.

ALBAN (ST.), a town of France, dep. Lozere, 22 m. N.N.W. Mende. Pop. 2428.

ALBANIA, a large prov. of European Turkey, bounded N. by Dalmatia and Servia, E. by Macedon and Thessaly, S. by Livadia, and W. by the Adriatic, along with that part of the Mediterranean called the Ionian sea. It thus comprehends, in its widest acceptation, the ancient Illyria and Epirus, and is at present included in the Turkish government of Romania.

ALBANO (TOWN, LAKE, AND MOUNTAIN OF), in the Papal dominions, in the *Campagna di Roma*. The town is situated in the line of the Appian Way, on a hill, near the S.W. side of the lake, about 14 m. S.S.E. Rome. Pop. 4900. This town is not built, as some have supposed, on the site of *Alba Longa*, which stood on the other side of the lake, but on the ruins of Pompey's villa. Its situation, at a moderate elevation above the level of the plain, fine salubrious air, shady walks, and magnificent views of the "eternal city," the Campagna, and the sea, make it a favourite retreat of the more opulent Roman citizens, particularly during spring and autumn. It is the seat of an archbishop; is well built; has a cathedral and some convents, with many fine palaces, among which may be specified those of the Corsini and Barberini families. At a little distance, on the margin of the lake, is Castel Gandolfo, the summer residence of the pope. The adjacent country is almost wholly appropriated to the culture of the vine; and the wine which it yields still maintains its ancient reputation.

The lake of Albano, a little to the N.E. of the town, is surrounded on all sides by very high banks, except towards the N., where they are a little lower. It has the form of an irregular ellipse, and there would appear to be little doubt that it occupies the crater of an extinct volcano. The distance round the crater, or summit of the basin of the lake, is estimated at about 8 m., and that round the water's edge about 4 m. It is in parts very deep; a variety of fish are found in it, among which are eels of an immense size and highly esteemed.

But the subterranean conduit or tunnel, called by the Italians an *emissario*, for conveying away its surplus water, is the feature most worthy the attention of the intelligent traveller who visits this lake. This tunnel, intended to prevent the waters of the lake from injuring the surrounding country by overflowing its banks, and to keep them always at their present level, was completed at an early period of the Roman history (about 400 years B.C.), and bears unequivocal proofs of the sagacity and perseverance of those by whom it was executed. It is cut right through the mountain, and mostly through solid rock, a distance of considerably more than a mile, being generally about 3 feet 10 inches wide, and from 6½ to 7 feet in height; at its entry from the lake, and its issue in the plain, it is solidly built round with large stones, arched at the top, and is in perfect preservation.* This great work is said to have been completed in about a year; but it has been objected to this, that as only three or at most four men could have wrought together, and these at the outer end of the tunnel only, the other end being under water, it must have taken many years for its completion. But Piranesi has shown that after tracing the line of the tunnel above ground, shafts had been sunk, by which workmen might have been let down in various places, and the work completed within the stated time.†

The Alban mount (*Mons Albanus*), now *Monte Cavo*, lies a little to the E. of the lake. It is about 2900 feet in height; and the view from its summit, extending over Latium and a great extent of country, is one of the noblest that can be imagined. It was crowned by a temple in honour of Jupiter Latialis, where sacrifices were annually offered up by deputies from the various Latin states, with the Romans at their head, to their common father and protector. Here, also, the Roman generals, refused the honour of the great triumph in the city, performed the lesser triumph, or ovation, and sacrificed to Jupiter Latialis. Some fragments of this famous temple existed in 1750; but they have since disappeared. (Besides the authorities referred to, see the excellent work of *Lumisden on the Antiquities of Rome*, p. 453–465.)

ALBAN'S (ST.), an ancient borough of England, co. Hertford, occupying the summit and sides of a low hill, on a feeder of the Colne, 20 m. N.N.W. London. It had in 1841 a population of 17,951, inhabiting 3348 houses. It has long had the privilege of returning two members to the House of Commons; the right of voting having been vested in the freemen, whether resident or not, and in the scot and lot householders. It is very ancient, and is either on or very near the site of the ancient Roman *Verulamium*. The abbey church is the most imposing object in the place, and is celebrated alike for its antiquity and great magnitude. It lately underwent a thorough repair. In the church of St. Michael is the tomb of the famous Lord Bacon, with a fine marble monument to his memory. There is a free grammar school, with several charitable institutions. The town is not thriving. Straw plait is the principal manufacture; and there are, besides, a cotton-mill and a silk-mill, but neither on a large scale. There is a market each Saturday. No. of £10 houses in parl. borough 507; constituency in 1837, 606.—(*Boundary Report, &c.*)

ALBAN'S HEAD (ST.), a cape of England, on the English channel, co. Dorset, lat. 50° 28′ 10″ N., long. 2° 6′ 15″ W.

ALBANY, county, N. Y. Situated in the E. part of the state, and contains 515 sq. m. Bounded E. by Hudson river. The surface is uneven in some parts, in others level; soil on the river fertile; in the interior sandy and unproductive. Drained by small tributaries of Hudson r. The Erie and Champlain canal form a junction on the N.E border of the county. There were, in 1840, 25,784 neat cattle, 57,478 sheep, and 49,468 swine; and it produced 21,998 bushels of wheat, 145,941 of rye, 127,162 of Indian corn, 155,902 of barley, 103,582 of buckwheat, 653,794 of oats, and 540,582 of potatoes. There were forty-seven commission houses engaged in foreign trade, 1166 retail stores, eleven fulling-mills, eight woollen factories, two cotton-factories, with 5160 spindles, twenty-six tanneries, eight breweries, four potteries, six flouring-mills, twenty-two grist-mills, eighty-four saw-mills, one paper-mill, eleven printing-offices, three daily, five weekly, and two semi-weekly newspapers, five academies, 469 students, 119 schools, 9319 scholars. Pop. 68,593. Capital, Albany.

ALBANY, city, N. Y., the capital of the state, and of Albany co., is situated on the W. side of Hudson river, 145 m. N. New-York, by the course of the r., in 42° 39′ 3″ N. lat., and 73° 32′ W. lon., and 3° 13′ E. lon. from. W., 164 W. by N. Boston, 230 S. Montreal, 370 W. Pop. in 1820, 12,630; 1830, 24,238; 1840, 33,721. Employed in agriculture, 144; in manufactures and trades, 1621; navigating the ocean, 8; do. rivers and canals, 106; in the learned professions, 237. On the margin of the river is a flat alluvial tract, from 15 to 100 yards wide, back of which the ground rises abruptly, and in the course of one mile attains to the height of 220 feet, beyond which it is level. Originally the city was not very regularly laid out, and some of the streets are narrow; but those more recently laid out are spacious and regular. State street, the principal early street, is from 150 to 170 feet wide, and has a steep ascent, at the head of which is the capitol, a fine stone edifice, 115 feet long and 90 wide, with richly-furnished apartments for the accommodation of the state legislature, and cost $120,000. In front of it is a handsome square, surrounded by an iron railing, and ornamented with walks, trees, and shrubbery. On the N. of this, and separated from it by a street, is another corresponding square, the whole constituting a fine public ground, on the E. side of which is the city Hall, a splendid marble edifice with a gilded dome; and on the same side of the same square is the state Hall for the public offices, a corresponding marble building. The Albany Academy, of free stone, is a fine edifice, situated on the N. square. The other public buildings are a Medical College, a Female Academy, the Exchange, a large building of granite, at the foot of State street, and thirty churches, four Presbyterian, one Associate Reformed, three Dutch Reformed, three Episcopal, four Methodist, one coloured Methodist, two Baptist, one coloured Baptist, two Lutheran, one Friends', one Independent Mission church, one Bethel, one Universalist, two Roman Catholic, and two

* For an account of the circumstances which are said to have occasioned the undertaking of this work, see *Livius*, lib. v., s. 15, 16, and *Cic. de Divinatione*, lib. i., s. 44. No doubt, however, it was made, as Cicero has elsewhere said, "*ad utilitatem agri suburbani non ad arcem urbemque retinendam.* (*De Divinat.*, ii., s. 32.)

† M. Simond has repeated this objection (*Tour in Italy and Sicily*, p. 212), apparently unconscious of what Piranesi had stated in his *Descrizione e Disegno dell' Emissario del Lago Albano.*

Jewish synagogues. The old state Hall, on the south side of State-street, is fitted up for the reception of the geological cabinet, collected in the geological survey of the state. The Albany Academy has able instructers, 400 students, and a liberal course of study. The Albany Female Academy has from 300 to 350 pupils, and has a high reputation. The Young Men's Association has a room in the Exchange building, 1500 members, a library of 3900 vols., a reading-room; and sustains through the winter season an able course of scientific lectures. The Albany Orphan Asylum supports 80 or 90 female children. The St. Joseph's Roman Catholic Asylum sustains 40 females, under the charge of the Sisters of Charity. The Poor-house, in the S.W. part of the city, has commodious buildings, and 150 acres of land, cultivated by its inmates. There are in the city 100 streets and alleys, eleven public squares, three markets, ten public school buildings, with dwellings for the teachers, and a state arsenal. There are eight banks, with an aggregate capital of $2,751,000, and four insurance companies, with a total capital of $700,000. There were, in 1840, forty-seven commission-houses engaged in foreign trade, 976 retail stores of different kinds, the whole employing a capital of $1,625,000. The manufactures are numerous and various, employing a total capital of $1,735,500. Two ferries cross the Hudson r. at this place. Twenty steam-boats and fifty-one tow-boats ply between this city and New-York, and the intermediate places on the river. An ordinary passage of a line boat occupies about ten hours. A large number of sloops also are owned here, which ply on the river. By the Erie canal and a continuous line of rail-roads, Albany is connected with Buffalo, and shares extensively in the trade of the Far West. By the Champlain canal it receives the trade of the N. Rail-roads also extend to Saratoga, and another great line of rail-roads extends on the E. to Boston. A spacious basin, 1¼ m. long, is constructed on the margin of the river for the reception of canal-boats, and the protection of sloops against the descending ice in the spring. Albany was founded by the Dutch in 1623, and by them called fort Orange, which was properly the name of the fort. It was chartered as a city in 1686.

ALBANY, p. t., Oxford co., Me., 62 m. W. Augusta, 597 W. It has one store, one grist-mill, three saw-mills, seven schools, 275 scholars. Pop. 691.

ALBANY, t., Strafford co., N. H., 6 m. N. by E. Concord. Watered by Swift river. Chartered in 1766. It has five schools, 153 scholars. Pop. 406.

ALBANY, p. t., Orleans co., Vt., 39 m. N. Montpelier, 535 W. Watered by Black river. It has one store, one grist-mill, three saw-mills, ten schools, 356 scholars. Pop. 920.

ALBANY, t., Bradford co., Pa. Drained by Towanda creek. Pop. 803.

ALBANY, t., Berks co., Pa. It contains two churches, one Presbyterian and one Lutheran, six grist-mills, six saw-mills, and one oil-mill. Pop. 1057.

ALBANY, p. v., capital of Clinton co., Ky., 196 m. S. by W. Frankfort, 690 W.

ALBANY, p. v., Whiteside co., Ill., 177 m. N. by W. Springfield, 873 W. Situated on the E. side of Mississippi river.

ALBANY, p. v., Baker co. Ga., 128 m. S.S.W. Milledgeville, 785 W. Situated on the W. side of Flint river.

ALBANY, a district of S. Africa, belonging to Great Britain, at the E. extremity of the Cape colony. It has on the E. the Great Fish river, on the W. Boshuans river, on the N. an imaginary line drawn from the junction of the Great and Little Fish rivers to the Konap, and on the S. the ocean. Its area has been variously estimated, but may probably amount to about 2000 sq. m., or. 1,280,000 acres. Its aspect is highly pleasing, being diversified with hill and dale, its verdant pastures and smooth grassy knolls contrasting agreeably with the dark masses of forest, which clothe the broken ground near the river courses. Soil very various. The stiff clayey lands would be the most productive, were they sufficiently watered; but as rain is precarious, and the rivers are said not to be suitable for irrigation, light friable soils are preferred. Climate temperate, salubrious, and suitable for European constitutions. Lions, wolves, and leopards, are occasionally met with, but are every day becoming rarer. Elephants are now seldom seen within the limits of the district. Horses, cattle, sheep, goats, hogs, &c., thrive remarkably well, and their produce forms the great dependence of the colonists. The country is traversed by numerous streams, of which the Great Fish river is by far the most important. Previously to 1820, there were not more than 1500 Europeans in the district; but government having given encouragement to emigration to this quarter, 3720 emigrants landed in 1820 at Algoa bay, whence the greater number proceeded to this district. For the first four or five years, the colonists suffered severely from a failure of the wheat crops; but their progress from 1825 down to 1835 was comparatively rapid, and presented a picture of prosperity and advancement not often to be met with in the early annals, even of the most successful colonies. At the last-mentioned epoch, however, this career was suddenly arrested by an irruption of the Kaffers, who destroyed a great quantity of valuable property, and killed several of the colonists. This invasion having been repelled, and peace having been again restored with the Kaffers, a lieutenant-governor was appointed to the E. province, and the district is fast recovering from the losses it had sustained. In 1837, it had a population of 11,728, of which 11,500 were whites. During the same year, the births were 700, and the deaths only 150. The value of the produce exported in 1836 was £47,307: the principal articles being—hides, £15,476; wool, £7353; skins, chiefly goat, £5749; tallow, £4427; ivory, £2546; with horses, beef and pork, butter, &c. The colonists had, in 1836, 38,945 head of cattle, 104,000 sheep, and 2755 horses. Graham's Town, the cap. of the E. prov., and the residence of the lieutenant-governor, is situated almost in the centre of this district. It contained, in 1834, 512 houses, and 1800 inhabitants, exclusive of the military. A town, called port Francis, has been founded at the mouth of the Kowie river; but as the access to it is obstructed by a dangerous bar, it is doubtful whether it will ever become of any importance. The entire shipping trade of the district is at present carried from Port Elizabeth on Algoa Bay. (See *Cape Almanacs* for 1834 and 1838; *Parl. Paps.*, Session, 1837, &c.)

ALBARRAZIN, a fortified town of Spain, prov. Arragon, on the Guadalaviar, with a cathedral, in a bleak and barren district. Pop. 2227.

ALBEMARLE, Sound, N.C., on the E. coast of the state, and is 60 miles long from E. to W., and from 4 to 15 miles wide. It receives the waters of Roanoke and Chowan rivers. It communicates with the ocean E. by several inlets, and with Pamlico sound on the S. It communicates with Chesapeake bay by a canal through the Dismal swamp.

ALBEMARLE, county, Va., situated in the central part of the state, and contains 700 sq. m. Drained by Revarina river and its branches. It contained, in 1840, 14,819 neat cattle, 20,512 sheep, 34,606 swine, and produced 336,986 bushels of wheat, 117,369 of rye, 711,516 Indian corn, and 2,499,528 pounds of tobacco. It had seventy-four stores, one cotton factory, with 1500 spindles, thirteen tanneries, four distilleries, fifteen flouring-mills, fifty-one grist-mills, forty-six saw-mills, two printing-offices and two weekly newspapers, one college, 247 students, eighteen academies, 400 students, twenty-one schools, 386 scholars. Pop. whites, 10,512, slaves, 13,809; free coloured, 603; total, 23,924. Capital, Charlottesville.

ALBENGA (an. *Albium Ingaunum*), an ancient seaport town of the Sardinian States, cap. prov. same name, 44 m. S.W. Genoa, on the Centa. Pop. 4000. It is the seat of a bishopric, and has several remains of antiquity. The situation is unhealthy; but the surrounding country is productive of oil and hemp. This is the birthplace of Proculus, a competitor with Probus for the throne of the Cæsars.

ALBENQUE, a town of France, dep. du Lot, cap. cant., 10 m. S.S.E. Cahors. Pop. 1984.

ALBERT, a town of France, dep. Somme, cap. cant., on the Miraumont, 15 miles E.N.E. Amiens. Pop. 2542. It has a cotton-mill, with print-works, bleach-fields, paper-mills, &c. In its vicinity is a cave or quarry, where there are a variety of petrifactions.

ALBINO, a town of Venitian Lombardy, prov. Bergamo, on the Serio, 7 m. N.E. Bergamo. Pop. 2300. It is very well built, the castle and gardens of Count Spini being particularly worthy of notice. There are silk filatures, with a manufactory of agricultural implements, and machinery for polishing whetstones renowned all over Europe.

ALBION (NEW), a large tract of the N.W. coast of America. This designation was given by Sir Francis Drake to California and part of the adjoining coast; but recent geographers, and, among others, Humboldt, limit the denomination of New Albion to that part of the coast which extends from the 43d to the 48th deg. N. Lat. It was carefully explored by Vancouver in 1792.

ALBION, p. t., Kennebec co., Me., 26 m. N.E. Augusta, 631 W. It contains four stores, one grist-mill, four saw-mills, and 692 scholars in schools. Pop. 1624.

ALBION, p. v., capital of Orleans co., N. Y., 250 m. W. by N. Albany, 392 W. It has a court-house, jail, county clerks' office, two banks, three churches, one Presbyterian, one Baptist, and one Methodist, an academy, a female seminary, eighteen stores, seven warehouses, one flouring-mill, and about 1400 inhabitants.

ALBION, t., 147 m. W.N.W. Albany. Watered by Salmon river, and has three stores, one grist-mill, eighteen saw-mills, sixteen schools, 561 scholars. Pop. 1503.

ALBION, t., Calhoun co., Mich. Watered by Kalamazoo river, and contains four stores, two flouring-mills, two grist-mills, four saw-mills, eight schools, 201 scholars. Pop. 932.

ALBONA, a small town of Istria, 25 m. E. Rovigno, whose vicinage is celebrated for its olives and vines.

ALBUFIERA, a sea-port town of Portugal, S. coast Algarve, 28 m. E. Lagos, lat. 37° 7′ 30″ N., lon. 7° 19′ 12″ W. Pop. 3000. Large vessels may anchor in the port, which is defended by a citadel and batteries. The inhabitants mostly subsist by fishing.

ALBUHERA, a town of Spain, Estremadura, 14 m. S.S.E. Badajos, on the river and near the mountain of the same name. Here, on the 16th May, 1811, a sanguinary conflict took place between the allied British, Spanish, and Portuguese troops under Marshal Beresford, and a French force under Marshal Soult. Each army lost about 7000 men in killed and wounded. On the allied side the chief brunt of the action fell on the British, who suffered severely. In the end Soult, who commenced the attack, was compelled to retreat.

ALBUQUERQUE, a town of Spain, with an old castle, prov. Estremadura, on the frontier of Portugal, 22 m. N.N.W. Badajos. Pop. 5560. It has cloth and cotton manufactures.

ALBURG, p. t., and port of entry, Grand Isle co., Vt., 83 m. N.W. Montpelier, 557 W. It is a point of land projecting S. into lake Champlain, and is level, low, and fertile. It contains four stores, one grist-mill, one saw-mill. Pop. 1344. It contains a mineral spring of some celebrity.

ALBY (*Albiga*), a city of France, cap. dep. Tarn, on the Tarn, which is crossed by an old-fashioned bridge, lat. 43° 55′ 46″ N., lon. 2° 8′ 23″. Pop. 9267. It is situated on a hill, and has few public buildings worth notice, except the cathedral, begun in 1277, and finished in 1480. It is ill-built; the houses being gloomy, and the streets narrow, crooked, and dirty; but the shady *promenade de la Lice*, on the side next the country, is universally admired. It has a public library, a museum, and barracks, with various manufactures of coarse cloth, sacking, table linen, handkerchiefs, cottons, hats, paper, a foundry for balls, &c. The preparation of wood has been long carried on in the vicinity. Alby has suffered much at different periods for its attachment to Protestantism.

ALCALA DE GISVERT, an ill-built town of Spain, prov. Valencia. Pop. 3600.

ALCALA DE HENARES (*Complutum*), a city of Spain, prov. Madrid, on the right bank of the river of the same name, 17 m. E.N.E. Madrid. Pop. 5800. Though much decayed from what it was in the 16th century, this is said by Mr. Townsend (i., p. 245), to be one of the handsomest, best built towns of Spain. It is surrounded by walls flanked with square towers, has a fine Gothic cathedral, a magnificent palace of the archbishop of Toledo, with numerous churches and convents. It is the seat of a university founded in 1510 by the illustrious statesman Cardinal Ximenes, which, next to Salamanca, is the most celebrated seminary in Spain: it had, in 1831, seventeen colleges and thirty-one professors. The cardinal also bequeathed his library to the university, and founded in it a printing-press, which produced, at his expense, in 1512–17, the famous Polyglott Bible, denominated the *Biblia Complutensia*; an imperishable and noble monument of his piety, learning, and liberality. The remains of the cardinal were interred in the college church. But it is the chief glory of Alcala de Henares to have given birth, in 1547, to Cervantes, the inimitable author of Don Quixotte; it is, also, the birthplace of the poet Figueroa, of Solis, the historian of Mexico, &c.

ALCALA DE LOS GAZULES, a town of Spain, prov. Cadiz, in a hilly and bleak district, totally unfit for tillage, but well adapted for rearing sheep, which, accordingly, constitutes the chief employment of the people: it is at a very short distance from the river Barbata, which flows into the sea 35 m. S.E. Cadiz. Close to the town are the remains of an old Roman castle. Dist. 38 m. E. Cadiz, and 48 m. S. Seville. Pop. of town and sub. 17,916.

ALCALA LA REAL, a town of Spain, prov. Jaen, on the Gualcoton, at an elevation of more than 2700 feet above the level of the sea, 30 m. W.S.W. Jaen. Pop. 4374. It had, and perhaps still has, a rich abbey, with various churches, convents, and an hospital. On the 28th January, 1810, the French defeated the Spaniards in the vicinity of this town.

ALCAMO, a town of Sicily, in the Val di Mazzara, on the great road from Palermo to Trapani, 24 m. W.S.W. Palermo. Pop. said by Swinburne to be 8300; perhaps it may now be estimated at 10,000, the pop. of the district being, in 1831, 15,589. Streets straight, but ill paved and dirty. It is situated on high ground, in a fine, open, cultivated country, and is well sheltered by large woods of olive trees. Within the district of Alcamo, and at no great distance from the town, finely situated on an eminence, are the magnificent ruins of an ancient Doric temple—all that now remains of the once powerful Segista! It is a parallelogram, 162 by 66 feet, and has 36 columns, which, when examined by Swinburne, were all, with one exception, perfectly entire. (For an account of the ruins, see *Swinburne's Two Sicilies*, ii., p. 236, 4to ed.)

ALCANDATE, a town of Spain, prov. Jaen, in a rugged, mountainous country, at a short distance from the river Guadajoz, lat. 37° 45′ N., long. 4° 12′ W. The Roman inscriptions seem here show its antiquity. Pop. 6800.

ALCANIZ (Arab. for *treasury*), a town of Spain, prov. of Ternel, Aragon, on the r. bank of the Guadaloupe on a hill side, above which is a castle, built by James I. of Aragon, 62 m. S.E. Saragossa. Pop. 5834. A handsome collegiate church, with a noble portico, is the chief building. It is encircled by walls; and is connected by a canal, constructed by the Moors, with the Ebro. There are in the vicinity rich mines of alum, and thriving plantations of mulberry and other trees; there is also in its vicinity a pond which produces remarkably large fine eels.

ALCANTARA (from the Arabic *al-cantarat-al-seif*, the bridge of the sword), a fortified town of Spain, prov. Estremadura, lat. 39° 41′ 30″ N., long. 6° 43′ W., and the cap. of a dist. having the same name. Pop. 3332. It stands on a steep hill, close to the E. bank of the Tagus (running here N.W.), was called by the Romans, its founders, *Norba-Cæsarea*, and they, in the reign of Trajan, erected the famous bridge, whence its present name is derived. It was of granite, its length 577 ft., breadth 22 ft., span of the two centre arches 110 ft., thickness of piers 38 ft., height above river-level 175 ft.; in the middle of the bridge was a triumphal arch, 46 ft. high, with a Roman inscription. (*Laborde's Voyage Pitter.*, where see views and sections of the bridge. Ponz., viii., 63.) This fine relic of antiquity was unfortunately destroyed, together with some adjoining buildings, by the British troops, June 10, 1809, owing to a mistake of military orders. (*Napier*, vol. ii., 316.) The river was once navigable up to this town, and before the separation of Portugal, in 1580, a large trade in fruit was carried on with Lisbon (*Miñano*); but it now serves only to turn a few mills, and to supply the people with dace, barbel, eels, and other fish, which greatly abound (*Ponz*). It is joined a little below Alcantara by the Alagon, Jartin, and Salor. At the expulsion of the Moors in 1213, which was aided by the knights of San Julian del Pereyro, the defence of the town was entrusted to them, and they thenceforward assumed the title of knights of Alcantara. The order is now a dignity of some value, and the monarch has been the grand-master since 1495. The knights, in 1506, built a handsome convent and church, which still exist. A cloth manufacture once existed here, but it has perished. Brick-making and tanning are all the signs now to be seen of industry.

ALCANTARA, a sea-port town of Brazil, prov. Maranham, on a hill, 15 m. N.W. San Louis de Maranham. The surrounding territory is productive of excellent cotton and rice; and the salt lakes, a little to the N. of the town, might yield the largest supplies if they were properly managed. Its port admits only small vessels.

ALCANTARILLA, a dist. and town of Spain, prov. Murcia, lat. 37° 56′ N., long. 1° 13′ W., 4 m. from the l. bank of the Segura. Dist. 5 m. S.W. Murcia, and 50 S.W. Alicant. Pop. 4037.

ALCAREZ, a town of Spain, prov. La Mancha, on the Guadarama, 45 m. W.S.W. Manzanares. Pop. 3300. It has a citadel, manufactures of cloth, mines of calamine and copper, and an aqueduct.

ALCAZAR DE SAL, a town of Portugal, prov. Estremadura, on the r. bank of the Sado, 28 m. S.E. Setubal. It is delightfully sit. in the midst of an extensive and fertile plain, and is chiefly distinguished for its salt-works and sedge-mat factories.

ALCAZAR DE SAN JUAN, a town of Spain, prov. La Mancha, lat. 39° 25′ N., long. 3° 13′ W., and the cap. of a dist. so called, which contains sixteen towns and villages. The dist. (besides its pasture, corn, oil, and fruits, which are abundant) produces salt-petre, and other minerals, supporting above 300 workmen and their families. The town contains twelve soap-factories, and had formerly forty. Dist. 45 m. N.E. Ciudad Real, 55 m. S.E. Toledo. Pop. of dist. 7000.

ALCESTER, a pa. and m. town of England, co. Warwick, 103 m. N.W. Lond., 16 m. W.S.W. Warwick. Pop. 2405. The town, situated at the confluence of the Alne and Arrow, has a handsome Gothic church, a free school, a good corn market, and carries on a pretty large needle manufacture.

ALCIRA, a town of Spain, prov. Valencia, on an island of the Xucar, 23 m. S.S.W. Valencia, and so low that the river, by rising 12 ft. above its usual height, inundates the town, lat. 39° 6′ N., long. 0° 25′ W. Pop. 8415. It is fortified and flanked with towers; has several churches, convents, and hospitals, with two fine bridges over the Xucar. This is a very ancient town, having been successively occupied by the Carthaginians, Romans, and Moors. The inhabitants are thrifty and intelligent farmers, superior to most in Spain, and in the immediate neighbourhood of the town they raise excellent pimentos and tomatos, in addition to the rice and other produce of the district. About 2 m.

It lies some limestone hills, among which is a remarkable cave (*Cueva de las Maravillas*), visited as a natural curiosity. (*Bowles.*)

ALCKMAER. See ALKMAAR.

ALCOBAZA, a town of Portugal, prov. Estremadura, lat. 39° 36′ N., long. 9° W., 15 m. S.S.W. Leiria, and within 5 m. of the sea, at the confluence of two small rivers. Pop., according to Minano, 1716. It contains a very handsome and extensive Cistercian monastery, founded by Alfonso I., possessing a good library, with valuable MSS., and a collection of pictures, among which are portraits of all the Portuguese kings, from Alfonso I. to Donna Maria I. The cotton manufacture is carried on here to some extent; the Marquis de Pombal set 250 looms at work in the monastery; but the late disturbed state of the country has very much impaired the industrial resources of this place.

ALCOLEA DEL REY, a town of Spain, prov. Seville, 26 m. N.E. of that city, near the r. bank of the Guadalquivir, in the midst of a fine and productive plain. Pop. 2000. When the Guadalquivir was more navigable than at present, this town appears to have been of some importance; the completion of the projected canal will perhaps restore it to its former prosperity.

ALCORA, a town of Spain, prov. Valencia, 48 m. N.Valencia, in a country watered by the Mijares. Pop. 6000. Its agricultural and industrial products are not important.

ALCOVER, a town of Spain, prov. Catalufia, on the banks of the small river Angura. In the time of Alfonso VIII., it was a place of some importance; but the oppressions of the French, at different times, have driven away the principal landholders, and the people seem now to be in a very wretched condition. 13 m. N.N.W. Tarragona. Pop. 2300. Contrib. to rev. 30,000 reals v.

ALCOY, a town of Spain, Valencia, at the source of the Alcoy, 24 m. N. Alicant. Pop. of town and district 14,600. Besides churches and convents, it has a college, a considerable manufactory of fine cloth, soap works, and paper works; the contiguous territory is very fertile.

ALCUDIA, a town belonging to Spain, near the N. extremity of the isle of Majorca, on a small peninsula between the bays of Pollensa and Alcudia, lat. 39° 50′ N., long. 3° 8′ E. Pop. 1018. Two stagnant pools, or Albuferas, lie between it and the bay; and the exhalations from them greatly injure the health of the inhabitants, a sickly and miserable race. The pools might be drained, and the soil rendered useful, if the natives were possessed of any enterprise or energy. Coral-fishing employs some forty vessels in the bay. At about 3 m. S.E. is a stalactitic cave, visited and well described by Antillon. (*Geog.*, p. 76.)

ALCUDIA DE CARLET, a town of Spain, prov. Valencia, in a plain about 8 m. from the Xucar, whose water supplies its rice grounds with nourishment. It is on the royal road of Madrid, about 18 m. S. Valencia. Pop. 3000.

ALDBOROUGH, a borough of England, W.R. co. York, wapentake Claro, 185 m. N.N.W. Lond., 18 m. W.N.W. York. Pop., in 1831, 620. Its former importance was wholly derived from its having enjoyed, since the aera of Philip and Mary, the privilege of returning two members to the H. of C. It was disfranchised by the Reform Act.

ALDBOROUGH, or ALDEBURGH, a sea-port town of England, co. Suffolk, hund. Plomesgate, 85 m. N.E. Lond. Pop. of bor. and pa. 1341. It returned 2 m. to the H. of C. from the 15th Eliz. down to the passing of the Reform Act, when it was disfranchised. It has suffered much from encroachments of the sea.

ALDEA DEL REY, a town of Spain, prov. La Mancha (Ciudad Real), on the l. bank of the Jabalon, an affluent of the Guadiana, 17 m. S. Ciudad Real. Pop. 2800. The climate is very unhealthy, owing to inundations of the river, which a very slight industry might obviate. Here is a palace of the knights commanders of Calatrava.

ALDEA GALEGA, a town of Portugal, prov. Estremadura, estuary of the Tagus, on the E. side of the bay of Montijo, well known as a ferry station between Lisbon and the great road to Badajos and Madrid. Pop. 3480.

ALDEN, p. t., Erie co., N.Y., 22 m. E. Buffalo, 270 W. Albany, 369 W. It contains one Presbyterian church, one store, one woollen factory, three grist-mills, ten saw-mills, fourteen schools, 667 scholars. Pop. 1984.

ALDERNEY, an island belonging to Great Britain, in the English channel, 55 m. S. from the Isle of Portland, and 18 m. W. Cape la Hogue in Normandy. The channel between Alderney, and the latter, called the Race of Alderney, is dangerous in stormy weather from the strength and rapidity of the tides. This island is about 3½ m. in length by ¾ m. in breadth, and had in 1831 a pop. of 1045. It is a dependency of Guernsey, and is principally celebrated for a small breed of cows, which afford excellent milk and butter. It has no good harbour.

ALDSTONE MOOR, a par. and m. town of England, co. Cumberland, Leath ward, on the borders of Northumberland. The town stands on a hill washed by the Tyne. The parish contains 26,060 acres. Pop. 6638. It is chiefly celebrated for its lead mines, formerly the property of the earls of Derwentwater, and now of Greenwich Hospital. Their present (1828) annual produce is estimated at from 3600 to 4000 tons of pure metal.

ALEDO, a town of Spain, in the prov. of Murcia, sit. on a mountain side, 6 m. from the l. bank of the Sangonera, a branch of the Segura, and about 25 m. W.S.W. Murcia. Pop. 2230.

ALENCON, a town of France, cap. dep. Orne, in an extensive plain of the same name, on the Sarthe, near the westhern boundary of the dep., 56 m. S.S.E. Caen, lat. 48° 25′ 46″ N., long. 0° 5′ 22″ E. Pop. 13,277. The town is agreeably situated and well built; streets generally broad and well paved; the walls by which it was formerly surrounded have nearly disappeared, and it has several considerable suburbs. Among the public buildings may be specified the cathedral church, the town-house embodying two well-preserved towers, the only remains of the ancient castle of the dukes of Alençon, the courts of justice, the corn-market, &c. It has a communal college, several hospitals, a public library, and an observatory. Its manufactory of the lace, known by the name of *Point d'Alençon*, established by Colbert, still preserves its ancient celebrity, and it has in addition manufactures of muslin, of coarse and fine linen, buckram, serges, stockings, straw hats, &c., with tanneries. There are freestone quarries in the neighbourhood; and at Hartz, a little to the W. of the town, are found the stones, called Alençon diamonds, which when cleaned and polished are said to be little inferior, in respect of lustre, to the genuine gem. Several fairs are held in the town, which is the seat of a considerable commerce. During the religious wars, Alençon, which was generally attached to the Protestant party, suffered severely.—(*Hugo*, art. *Orne*; *Dictionnaire Géographique*, &c.)

ALENQUIR, a town of Portugal, prov. Estremadura, 26 m. N.N.E. Lisbon. Pop. 3000. It is one of the principal points for the defence of Lisbon.

ALENTEJO, a prov. of Portugal, which see.

ALEPPO, a city in the N. of Syria, called by the natives, Haleb-es-Shabba (an. *Chalyben* and *Berrœa*), lat. 36° 11′ 27″ N., long. 37° 10′ 15″ E.; 76 m. E.S.E. Iskenderoun, and 126 m. N.N.E. Damascus. Its present pop. is probably under 70,000; though from the middle of the 17th to the beginning of the present century it was variously estimated at from 200,000 to 258,000. According to Russel, it had in 1794, 235,000 inhab., of whom, 30,000 were Christians, and 5000 Jews, the rest being Mohammedans; but, according to Volney, the pop. in 1785 did not exceed 100,000, which we incline to think is the more probable statement. Aleppo occupies an elevation in the middle of an open plain; and is surrounded by walls 30 ft. high and 20 broad; supposed, from the massive style of their architecture, to be Saracenic. The city, within the walls, is about 3½ m. in circ. but including its suburbs, it occupies a circuit of more than double that extent. Houses of freestone: they are said to be elegant and durable, and those belonging to the better classes exhibit an elaborate degree of ornament in their lofty ceilings, decorated with arabesques; and their large windows of painted glass. Roofs flat, as in most Eastern towns; during the summer months, the inhabitants pass their nights upon them, unprotected by tents or awnings of any kind. These flat roofs form also a continuous terrace, upon which it is easy, by climbing over the low partition walls, to pass from one end of the town to another. Streets broad, well paved, and clean, remarkable qualities in the East: the latter may, perhaps, be owing, in part, to the drainage, occasioned by the slight elevation of the town and neighbourhood above the surrounding plain. The seraglio, or palace of the Pacha, which used to be admired for its magnificence, was destroyed in 1819–20 during the siege of the town by Khourchid Ahmed Pacha. Mosques numerous, but nearly all have been injured, and many of them are in ruins, from the effects of the earthquakes which have so often shaken this part of Syria: the Djameé, Zacharie, and El-Halawe, are, however, fine remnants of the ancient Roman style; they were originally Christian edifices, the latter built, it is said, by the Empress Helena. There are ten or twelve Christian churches, three Christian convents, and several wakfs, the conventual establishments of the Mohammedans. An ancient aqueduct conveys a plentiful supply of good water from two springs. This work is an object of much care; and it is singular, that being certainly constructed before the time of Constantine, it should have remained uninjured amid the frequent convulsions to which the town has been subject. In the centre of the city* is a castle, partly in ruins, built upon an artificial mount, of considerable height,

* This is Volney's statement. Robinson describes the castle as situated at the N.E. corner; the apparent discrepancy probably arises from the one including, and the other excluding the suburbs. The N.E. corner of the walled town would be nearly the centre of the whole mass of buildings.

and ½ m. in circumference; this is surrounded by a broad and deep, but dry ditch, crossed by a bridge of seven arches. From this spot is commanded a very extensive view, bounded N. by the snowy tops of the Taurus, W. by the elevated rocky bed of the Aassy; while to the S. and E. the eye reaches over the desert, as far as the Euphrates. Here are several large khans, principally occupied by Frank and other foreign merchants. These are handsome and convenient buildings, containing counting-houses and store-rooms ranged round an interior court, in which are stands for loading and unloading the beasts of burden, and a fountain to supply them with water. At present, however, Aleppo can be regarded as little more than the shadow of its former self: slight earthquakes are frequent in its neighbourhood, but in 1822 a tremendous shock overturned most of the public buildings, and reduced the greater part of the city to a heap of ruins. This calamity has occasioned the erection of a new suburb, materially altering the appearance, and injuring the beauty of the town. The houses in this suburb, intended at first for the temporary shelter of the population that had escaped from the town, were hastily constructed of wood, lath, and plaster; but from want, either of funds to repair their more substantial dwellings, or of energy to set about the work, or probably from a fear of returning into the city, these hastily constructed edifices have become permanent residences, while many, perhaps the greater number, of the large and convenient stone buildings in the city are either in ruins or tenantless.

Although upon the borders of the desert, Aleppo is advantageously and agreeably situated. A small stream, called the Koeik (an. *Chalus*), waters the W. side of the town. This brook, which is about the size of the New River, and nearly dry, swells, in the rainy season to a formidable and rapid current; it rises at the foot of mount Taurus, about 70 m. N., and after a course of 80 or 90 m. loses itself in a large morass full of wild boars and pelicans. The upper course of the Koeik lies between naked rocks; but near Aleppo, and S. of that town, it flows through an extremely fertile valley, in a high state of cultivation. This river, and the aqueduct before mentioned, furnish an abundant and unfailing supply of water; and besides the public fountains and baths, every private individual, who chooses to be at the expense of pipes, may have his house served with water in the European fashion.

The far-famed *gardens of Aleppo* are situated to the S.E. of the city, upon the banks of a small rivulet, one of the very few affluents of the Koeik. They are rather orchards than gardens, consisting of fruit trees, with vegetables growing between them, but scarcely any flowers. They are pleasant spots, from the luxuriance of their productions, and the nightingales that resort to their shades; but very little taste is exhibited in their arrangements. W. of the town the banks of the river are covered with vines, olives, and fig-trees, and towards the E. are some plantations of pistachio trees, which, though still extensive, are only the remains of much more majestic groves, for which this country was formerly famous.

The air of Aleppo is dry and piercing, but accounted salubrious both to natives and strangers; the former, however, are subject to a peculiar disease, said to attack them once, at least, in their lives, the *habal-es-sine;* "ulcer," or "ringworm of Aleppo." It is, at first, an inflammation of the skin, subsequently becomes an ulcer, continues for a year, and generally leaves a scar for life. It usually fixes in the face, and an Aleppine is known all over the East by the mark left by this disorder, the cause of which is unknown, but suspected to be owing to some quality of the water.

Aleppo appears to have risen to importance on the destruction of Palmyra. Like the latter, it was a convenient emporium for the trade between Europe and the East, so long as it was carried on over land. The productions of Persia and India came to it in caravans from Bagdad and Bussora to be shipped at Iskenderoun and Latakia for the different ports of Europe. Aleppo communicated also with Arabia and Egypt, by way of Damascus; with Asia Minor, by Tarsus; and with Armenia, by Diarbekir. It rose to great wealth and consequence under the Greek sovereigns of Syria, and into still greater under the early Roman emperors. In 638, A.D. it resisted the arms of the Arabs for several months; but being finally taken, it became of as much importance under the Saracens, as it had before been under the Romans or Greeks. In the 10th century, it was reunited to the empire of Constantinople, by the arms of Zimisces; but it soon after fell into the hands of the Seljukian Turks, under whose sway it remained during the time of the crusades. It suffered considerably during the irruptions of the Mongols, in the 13th century, and again, by the wars of Tamerlane, or Timur Bec, in the 15th. Selim I. annexed it, in 1516, to the Turkish empire, of which it continued a part till 1832, when it opened its gates to Ibrahim Pacha without a summons. Its political revolutions, with the exception of its two captures by the Tartars, affected its prosperity only temporarily and in a slight degree; but the discovery of a passage to India by the Cape of Good Hope struck a deadly blow at its greatness. Since that event it has continued to decline, and the earthquake of 1822, together with the wars which have distracted Syria, by causing extensive emigrations, have reduced it to comparative insignificance. Its capabilities are however very great, and under judicious treatment it is more than probable it would speedily regain a considerable share of its former prosperity. It is the most convenient centre for the trade between Persia and the interior of Arabia, on the one hand, and Asia Minor and Armenia on the other; it is beyond all comparison the cleanest and most agreeable town in Syria; and still, even amid its ruins, better built than almost any other between the Black sea and the Euphrates; its inhabitants, a great proportion of whom are sheriffs (descendants of the Prophet), are the mildest and most tolerant among the professors of Mohammedanism. These circumstances have made it the resort of strangers, and they are not likely, in peaceable times, to have less influence in future.

Aleppo formerly possessed several manufactures, and before the earthquake it was said to contain 12,000 artizans, chiefly weavers of gold and silver lace, silk and cotton goods, shawls, &c. These works are now languishing, but they still exist, and, with the pistachio nuts, form the chief part of its remaining trade. Its imports are goats' hair, from Asia Minor; gall nuts, from Kurdistan; and Indian goods, such as shawls and muslins. From Europe, it receives cotton stuffs, cloth, sugar, dye-stuffs, &c.; W. I. coffee, though a prohibited article, is also introduced, and is cheaper than that of Mocha.

About 20 miles N.W. of Aleppo, is the convent (in ruins) of St. Simon Stylites, where some fragments of the pillar on which that famous ascetic passed so many years are still exhibited. The ruins of the convent attest its former magnificence, and a great number of deserted villages, in this direction, evince the former populousness of the neighbourhood.—*Olivier, Voy. dans l'Em. Oth.*, iv., 169-209; *Russell, Nat. Hist. of Alep.*, 77 *et passim. Volney*, ii., 194-130; *Robinson*, ii., 250-266; *Browne*, 364-368.)

ALESEINA, a town of Russia in Europe, gov. Toula, cap. district, on the Oka, 34 m. N.W. Toula. Pop. 2300. It has several breweries; and manufactures hats, soap, &c.

ALESSANDRIA, or ALEXANDRIA, an important town and fortress of the Sardinian states, prov. of the same name, in a marshy country on the Tanaro, near where it is joined by the Bormida, 47 m. E.S.E. Turin, lat. 44° 53′ N., long. 8° 36′ E. Pop. 36,000. It has a very strong citadel, and was surrounded by Napoleon with extensive fortifications, which have been demolished since his downfall. It is well built; has a cathedral, numerous churches, palaces, and hospitals; a handsome town-house, with a gymnasium, theatre, public library, and large barracks. It has manufactures of silk, cloth, and linen, and some trade. The latter is promoted by its two fairs, held the one at the end of April, and the other on the 1st of October; they are both well attended, not only by Italians, but also by French and Swiss. Alessandria was founded in the 12th century, and has frequently been taken and retaken. It has always been reckoned one of the bulwarks of Italy on the side of France. The village and battle-field of Marengo lie a little to the E. of the town.

ALEUTAN, or ALEUTIAN ISLANDS, a chain of islands in the N. Pacific ocean, stretching from the peninsula of Kamtschatka, in Asia, to Cape Alaska, in N. America, comprised in the Russian government of Irkutzk. They are very numerous, occupying a circular arc, extending from 165° to 195° E. long., whose chord is in 55° N. lat., and above 600 m. in length. Apparently, this insular chain consists of the summits of a range of submarine mountains. In 1795, a volcanic island rose from the sea, in the middle of the line, which, in 1807, was found to be enlarged to about 20 m. in circuit, and lava was then flowing down its sides. There are always among them several volcanoes in activity, and some, known to have emitted flames, are now quiescent. Earthquakes are common, and sometimes so violent as to throw down the huts of the inhabitants. Behring's island, Attoo, and Oonalaskha, are the largest, the first being 104 m. in length, but many are only inconsiderable rocks. They are intersected by channels, various alike in width, and in the safety of navigation. All exhibit a barren aspect; high and conical mountains, covered with snow during a great portion of the year, being the most prominent features. Vegetation scanty; there are no trees nor any plants surpassing the dimensions of low shrubs and bushes. But abundance of fine grass is produced in the more sheltered valleys, and different roots, either indigenous or introduced recently. The seas abound in fish, and the feathered tribes are numerous. The hunting the sea otter, whose skin affords a fur of the finest quality, was, formerly, carried on to a great extent: they were wont to be caught in thousands; but their indiscriminate destruction has greatly

exceed the number of those now taken. The seal is particularly valuable, affording the inhabitants a constant supply both of food and clothing; the thin membrane of the entrails is also converted into a substitute for glass. Foxes are the principal quadrupeds. The natives are of middle size, of a dark brown complexion, resembling an intermediate race between the Mongol Tartars and N. Americans. Their features, which are strongly marked, have an agreeable and benevolent expression. Hair strong and wiry; beard scanty; eyes black. They are not deficient in capacity, and the different works of both sexes testify their ingenuity. They are indolent, peaceable, and extremely hospitable; but stubborn and revengeful. Tattooing, which was common among the females, is on the decline, but they practise a hideous mode of disfiguring themselves, by cutting an aperture in the under lip, to which various trinkets are suspended. These deformities, however, are less common than when the islands were discovered; the more youthful females having learned that they are no recommendations in the eyes of their Russian visiters. A man takes as many wives as he can maintain; they are obtained by purchase, and may be returned to their relations; or the same woman may have two husbands at once; and it is not uncommon for men to exchange their wives with each other. Their subsistence is principally obtained by fishing and hunting. Their dwellings are spacious excavations in the earth, roofed over with turf, as many as 50 or even 150 individuals sometimes residing in the different divisions. Only a few of the islands are inhabited; but in former times the population is said to have been more considerable. Its decrease is ascribed to the exactions of the Russian American Company, who have factories in the islands. Its present amount has been variously estimated, at from a few hundreds to 6000. The islands were partially discovered by Behring, in 1741.

ALEXANDER, p. t., Washington co., Me., 25 m. N. by W. Machias, 203 E.N.E. Augusta, 788 W. It has six schools, 237 scholars. Pop. 513.

ALEXANDER, co., Ill. Situated in the S. part of the state, and contains 375 sq. m. It is between the Ohio and Mississippi rivers, extending S. to their junction. A part of it is liable to be overflowed. It had in 1840, 2952 neat cattle and 10,239 swine. There were produced 3947 bushels of wheat, 84,620 of Indian corn. It had thirteen stores, ten grist-mills, nine saw-mills, eight schools, 190 scholars. Pop. 3313. Capital, Unity.

ALEXANDER, p. t., Genesee co., N. Y. 8 m. S.W. Batavia, 258 W. by N. Albany, 382 W. It has four stores, one woollen factory, four fulling-mills, two grist-mills, four saw-mills, one academy, 200 students, fourteen schools, 516 scholars. Pop. 2242.

ALEXANDER, p. t., Athens co., O., 78 m. S.E. Columbus, 345 W. It is one of two townships granted to the Ohio university, located at Athens. It has five stores, three grist-mills, twelve saw-mills, five schools, 130 scholars. Pop. 1451.

ALEXANDER, t., Benton co., Mo. Pop. 1015.

ALEXANDRETTA. See ISKENDEROON.

ALEXANDRIA (Arab. *Iskendiryyeh*), a celebrated city and sea-port of Egypt, so called from Alexander the Great, by whom it was either founded, or raised from obscurity, 332 years B.C.; about 14 m. W.S.W. of the Canopic, or most W. mouth of the Nile, on the ridge of land between the sea and the bed of the old lake Mareotis, lat. 31° 12′ 35″ N., long. 29° 53′ 33″ E. Its situation was admirably chosen, and does honour to the discernment of its illustrious founder. Previously to the discovery of the route to India by the Cape of Good Hope, Egypt was the principal centre of the commerce between the E. and W. worlds; and it so happens that Alexandria is the only port on its N. coast that has deep water, and is accessible at all seasons. It has not, it is true, any natural communication with the Nile, but this defect was obviated in antiquity by cutting a canal from the city to the river. After Alexandria came into the possession of the Saracens, this canal was allowed to fall into disrepair; and it was not to be supposed that any attempt would be made to reopen it, while Egypt continued subject to the Turks and Mameluke. But Mohammed Ali, the present ruler of Egypt, being anxious to acquire a navy, and to revive the commerce of the country, early perceived the importance of Alexandria, both as a station for his fleet, and a centre of commerce. In furtherance of his views he has greatly improved, beautified, and strengthened the city, and has restored the ancient communication with the Nile by means of the Mahmoudieh canal from Alexandria to Fouah, a distance of 48 m., opened in 1819. It is to be regretted that its construction is in several respects defective; but it is, notwithstanding, of great advantage. Alexandria is built partly on a peninsula, consisting of the island of Pharos, so famous in antiquity for the lighthouse or pharos, whence it has derived its name, and partly on the isthmus by which that island is now connected with the mainland. The principal public buildings, as the palace of the Pacha, the arsenal, the hospital, &c., are on the peninsula, and the town principally on the isthmus. The ancient city was situated on the mainland opposite the modern town; and the vast extent of its ruins would sufficiently evince, were there no other evidences, its wealth and greatness.

Alexandria has two ports. That on the W. side of the city, called the old port, the *Eunostos* of the ancients, is the largest and by far the best. The entrance to it is narrow and rather difficult; but when in, ships may anchor off the town in from 22 to 40 feet water, and there is good anchorage in deep water all along the shore. The new harbour, or that on the E. side of the town, is very inferior, being comparatively limited, having a foul and rocky bottom, and being exposed to the N. winds.

The change in the appearance of Alexandria during the last dozen years has been quite extraordinary—"J'allai," says Marshal Marmont, "visiter l'arsenal et l'escadre. J'étais extrêmement impatient de voir cette création étonnante, et, pour aussi dire, incompréhensible. En 1798, il n'existait sur la presqu' île d'Alexandrie qu'une plage aride et deserte. Je la trouvai, en 1834, couverte par un arsenal complet, bâti sur la plus grand echelle; par des cales de vaisseaux, de ateliers de tous les genres, des magasins pour tous les approvisionnements, une corderie de mille quarante pieds de longueur (dimension égale à celle de la corderie de Toulon). J'y trouval rassemblés des ouvriers nombreux, habiles dans tous les métiers qui se rattachent au service de la marine, et qui tous étaient Egyptiens; tout cela organisé, en mouvement, en plein service. Et de cet arsenal, dont les fondations datent de six ans, il est sorti dix vaisseaux de ligne de cent canons, dont sept étaient armés, avaient déjà navigué, et trois étaient sur le chantier, prêts à être lancés à l'eau. Je ne parle pas des frégates de divers rangs, des corvettes et des bricks, qui portent la flotte à plus de trente bâtiments armés. Ces prodigieux résultats ont été obtenus avec cette promptitude si grande, dans un pays où il n'y a ni bois, ni fer, ni cuivre, ni ouvriers, ni matelots, ni officiers de marine; aucun des éléments, enfin, qui peuvent servir à la création d'une escadre. Je ne crois pas que l'histoire du monde entière, ait jamais présenté dans aucun temps rien de pareil."

A dry dock is at present (1837) in course of being constructed. Naval and military hospitals have been established, the former under the direction of an English, the latter of a French doctor. A quarantine board exists under the direction of the consular body, to which the Pacha has confided this branch of service, and connected with which, a large and commodious lazaretto has lately been erected outside the walls. Vessels arriving from any of the infected ports of the Levant, are subjected to quarantine, the same as in Europe; there is also a school for the marine, and a board composed of the admirals and higher officers of the fleet, for examining into the merits of candidates, maintaining the discipline and regulating every matter connected with that branch of service. The French system has been adopted in every department of the service, and to the French the Pacha is chiefly indebted for the advances he has made.

On the peninsula has been erected the *Schuna*, or range of warehouses for the reception of the surplus produce of Egypt, and hither it all comes, with the exception of that exported from Suez and Cosseir, for the maintenance of the army and fleet in the Red Sea. According to the Pacha's monopolizing system, the whole produce of the country comes into his hands, at prices fixed by himself, without the option of resorting to other markets being allowed to the grower. And not only does this apply to the produce of Egypt, but to that of the adjacent countries, wherever the Pacha's influence extends, embracing the coffee of Mocha, the gums and drugs of Arabia, the tobacco of Syria, elephants' teeth, and feathers from the interior, &c., all of which are purchased for him in the first instance, the prohibition of trading in them applying to every one, and carrying with it the risk of confiscation, if contravened; the whole of this produce, native as well as exotic, being collected in Alexandria, is sold by public auction, in the same way exactly as auctions are conducted in Europe, the upset price being fixed according to the latest report of the markets, the merchant having the privilege of examining the article in the Schuna before the sale, and being required to pay in cash the price at which it is knocked down to him within a limited number of days, when delivery takes place. The principal articles thus disposed of, are cotton, which is by far the largest, rice, opium, indigo, gums, coffee, senna, hemp, linseed, and the *comestibili* of the country, wheat, barley, beans, lentils, &c., of which however there has latterly been very little sold, there being barely enough produced for the home consumption. Ten years ago, a million of quarters of corn were generally exported, but now everything yields to cotton, which is found more profitable to the revenue. The cotton, gums, coffee, indigo, linseed, and some other articles

of less importance, go to the markets of Trieste, Leghorn, Marseilles, and Liverpool; the rice and opium to Smyrna, the Greek isles, and Constantinople. England sends in return, iron, lead, coals, ordnance, cables, anchors, machinery, and some manufactured goods, though not much. France, Switzerland, Italy, and Germany return wines, spirits, oils, manufactures of silk and cotton, articles of dress of every description, furniture, hardware, trinkets, and other things, suited not only to the consumption of Egypt, but of Abyssinia and the countries in the interior. Austria sends timber and other articles. From Turkey and the isles are received silks, tobacco, oils, and some wood and fruits. There is also a little commerce with Malta and the Barbary states, in grain chiefly.

According to official statements furnished by the French consul, the value of the imports into Alexandria, in 1837, amounted to 71,817,000 fr. (£2,872,000), and that of the exports to 55,687,000 fr. (£2,227,000). The imports were derived from, and the exports shipped for, the undermentioned countries, as follows:

Imports.	Fr.	Exports.	Fr.
England and Malta	15,158,000	. . .	5,494,000
Austria	13,858,000	. . .	14,532,000
Belgium	386,000	. . .	215,000
France	10,702,000	. . .	11,469,000
Greece	1,259,000	. . .	394,000
Sardinia	146,000	. . .	111,000
Sweden	117,000	Holland	28,000
Tuscany	10,257,000	. . .	3,130,000
Turkey	12,661,000	. . .	12,150,000
Barbary	4,434,000	. . .	1,614,000
Syria	2,790,000	. . .	6,258,000
Total	71,817,000	Total	55,687,000

The description of articles imported and exported, and the value of each, were as follow:

Imports.	Fr.	Exports.	Fr.
Arms of all kinds	258,000	Coffee	126,000
Timber for building & fuel	9,242,000	Corn	1,625,000
Woollen caps	1,816,000	Cotton	24,288,000
Cochineal	421,000	Dates	1,250,000
Copper and copper wire	1,344,000	Tortoise shell	168,000
Coal	796,000	Incense	1,028,000
Cloth	8,628,000	Gum	3,112,000
Drugs	1,486,000	Henna	652,000
Tin plates and iron wire	3,892,000	Indigo	1,591,000
Fresh and dry fruit	1,165,000	Dried fruit	900,000
Oil	1,112,000	Mother of pearl	259,000
Paper	1,166,000	Mats	562,000
Jewellery, haberdashery,		Opium	596,000
and cutlery	2,568,000	Skins	374,000
Sugar	686,000	Ostrich feathers	654,000
Cotton stuffs	16,253,000	Rice	8,749,000
Woollen do.	1,930,000	Senna and other medi-	
Silk do.	2,323,000	cines	1,784,000
Glass	648,000	Soda	1,298,000
Wines and liqueurs	712,000	Linen cloth	1,641,000
Different articles	20 587,000	Different articles	10,028,000
Total	71,817,000	Total	55,687,000

The effect of the present monopoly system of the Pacha has been to drive out of the field large classes of traders, who before his time were rich, and had considerable influence; such as the coffee and tobacco merchants, to whom Napoleon, in his wants, never applied in vain; and to reduce all the native merchants and retailers to comparative beggary, as well as the Felahs or peasantry, whose condition is now little better than that of serfs, without interest in the produce of their labour. If his successor persevere in the same system, the country must ultimately be ruined, and that at no very distant period. A few Frank merchants (by which name the Europeans generally are designated), have alone thriven and arrived at wealth under the present system, not in the ordinary course of commerce, but by enjoying the confidence of the Pacha, acting as commission agents for him, negotiating his finance transactions, and by fortunate speculations in cotton, that is, by having taken cotton in payment of their advances, which they afterwards sold at a profit.

There is no doubt that the population has trebled or quadrupled since the opening of the Mahmoudieh canal, and is still on the increase. It may amount, in all, to from 30,000 to 40,000. A good deal of this increase has taken place at the expense of Rosetta, which has latterly very much declined. The population is of a mixed character, consisting, besides the native Turks and Arabs, of Armenians, Greeks, Smyrniotes, Syrians, Moghrebins, or men from the Barbary states, Maltese, Jews, and Europeans of almost every nation, in such numbers, that it may be questioned, whether the strangers, in a commotion, would not be more than a match for the natives. The English have ten commercial houses, independently of those engaged in other pursuits, yet they are considered about the weakest in numbers, the French, Italians, and Greeks, being the most numerous. Amateur French and Italian theatres exist, the performances in which rival those of the Académie Royale and San Carlos; balls and routes are given in the most approved style of fashion; a commercial journal has been established in the Italian language, which, however, does not treat of politics; French *modistes*, tradesmen in all departments, and shops displaying every article of furniture, and of male and female attire, from the Parisian bonnet of the latest fashion to the very humblest article of dress, all conspire, in conjunction with the style of the buildings, and pretty equal balance of hat and turban, to take away from this place the appearance of an Oriental city; and it is only after leaving it, and pursuing his way to Cairo, that the stranger truly feels that he is in the East. Here also exist Catholic and Greek convents, where divine service is performed on Sundays and holydays to the people of those persuasions: the Armenians, Syrian Christians, and Jews, have also places of worship, Protestants alone being without a temple. There is little intercourse between the natives and Franks, except in the way of business. They occupy distinct quarters of the city, the former secluding their families, and maintaining all the reserve of Oriental life, the siesta, pipe, and coffee filling up three fourths of their time; the latter adhering to the customs of their own country, in dress, furniture, the use of carriages and horses, and, indeed, in all things but the siesta, the pipe, and immuring themselves during the heat of the day, wherein they imitate the Orientals. Latterly also, after the example of some of the higher Turks, several of the richer Frank merchants have obtained grants of land from the Pacha, on the banks of the canal, and built houses and made gardens, which serve to beautify and give interest to the neighbourhood: but the great architect in this way is Ibrahim Pacha, the son of Mohammed Aly, whose garden is destined to become very shortly the chief attraction of the place.

The Turkish quarter of the city consists of a number of narrow, irregular, tortuous, filthy, and ill-built streets and bazars, with hardly any good houses but those of the Pacha's officers, and without a single public building, mosque, or other object worthy the least attention, the bazars being mean, and but very indifferently provided. The Frank quarter, on the other hand, presents several streets of well-built substantial houses, with good shops; in particular the square, which is the residence of the consuls and principal merchants, called the Piazza Grande, that may well bear comparison, for the size and style of its buildings, with some of the best streets of Paris or London. Ibrahim Pacha is the owner of the greater part of these houses, which he built on speculation, and for which he draws rents, varying from £200 to £240 per annum. The whole town is built of stone and brick, dug up from the foundations of the ancient city.

During part of the year Alexandria is supplied with water from the canal; and during the other portion, from the cisterns of the ancient city (the only portion of its public works that has been spared) which, at the period of the inundation, when the canal is full, are thence filled, and to which recourse is only had when the water of the canal, by being stagnant, becomes unfit for use. As the inundation advances, the old stagnant water is run off into the sea, and the canal, being filled brim full with fresh, is shut up at both ends, and so remains till the following year, serving in the mean time for navigation, for the use of man and beast, and for the irrigation of those small portions of land on its banks, that have been reclaimed from the desert, and brought into cultivation. The climate of Alexandria is considered very salubrious, the heats of summer, which rarely exceed 85° Fahr., being tempered by the Etesian, or N.W. winds, which prevail for nine months of the year. In winter, a good deal of rain falls, which, however, is confined to the coast, and is probably the cause, coupled with the wretched habitations and misery of the poorer classes, why the plague so often makes its appearance here. Were the labouring classes better clad, housed, and fed, there is little doubt that this scourge would soon be no longer heard of.

The municipal government of the city is entrusted to the governor, Moharrem Bey, son-in-law of the Pacha, who has under him a commandant de place, and an officer, called the Bashaga or chief police magistrate, whose duty it is to see that order and quiet be maintained. The city is besides divided into quarters, over each of which a sheikh presides, who is responsible to the governor for the peace of his district: and moreover, each trade and profession has its sheikh, whose duty it is to collect the taxes, and to see to the good behaviour of the members. Guard-houses are also distributed all over the city, and the military are instructed to take all riotous and disorderly parties into custody, the officer of the guard, if the offender be a native, having authority to inflict summary punishment by the bastinado; but if a Frank, he must send him to his own consul, to be pun-

filled according to the laws of his own country. This system works so well, that a more orderly place, or one freer from riot or crime, is rarely to be seen: indeed, when crime is committed, it is usually by Frank upon Frank; and then, from defects in the consular system, it almost always escapes detection. Besides the Bashaga or police court, there is the Meh-kemeh or Kadi's court, where all civil questions between natives are determined; and a commercial court, with Frank judges, but presided over by a Turk, for deciding questions between the Franks and natives, where the latter are defendants: the Franks themselves, besides exemption from all taxes and burdens of every sort, being amenable only when defendants to their own consular courts, and to the laws of their respective countries. These immunities have been secured to the Franks by convention with the Porte, and are rigidly insisted upon here as well as in every other part of the Turkish empire. The garrison usually consists of about 2000 men, besides the topjees or gunners, who man the forts.

There can be no doubt that Alexandria will profit much by the recent establishment of a steam communication with India, by way of Egypt, as well as by the lines of steamers now connecting it with Marseilles, Trieste, and the whole of the Levant. It is true that a considerable change must take place in the commercial system of the Pacha, before these advantages can have their proper effect; but, independently of this, it is quite clear that, in the novel circumstances under which the world is now placed, Egypt, and consequently Alexandria, must, from its position, become every day of more and more importance.

Sketch of History, &c.—The Ptolemies, to whom Egypt fell on the demise of Alexander the Great, made Alexandria the metropolis of their empire; and it became under their liberal and enlightened government one of the greatest and most flourishing cities of antiquity. When it was annexed by Augustus to the empire of Rome, it is said to have occupied a circumference of 15 miles, and to have had 300,000 free inhabitants, besides slaves, who were probably quite as numerous. It was regularly and magnificently built; and was traversed by two great streets, each more than 100 feet across, and the larger extending more than 4 m. from E. to W. Under the Ptolemies and the Romans, Alexandria was the entrepôt of the principal trade of antiquity, being the market where the silks, spices, ivory, slaves, and other products of India, Arabia, and Ethiopia, and the corn of Egypt, were exchanged for the gold, silver, and other products of the W. world. The inhabitants were distinguished by their industry: either sex and every age were engaged in laborious occupations, and even the lame and the blind had employments suited to their condition. Among the principal manufactures were those of glass, linen, and papyrus, the paper of antiquity. Under the Roman emperors, Egypt became a principal granary for the supply of Italy; and its possession was reckoned of the utmost importance, and watched over with peculiar care. Various privileges and immunities were conferred upon Alexandria; many of her inhabitants were admitted to the rights of Roman citizens, and her wealth and prosperity continued undiminished.

But Alexandria was still more distinguished by her eminence in literature and philosophy than by her commerce and riches. The foundation of her pre-eminence in this respect was laid by the Ptolemies, who founded the museum and library (*elegantiæ regum curæque egregium opus*. Livy), that afterwards became so famous, at the same time that they gave the most munificent encouragement to literature and learned men. This patronage being continued by the emperors, Alexandria was, for several centuries, a distinguished seat of science, literature, and philosophy. Generally, however, her literati were more distinguished for learning and research than for original genius. She produced a host of grammarians and critics; and the names of Euclid, Apollonius of Perga, Ptolemy, Eratosthenes, Nicomachus, Herophilus, Zopyrus, &c., are but a few of those most distinguished in the schools of geometry, astronomy, geography, and medicine, that flourished in Alexandria. But her philosophy was the most striking feature of Alexandria, in a literary point of view. The influx of doctrines from the E. and W. schools produced a singular conflict of systems, which ended in an attempt of the philosophers Ammonius, Plotinus, and Porphyry, to establish an eclectic or universal system, by selecting and blending doctrines taken from the principal existing systems, particularly from those of Pythagoras and Plato. Christianity was not exempted from the influence of this spirit; and on its introduction, it was strangely alloyed with Platonism; and principles for expounding of its doctrines were laid down that would now be with difficulty admitted.

The schools of geometry, astronomy, physic, and other branches of science, maintained their reputation till A.D. 640, when, after a siege of fourteen months, Alexandria was taken by Amrou, general of the caliph Omar. The conquerors were astonished by the greatness of the prize; and Amrou, in acquainting the caliph with its capture, said, "We have taken the great city of the West. It is impossible for me to enumerate the variety of its riches and beauty; and I shall content myself with observing, that it contains 4000 palaces, 4000 baths, 400 theatres or places of amusement, 12,000 shops for the sale of vegetable food, and 40,000 tributary Jews. The town has been subdued by force of arms, without treaty or capitulation."

It was on this occasion that the famous library is said to have been destroyed, conformably to the fanatical decision of the caliph, that "if the writings of the Greeks agreed with the book of God, they were useless, and need not be preserved; if they disagreed, they were pernicious, and ought to be destroyed." This barbarous judgment being carried into effect, the books and manuscripts were distributed among the 4000 baths belonging to the city; and so prodigious was their number, that six months are said to have been required for their consumption! Such is the tale that has so often excited the indignation and regret of scholars and the admirers of ancient genius. But Gibbon has shown that it has no good foundation: it rests on the solitary statement of Abulpharagius, who wrote six centuries after the event, and is not noticed by those more ancient annalists, who have particularly described the siege and capture of the city. It is, besides, repugnant to the character of the caliph and his general, and to the policy of the Mohammedans. Even if it did occur, the loss has been much exaggerated. Great part of the library of the Ptolemies was accidentally consumed by the fire which took place during the attack on the city by Cæsar; and either the whole, or the principal part of the library subsequently collected was destroyed A.D. 389, when the temple of Serapis, the most magnificent structure of the city, was demolished by the enthusiastic zeal of the Christians.

It would be useless to pursue farther the history of Alexandria. It continued progressively to decline till, in 1497, its ruin was consummated by the discovery of the passage to India by the Cape of Good Hope. But there can be no doubt, as previously stated, that it is destined to recover some portion of its ancient importance. It will necessarily become the centre of the communications now carried on by steam between Europe and India; and will, most probably, again become a considerable emporium.

The cisterns which, as already seen, are still in pretty good preservation, are the principal monuments of the ancient city that have outlived the injuries of time, and the ravages of barbarians. The catacombs are also comparatively entire. The magnificent column, improperly called Pompey's Pillar, seems to have been erected in the reign of Diocletian: its shaft consists of a single block of granite, 68 feet in height. Two obelisks, vulgarly called Cleopatra's needles, of which only one is erect, are said to have formed the entrance to the palace of the Cæsars. (For further particulars, see *Dict. Géographique*, art. "Alexandria;" *Voyage du Maréchal Marmont*, tom. iii., passim; *Matter sur l'Ecole d'Alexandrie*, passim; *Gibbon*, caps. 10, 28, and 51; and private information from residents in Egypt.)

ALEXANDRIA, p. t., Grafton co., N. H., 34 m. N.W. Concord, 515 W. It has two stores, one woollen factory, one grist-mill, five saw-mills, fourteen schools, 204 scholars. Pop. 1284.

ALEXANDRIA, p. t., Jefferson co., N. Y., 20 m. N. Watertown, 195 N.W. Albany, 447 W. A part of the Thousand Islands in St. Lawrence river belong to it. It has six stores, one grist-mill, seven saw-mills, six schools, 135 scholars. Pop. 3475.

ALEXANDRIA, p. v., Porter t., Huntingdon co., Pa., 98 m. W. Harrisburg, 157 W. Situated on the Frankstown branch of Juniata river. It contains two churches, seven stores, two tanneries, one brewery, one grist-mill, and about seventy dwellings, chiefly of brick. Incorporated in 1827. Pop. 574.

ALEXANDRIA, t., Hunterdon co., N. J., 12 m. N.E. Flemmington. It has ten stores, one fulling-mill, five distilleries, six flouring-mills, four grist-mills, ten saw-mills, three oil-mills, nine schools, 420 scholars. Pop. 3490.

ALEXANDRIA, city and capital of Alexandria co., Dist. of Columbia, 43 m. S.S.W. Baltimore, 115 N. Richmond, 7 W.; 33° 48′ N. lat., 77° 4′ W. lon., and 0° 3′ W. lon. from W. Pop. 1820, 8218; 1830, 8263; 1840, 8459. It is pleasantly situated on the W. side of Potomac river, from which the ground rises gradually to a considerable elevation, and the river here has a depth sufficient to admit vessels of the largest class to its wharves. It is regularly laid out, with streets crossing each other at right angles, and contains a court-house, two banks, with a capital of $1,000,000, a fire insurance company, a marine insurance company, and ten churches, two Presbyterian, two Episcopal, two Methodist, one Baptist, one Friends', one coloured Methodist, and one Roman Catholic. The tonnage of the port in 1840 was 14,470. Its exports consist chiefly of wheat and flour, Indian corn and tobacco. It has eight academies, 284 schol-

are. The Chesapeake and Ohio canal terminates at this place.

ALEXANDRIA, county, Dis. of Col., comprises that part of the District of Columbia W. of the Potomac river, was ceded by Va. to the United States, and contains 36 sq. m. The laws of Va. are in force, unless superseded by the special enactments of the general government. It had, in 1840, 989 neat cattle, 263 sheep, 1190 swine, and produced 4334 bushels of wheat, 18,800 of Indian corn, 2798 of rye, and had 156 stores, five tanneries, one grist-mill, one pottery, one rope-walk, and one daily newspaper. Pop. whites, 6731; slaves, 1374; free coloured, 1862; total, 9967.

ALEXANDRIA, p. v., De Kalb co., Tenn., 50 m. E. Nashville, 640 W. It has one Campbellite and one Methodist church, two stores, and about 250 inhabitants.

ALEXANDRIA, p. v., capital of Rapides par., La., 291 m. N.W. New-Orleans, 1210 W. Situated on Red river below the rapids, and contains a court-house, jail, and a printing-office. It is built on a single street, along the river.

ALEXANDROVSK, a town of Russia in Europe, gov. Ekaterinoslaff, cap. district on the Dnieper at the bottom of the cataracts, 140 m. N.E. Cherson. Pop. 3400. It is fortified, and displays considerable activity, from its being the place where merchandise conveyed from Ekaterinoslaff by wagon, to avoid the cataracts in the river, is again shipped.

ALFARO, a town of Spain, prov. Soria, on the banks of the Alhama, close to its junction with the Ebro, 12 m. W. by N. Tudela. There is a military road between this place and Logroño. Pop. 6450.

ALFELD, a town of Hanover, prov. Hildesheim, at the conflux of the Leine and Warne. Pop. 2300. It has a normal school and three hospitals.

ALFORD, p. t., Berkshire co., Mass., 145 m. W. Boston, 261 W. Watered by Green river and its branches, which flow into Housatonic river. It contains one store, one fulling-mill, one grist-mill, two saw-mills, four schools, 144 scholars. Pop. 481.

ALFRED, p. t., York co., is one of the shire towns of the county, and has seven stores, three grist-mills, three saw-mills, two tanneries, one academy, 35 students, ten schools, 397 scholars. Pop. 1408.

ALFRED, p. t., Alleghany co., N. Y., 12 m. S.E. Angelica, 249 W.S.W. Albany, 321 W. It has four stores, one fulling-mill, one grist-mill, three saw-mills. Pop. 1630.

ALFRETON, a par. and m. town of England, co. Derby, hund. Scarsdale, 16 m. N.N.E. Derby. Pop. 5691. The inhabitants of the town are principally employed in the manufacture of stockings and earthenware, and in the adjoining collieries.

ALGANSI, t., Branch co., Mich. It has one saw-mill, three schools, 45 scholars. Pop. 494.

ALGARINEJO, a town of Spain, prov. Granada, close to the frontiers of Cordoba, near the right bank of the Genil, in a country whose abundant and fertilizing streams fall into that river. Pasturage and tillage form the chief business of the population. Pop. 3876.

ALGARROBO, a town of Spain, p. Granada, 2 m. from the Med. sea, in the midst of a country particularly rich in lemons, oranges, figs, and other fruits belonging to the south of Spain, 16½ m. E. Malaya, and 38 m. S.S.W. Granada. Pop. 3500.

ALGARV, the most S. prov. of Portugal, which see.

ALGECIRAS, the *Carteia* of Roman Geography, a town of Spain, prov. Cadiz, on the W. side of the bay of Gibraltar, opposite to the celebrated rock and peninsula of that name, from which it is distant about 7 m. by water, and 17 m. by land. Lat. 36° 8′ N., lon. 5° 31′ 7″ W. Pop. 4500. It has a good harbour, and some trade in the export of coal. It was built by the Moors, and taken from them after a two years' siege, in 1344.

ALGHERI, or ALGHERO, a town and seaport of the island of Sardinia on its W. coast, 15 m. S.S.W. Sassari, lat. 40° 25′ 50″ N., lon. 8° 16′ 45″ E. Pop. 6700. It is built on a low rocky point, jutting out from a sandy beach, in the shape of a parallelogram with stout walls flanked by bastions and towers: the walls are in good repair; but being commanded by two heights, it could not oppose any vigorous attack from the land side. To the S.W. of the town there is tolerable summer anchorage in from 10 to 15 fathoms, good holding-ground. Though narrow, the streets are clean and well-paved. It is the seat of a bishopric, has a cathedral, and twelve churches and convents, with public schools which carry their scholars through a course of philosophy, and a surgical institution. It has a small theatre. The town was long occupied by the Spaniards, and their language and manners still prevail. The country round is well cultivated, producing wine, butter, cheese, &c. In addition to these the exports consist of wool, skins, tobacco, rags, anchovies, coral, and bones.—(*Smyth's Sardinia*, p. 280.)

ALGIERS, now frequently called ALGERIA, a country of N. Africa, and, till recently, the most powerful of the Barbary states, comprising the *Numidia* Proper of the ancients, or the Numidia of the *Massyli* and the *Numidia Massaesyli*, afterward called *Mauritania Caesariensis*, with some portion of the region S. of the greater Atlas anciently inhabited by the Getulæ and Garamantes. The N. parts have been, since 1830, in possession of the French; but for more than three centuries previously they formed a subordinate part of the Turkish empire, and were, during that period, the seat of an extensive system of piracy and Christian slavery.

Situation, Extent, Boundaries.—Algiers lies between 1° 48′ W., and 9° 16′ E. lon.; its greatest N. lat. 37° 5′. It is bounded N. by the Mediterranean, W. by Fez (Morocco), and E. by Tunis: its S. boundary is doubtful, but it extends beyond the greater Atlas range to the confines of the desert of Sahara: it is above 500 m. in length; its breadth, which is greater in the E. than in the W., varies from about 40 to about 200 m. The pop. has been variously estimated at from 1,700,000 to 2,300,000, and may probably amount to about 2,000,000. It used to be divided into four provinces: 1. Algiers (*Al Jezair*), including the capital, and a small surrounding territory; 2. Titteri, to the S. of Algiers; 3. Oran, or Tlemsen, to the W.; and, 4. Constantine, to the E. of that city. But these provinces are generally understood to include only the *Tell*, or land N. of the greater Atlas, excluding the territories of Zaab or Wad-reng, S. of that range; for though the villagers in the latter either paid the taxes imposed by the Turks, or gave other tokens of submission to them, the greater portion of the population was independent.—(*Shaw*, p. 3, 4to ed.)

Mountains.—Algiers is mostly mountainous: the little Atlas, which runs along the coast parallel to the greater Atlas, varies from 3000 to 4000 feet in height; its loftiest point is S. of Chiaffa; opposite to cape Matifou its elevation is little more than 2000 feet. The abrupt mountains of Titteri, belonging to the greater Atlas, reach in some points to an elevation of 9000 feet, and send off three principal ridges; N.W. towards cape Ivy; N. towards Algiers; and N.E. towards Bugia. Many of these mountains are remarkable; as Wannashrees (*Zalacus*), prov. Oran, very lofty, and Jurjura, S.E. of Algiers, both capped with snow during winter; the Titteri Dosh, or rock of Titteri, is also a remarkable ridge of rugged precipices. The Jibbel Aurees (*M. Audus* of Ptolemy), S. part prov. Constantine, is not, as the name would imply, a single mountain, but an extensive tract, 120 m. in circuit, of mountainous or, rather, hilly ground. It is interspersed with several fine valleys; and both its lower and upper parts are extremely fertile, it being, in fact, the garden of the prov.—(*Shaw*, p. 26, 36, 38.)

Plains.—The principal is that of Metidjah, immediately S. of Algiers, 50 m. by 20; fertile, well-watered, and covered with an abundant vegetation, but in parts marshy and unhealthy. In the W. prov. are several plains, especially that through which the Shelliff runs; and another S.W. of Oran, sandy and saltish, dry in summer, but inundated in winter. In the S. prov. are the rich plains of Hamza, watered by the Nassava. Many luxuriant plains are found in the E. prov., as those of Sateef, Majanah, and that skirting most part of the E. coast, which is, however, in many parts marshy.—(*Shaw*, p. 24, 37, 44, 47, 50, 53.)

The Rivers are separated by the greater Atlas range into those which run N. and S. Of the former, or those which discharge themselves into the Mediterranean, the principal is the Shelliff (an. *Chinaleph*), which rises S. of the Wannashree M., and after a tortuous course of 200 m., during which it passes through the Titteri Gawie or lake, falls into the sea under cape Jibbel Iddis. In the rainy season it overflows its banks, and interrupts the communication between Algiers and Oran. The Wad-el-Kebeer (an. *Ampsagas*), which falls into the sea N. of Constantine, in 6° E. long., is the second in magnitude; the others are the Seibous, or river of Bona, the Booberac, Yissa, Zowah, Wad-y-Zaine, &c. The large rivers, the Adjedi and Abiad, run S.E., and empty themselves into the *Me'gig*; and several rivers of inferior dimensions empty themselves into the *Shott*. These are two very extensive salt marshes; the former on the S., the latter on the N. side of the greater Atlas; they consist partly of a light oozy soil, as dangerous as quicksands to travellers. The lakes are those of Titteri; two near Oran, which dry in summer, and from which salt is collected; some salt marshes near cape Matifou, and others along the coast from Bona to the borders of Tunis.—(*Rozet*, p. 19; *Shaw*, p. 55.)

Climate—Of the Tell, i. e., between lat. 34° and 37°, is generally wholesome and temperate. Shaw states that for twelve years during his experience, it only froze twice at Algiers; yet the heat was never oppressive, unless during S. winds. The mean temperature of the year at Algiers is 70° F., in July and August about 86° F.; but ranging occasionally during the prevalence of the khamsin, simoom, or hot wind from the Sahara, as high as 110°, or even more. Luckily, however, the latter seldom or never continues for more than five or six days at a time, and rarely occurs except in August or September. In winter the temperature is

usually from 35° to 65° F. The heat is mitigated by the N. winds, which with the E. prevail during summer. About the equinoxes violent S.W. winds occur; N.W. winds are common from November to April, at which time storms and showers of rain are most frequent: but in summer these winds bring dry weather; the E. and S. winds are also dry, and quite unlike what they are on the opposite European coasts. The barometer varies only from 29 and 1-10th to 30 and 4-10ths in. There are about fifty wet days during the year, chiefly in March, along the coast and on the lesser Atlas. The quantity of rain varies greatly in different years; but, at Algiers, it may average from 27 to 28 inches; little falls during summer. Dews are abundant, and the air on the coast is damp. At the end of December the trees lose their leaves; but by the middle of February vegetation is again in full activity, and the fruit is ripe in May.—(*Shaw*, p. 133-136; *Rozet*, i., p. 140-149; *D'Avezac*, art. "Alger.") The atmosphere is very clear, and the country healthy, excepting in the marshy districts.

Geology and Minerals.—The primary rocks consist in part of granite, but chiefly of gneiss and micaceous schist. Travertine is found on the coast; near Oran a grayish quartz, but no volcanic rocks; in the interior a lime formation often alternates with a schistose marl. The secondary deposites consist in many places of a lias formation and calcareous strata, containing a few organic and no vegetable remains. At Oran the lime contains bivalve, but no univalve shells. The tertiary deposits are mostly calcareous, in the Metidjah of a yellowish gray colour; sometimes a blue clay, enclosing a laminary gypsum and a little iron, in other parts sandy and much impregnated with salt. All the chain of Atlas has a tertiary clay deposit. The W. province appears to be the richest in minerals. Salt is extremely abundant, in springs and beds, on both the E. and W. frontiers; near Constantine, the Titteri Dosh mountains, the Melgigg and Shott marshes, &c. The salt-pits near Arzew occupy a space of 6 m. circ., forming marshes in winter, which dry in summer, when large quantities of salt are collected. Nitre, though not found pure, is very plentiful in the W. province, Gerselia, &c. Iron is most abundant. Copper is found in various places; and there are some very rich lead mines, the ore of those of the Wannashrees being said to yield eighty per cent. of pure metal. There are also fullers' earth, potters' clay, talc, pyrites, &c. Diamonds (verifying what was reckoned the apocryphal statement of Pliny, *Hist. Nat.*, lib. 37, § 4) have been found in the sands of the Wad-el-Kasanel that runs by Constantine, mixed with small quantities of gold-dust, silver, tin, and antimony. Saline hot and cold springs are exceedingly abundant, more so, in fact, than those of fresh water. The latter, however, are by no means rare, and may everywhere be found by digging through a crust of flaky, soft stone, lying at different depths, but near Algiers and Bona immediately below the surface of the ground.—(*D'Avezac*, art. "Alger.")

Vegetation in the N. parts of Algiers is nearly the same as in the S. parts of Spain, Provence, Italy, and the rest of the Mediterranean shores. The mountains of the little Atlas are covered with thick forests, in which are found *five* different varieties of oak, the Aleppo pine, the wild olive, the shumac-tree (*Rhus cotinus*), with arbutus, cypress, myrtles, &c. S. of the greater Atlas are found the date-bearing palms, and other trees belonging to a warmer climate.

Animals.—Lions of great size and strength, panthers, hyænas, and leopards inhabit the mountainous recesses of the great Atlas, but are never seen near Algiers: wild boars, wolves, and jackals are more common, and there are a few bears. Wild cats, monkeys, porcupines, and hedge-hogs are more or less abundant; as well as antelopes and other species of deer, hares, gennets, jerboas, rats, mice, &c. Ostriches are found in the desert on the confines of Morocco; there are also vultures and other large birds of prey; bitterns, curlews, lapwings, plovers, pigeons, and snipes; with great plenty of game and small birds. Some serpents of the Coluber race are met with; and lizards, chamelions, and other amphibia. Tunny and other sea fish abound on the coasts; barbel, perch, eels, &c., are found in the fresh waters, and even in the warm salice streams; conger at the mouths of the rivers; and lobsters and many other crustacea along the shores. Among the insect tribe are scorpions, tarantulas, &c. Locusts seldom commit the same devastations here as in Egypt and Syria. Coral, which is very abundant on the coasts, forms an important article of produce and industry: it is of a larger sort, but less vivid in its colour, than that of Sicily.—(*Rozet*, vol. i., p. 218; *Shaw*, p. 128; *Campbell, Letters from the South.*)

People.—There are nine distinct races of inhabitants, viz.: 1st, Berbers or Kabyles, who, however, call themselves *Mezigh* (noble) or *Mazery* (free); they constitute about half the entire population, and are the lineal descendants of the aboriginal inhabitants of the country. They are principally found in the mountain districts; and their lands are occasionally well cultivated and irrigated. 2d, Bisheris or Mozabs, supposed to be the descendants of the Getulæ, living principally S. of the great Atlas, and comparatively industrious. 3d, Moors; a mixed race, descended from the Mauritanians, Berbers, Carthaginians, Romans, Vandals, and Arabs; they constitute the bulk of the population of the towns and villages. 4th, Arabs, consisting of three tribes: the first, supposed to have descended from the ancient Amalekites, is nearly extinct; the second consists of cultivators of the soil, and is fixed to certain spots; the third, or wandering Arabs, are principally herdsmen and shepherds dwelling in tents. 5th, Negroes, called *Abyd* (slaves) or *Soudan* (black); originally brought thither from the interior, and sold as slaves. 6th, Jews, who form a third part of the inhabitants of Algiers, and a fourth part of those of Oran. 7th, Turks, now very few, nor ever very numerous, although long the dominant race: they were a heterogeneous body, composed of genuine Turks, Greeks, Circassians, Albanians, Corsicans, Maltese, and renegades of all nations; mounted, and forming a militia similar to the Mamelukes. On the conquest of Algiers, in 1830, by the French, the Turks, being permitted to withdraw, evacuated the country to the amount of about 20,000. 8th, Kolouglis, or descendants of Turks by Moorish mothers; their name literally signifying "sons of soldiers." Although possessed of influence, they did not formerly enjoy the same rights and consideration as their fathers. 9th, Europeans, who may, of course, be subdivided into various nations, but are mostly French. Among the Kabyles of the Auress is a tribe distinguished by a fair complexion, blue eyes, and light hair, believed to be descendants of the Vandals. Traces of the Huns, Suevi, and other Gothic nations have been also found. (For further information respecting the different native races, see ARABIA, BARBARY, MOROCCO, &c.)

Scenery.—Proceeding from W. to E., a rich champaign country stretches for some distance inland S. of Arzew, bounded towards the sea by steep rocks and precipices; many fertile plains are irrigated by the Sigg river (or *Sikk*, a drain or trench), its waters being diverted by numerous canals for that purpose. Behind Mazagran, and near the Shelliff, as far as the sea, is a tract studded with orchards, gardens, and country houses. The country round Shershell is of the most exuberant fertility, possessing large tracts of arable land, and the mountains covered to their summits with plantations of fruit trees, and affording delightful and extensive prospects. The inland parts of the W. province present alternately fertile valleys and high ranges of rocky mountains. "If we conceive," says Shaw, "a number of hills, usually of the perpendicular height of 400, 500, or 600 yards, with an easy ascent, and several groves of fruit and forest trees rising up in a succession of ranges one behind another, and if to this prospect we here and there add a rocky precipice of a superior eminence and difficult access, and place upon the side or summit of it a mud-walled Dashkerah, or village of the Kabyles—we shall then have a just idea of the Atlas bounding the Tell." The verge of the Sahara beyond this presents nothing but scattered villages, and plantations of dates. The plain of Metidjah, adjoining the capital, contains many farms and country houses, producing in perfection, flax, henna, roots, pot-herbs, rice, fruit, and corn of all kinds; it is adorned besides with multitudes of oleanders, geraniums, passion-flowers, and other luxuriant shrubs. The S. province has the same general character as that of Oran. The Titteri Dosh, 20 m. S. of Medeah, is a towering range of bleak precipices. The Jurjura, S.E. of Algiers, is a similar tract. The sea coast of the E. province as far as the river Zhoore is mountainous, and called by the Arabs El-Adwah (the Lofty); thence to the Seibous it is hilly; and from the latter to the border mostly level, and sometimes covered with forests. Some distance to the S. are the *M. Thambes* of Ptolemy. The Seibous in some parts wanders through beautiful valleys, clothed with olive trees, lentisks, and a fine turf. The country about the source of the Zenati is broken and irregular, and appears to be volcanic; that to the N. and N.W. of Constantine, from which that city is chiefly supplied, is watered by the Rumili, which is "bordered by a few villas and numerous gardens, rich in every variety of vegetable and fruit trees, with extensive groves of pomegranate, olive, fig, orange, and citron," and bounded by bold ranges of hills; its fruit is esteemed over the whole province. In the road from Algiers to Constantine, between the plains of Hamza and Majanah, a deep narrow pass, called *Beshen* (the Gates), which a few men might defend against an army, leads through a mountain ridge; and a little farther E. the road is carried by a dangerous track over the crest of a high mountain. S. of Seteef are many rich plains. The territory around Tifesh is the most fruitful in Numidia, and the W. province the finest of the regency. The villages of Zaab are collections of dirty hovels, surrounded by date plantations; Wad-reag, a similar country, has twenty-five villages. To the W. extends the vast region of Blaid-el-Jerride, "a dry country," abound-

ing in dates. (*Shaw*, p. 14–68; *Sir G. Temple*, Extracts in the *Geograph. Journal*, 1838, part ii.)

Antiquities.—Most of the cities and towns bear names little altered from those given them by the Romans. Many ruins remain; those of Tipasa (Tifessad), 12 m. E. of Shershell, stretch for two miles along the coast: on the brink of the Shelliff, in about the same lat., there are several classical remains, Corinthian capitals, &c., probably the ruins of the Colonia Augusta of Pliny. About 14 m. E. of Algiers are the ruins of Rusucurium. At Maliana, N. of the Shelliff, a stone, inserted in a modern wall, bears an inscription, whence it has been inferred that it was the place where Pompey's grandson and great grandson were buried. (See *Martial*, *Epig.*, lib. v., Ep. 75.) Near Bona are the ruins of *Hippo Regius*, and many towns can boast of ancient relics in tolerable preservation. The province of Constantine, especially, abounds with them, and with Roman roads; and even the remote district of Wad-reag has numerous remains of Roman masonry. Near the capital is a collection of unhewn stones, somewhat similar to those of Stonehenge, which the French call Druidic, but others believe to be Phœnician. There are few Christian remains, their buildings having been destroyed by the zeal of the Saracens. (*Shaw*, p. 21–67; *Sir G. Temple*, Extracts.)

Agriculture.—Much of the land is uncultivated and waste; but the fertility for which it was so famous in antiquity—

> Non quicquid Libycis terit,
> Fervens area messibus—

still continues unimpaired; and requires merely the substitution of regular government for lawless violence, and of industrious colonists for roving herdsmen, to render it once more the granary of Europe. The land in many parts, owing to the quantity of salt with which it is impregnated, is so rich as to require no manure but burned weeds. But in a dry climate like this everything depends on the command of water; and the necessity under which the native inhabitants were placed of providing this indispensable element for their lands, had so far countervailed their indolence and want of science as to make them pretty expert in the art of irrigation. The French were not, at first, sufficiently alive to the vital importance of this; and some of the Arab works for irrigating were in consequence neglected, to the great injury of the province. The land is usually ploughed and sown in October or (if with barley) November: by the aid of April rains a good crop is thought secure, and the harvest takes place in the end of May or the beginning of June, yielding at an average eight or twelve for one. The species of corn mostly grown are the *Triticum durum* (hard wheat) and *Hordeum vulgare* (common barley). Maize is not much cultivated except in the W. province; white millet for fattening cattle is planted there; rice chiefly in the prov. of Oran. Oats not being grown, horses are fed wholly upon barley and straw. The plough used round Algiers is the same as that of Spain and Provence, but in general is not shod with iron. It is drawn by cows and asses, very rarely by horses; yet with such imperfect ploughing the crops are generally excellent. When reaped, the grain is trodden out by cattle or horses; and, after being cleaned by throwing it up against the wind, is deposited in subterraneous caves or magazines. The pulse crops are beans, lentils, kidney-beans, pease, and garvanços (cicer pea); turnips, carrots, cabbages, &c., are good and plentiful. Endive, cress, spinach, and artichokes are in season from October to June; after which come calabashes, mallows, tomatas, and water-melons. Potatoes are frequently grown, but do not arrive at a large size, and are of inferior quality. The date is the principal fruit, and is by far the most valuable product of the country S. of the greater Atlas. It is propagated chiefly by young shoots, and yields fruit in its sixth or seventh year; it attains maturity at about its thirtieth year, and is in full vigour for sixty or seventy more, after which it gradually declines, till it becomes extinct when about 200 years old! (*Shaw*, p. 142.) Truly, therefore, might Palladius say, *Cui placet curas agere sæculorum de palmis cogitet conserendis.* (*Oct.* 12.) During its maturity it yields annually from fifteen to twenty-two clusters of dates, each weighing from fifteen to twenty pounds. The date-palm (φοινιξ), when it dies, is always succeeded by others from shoots or kernels; whence may probably have originated the fable or allegory of the bird Phœnix. The lotus or *seedra* bears a berry sold all over the S. district. Most of the fruit trees common to Europe are found in Algiers; but the fruits are inferior, excepting nectarines, peaches, and pomegranates; there are no hazel-nuts, filberts, strawberries, gooseberries, or currants. The vine is cultivated with much advantage; the grapes ripen by the end of July, and are eaten both fresh and dry by the natives, who seldom make wine; though this, no doubt, will be attempted, and most likely with success, by the French. Oil of a very inferior quality, and always acrid, is obtained from the olive. Melons and Indian figs are largely grown, and form a considerable part of the food of the Arabs. In some grounds near Algiers the sugar-cane is cultivated. Cotton and indigo have been tried, and the climate suits them well; coffee has also been tried, but is not found to succeed.

Cattle constitute the principal wealth of the natives. Sheep are of two kinds: one small, with a thick large tail; the other of a much larger size, chiefly found in the country of the Melano-Getulæ. Sheep of the fine Tunisian breed are not met with. Goats pretty abundant; pigs few, round-bodied, short-legged, and generally black. Cattle usually black; their milk is inferior to that of European cattle; that of sheep and goats is mostly used in the making of cheese, butter, &c. The Arabs seldom diminish their flocks by killing them for food, but live on their milk, wool, &c.; no animals are castrated. The common beasts of burden are camels, dromedaries, asses, and mules. Dr. Shaw speaks of a singular cross breed between an ass and a cow, called *kumrah*, having a sleeker skin than its sire, no horns, but the dam's head and tail; but Rozet says that he had not been able to find any trace of any such animal. Horses are not of the pure Arab breed, nor altogether well shaped, being lanky and round-shouldered; head small, and not ill formed; ears erect; and they are hardy, fleet, spirited, and docile: those of Oran are accounted the best. They are used only for riding, and, like the camels, are reared and live in the tents with their owners. (*Shaw*, p. 9–65, 166–170; *Rozet*, p. 204–261; *Campbell's Letters from S.*)

Trades and Manufactures.—Almost all the trades of Europe are followed in the towns; but conducted in a very inferior manner, as well because of the indolence as of the ignorance of the natives. The Jews are the most industrious, and monopolize the greater part of the external trade, with the higher branches of art, being the chief jewellers, watch-makers, tailors, &c. The Arabs are merchants, tanners, and carpenters; the Negroes masons, bricklayers, and other artificers; the Kabyles extract iron, lead, and copper from their mountains, and manufacture gunpowder, said to be superior to that made at Algiers. The chief manufactures are coarse linen, woollen, and silk stuffs, the first two forming the greater part of the dress of the population, leather saddles, bridles, carpets, fire-arms, steel, and other metal articles, pottery, gunpowder, but very inferior to that of Europe. Women only are employed in the linen and coarse woollen manufactures, as well as in the slavish occupation of grinding corn. European goods are much in request, and are bartered in the S. for gold dust, ostrich feathers, &c.

Trade.—Previously to the occupation of Algiers by the French, the established rates of duty were 5 and 10 per cent. on imported articles, according to the stipulations in the treaties with the countries of which they were the produce. But these general rules were entirely disregarded in practice; and, in point of fact, little or no trade could be carried on, except by those who obtained licenses to that effect from government, which were either sold to the highest bidder, or to those who had most interest with the divan.

Such is the inexhaustible fertility of the soil that, notwithstanding the low state of agriculture, corn and animal products have always formed a principal part of the exports; and Marseilles and other towns in the S. of France, with Genoa, &c. in Italy, used to derive a considerable part of their supplies of corn and butcher's meat from Algiers. Exclusive of these, the principal articles of export were coral, hides, wool, wax, oil, leather, gums, ostrich feathers, dates, kermes, &c. But since the occupation of Algiers by the French, the exportation of corn has in the mean time almost entirely ceased; and besides the supplies obtained in the country, large quantities have been imported for the use of the French troops.

The other principal articles of importation are cotton, woollen, silk, and linen stuffs, but particularly the first; wines and spirits; sugar and coffee; arms, hardware and cutlery, &c. Subjoined is an account of the value of the imports and exports since 1831:

Years.	Imports.	Exports.
	Fr.	Fr.
1831	6,504,000	1,479,600
1832	6,956,920	850,659
1833	7,569,156	1,028,410
1834	8,560,236	2,378,662
1835	16,778,737	2,597,466
1836	22,402,768	3,436,222
1837	30,056,246	2,946,691

It is supposed that of the imports, in 1837, about one third part were on account of the army. No duties are charged on French commodities, nor on foreign commodities required for the subsistence of the inhabitants, or to be used in agriculture or building. On other articles the duties vary from a fifth to a fourth part of those in the French tariff: articles prohibited in France are charged with an *ad valorem* duty of 15 per cent. A tonnage duty of 2 fr. is charged on foreign ships.

The increase of shipping has been quite equal to the in-

merce of trade; and the proportion of both in the hands of the French is rapidly increasing. A regular intercourse is kept up by means of steam-packets between Marseilles and Algiers.

The barbarians by whom this fine country has been so long laid waste, while they neglected all the old Roman roads, constructed none themselves; so that the communication between different parts was very difficult, and produce could only be conveyed on the backs of mules and camels. The French have already directed their attention to the repair of the old and the opening of new roads; measures indispensable alike for their own security and the development of the resources of the country. (*Tableau de la Situation, &c.*, p. 329–357.)

The weights, measures, and money in use are,

Weights.—The Ouquyah (4 grammes); Roll a thary = 16 ouqeyah; Cantar = 100 rotal.

Measures of Capacity.—Liquid: Hellah (16·66 litres) = about 17 pints. *Dry:* Fra (48 litres) = 51 3-7th pints. *Of length:* Dmrd a Torky (640 millemetres) = 2 099 feet Eng.: Dmrd a Raby (480 millemetres) = 1.574 feet Eng.

Money is as follows: *Gold*, Sequin = 8s. 6 1-2d. *Silver*, Mouzounah = 7-10ths of 1d.; Real Boudjoux = 24 mouzounah. *Copper*, Derhem Segar 5-29th of a mouz.

French money is now, however, in frequent use, and Spanish dollars worth about 4s. 4d.

Revenues.—It is impossible precisely to ascertain the amount of revenue at the disposal of the dey of Algiers previously to the French conquest; but it would seem, according to the best attainable information, that it may be fairly estimated at about 3,000,000 *fr.*, or £120,000, including therein 550,000 fr., or £22,000 of tribute paid by Naples, Portugal, &c. for exemption from piracy; but it is probable that the taxes paid by the people amounted to at least three or four times as much. The taxes were of various kinds: the principal was the tithe (*aschr*) of all crops; and there were also poll taxes on the Jews, with taxes on professions, trades, &c.; and the government derived a considerable sum from the monopoly of wool, leather, salt, and wax. These taxes have been partly retained by the French; but the more oppressive, with the monopolies, have been abolished. A considerable revenue has been latterly derived from the sale of the public lands and other property belonging to the state, which are beginning to be extensively purchased and occupied by Europeans.

The revenue, which in 1832 amounted to only 1,400,416 fr., had increased in 1837 to 3,039,775 fr. But notwithstanding this increase, the occupation and defence of the Algerine territory entail on France a heavy annual expenditure; and occasioned, for a while, considerable doubts as to the policy of her continuing to hold the country.—(*Tableau, &c.*, p. 363, &c.)

The tribute of the Arabs was better collected by the Turks than might have been expected; but it was otherwise with the Kabyles. No sooner had the latter got intimation of the approach of Turkish troops to enforce payment than they hastily decamped, carrying with them their cattle and families to fastnesses in the mountains; so that the tribute was seldom paid, unless the dey's troops succeeded in capturing some stragglers from the main body, or some stray cattle, which were usually ransomed.

The Coral Fishery is prosecuted from the middle of April till the end of July. Ten years being generally allowed for the growth of the coral, different spots are annually chosen for the fishery. Foreigners are allowed to fish on paying a rent to government. In 1836 there were 245 boats engaged in the fishery, principally at Bona, the revenue accruing on which to the French was 242,222 fr. (£10,064). The value of the coral exported in 1837 was 1,163,513 fr.—(*Tableau, &c.*, p. 337, 253.)

The Government is at present administered by the commander-in-chief of the French forces in Algiers, who is governor-general, and responsible to the French cabinet; there is besides a civil intendent. Previously to 1830 the government was vested in a dey, or pacha, being the officer at the head of the Turkish soldiery in the regency. This officer, who exercised absolute power, was appointed for life, but was rarely permitted to die in office. He was chosen out of, or rather rose from, the army; and in the words of Dr. Shaw, "any bold and aspiring soldier, though taken yesterday from the plough, might be considered as heir apparent to the throne; and with this farther advantage, that he lay under no necessity to wait till sickness or old age had removed the present ruler: it was enough if he could protect himself with the same cimeter which he had the hardihood to sheathe in the breast of his predecessor."—(*Shaw*, p. 248.) They dey notified his accession by an embassy to the grand seignior, by whom it was uniformly confirmed. But he did this merely as an act of deference to the sultan as the chief of Islamism, and not as recognising in him any real supremacy. The dey received no orders from the Porte, but acted in all respects as an independent prince. He presided in the divan, dowanea, or council of state, consisting of sixty old officers and other high functionaries, and which nominally formed the government; but though formally convened every Saturday, this body did little but agree to the measures previously decided upon by the dey and his favourites. Their ordinances began with "We, superior and inferior members of the mighty and invincible militia of Algiers, and of the whole regency, have hereby resolved," &c. Each of the three provinces, exclusive of Algiers, into which the regency was divided, was governed by a *bey*, nominated by the dey, and responsible to him.

Except in the towns, where they were absolute masters, and in their immediate vicinity, the Turks had but very limited authority over the rural population. The Arabs and Kabyles affected an almost entire independence, obeying only their sheikhs, and frequently committing hostilities on each other. This state of things has hitherto been but little changed under the French; and it is easy to see that the growth of a regular and efficient system of government can only be gradual, and must principally depend on the spread of agriculture, or on the more extensive occupation of the country by a settled population.

Military and Naval Force.—Under the Turks the dey maintained about 10,000 regular infantry and 6000 cavalry; but in case of need he could bring into the field a considerable body of irregular troops, bound to serve, like the European troops of the middle ages, for a certain number of days at their own cost. The cavalry was recruited chiefly among the Arabs and Berbers. The naval force, so long an object of terror to the Christian powers, was never very formidable. In 1816, when it was nearly annihilated by Lord Exmouth, it consisted of 4 frigates of from 40 to 50 guns, 1 of 38 guns, 4 corvettes, 12 brigs and goelettes, and 30 gunboats. In 1824 their corsairs had again begun to infest the seas; and in 1830, on the capture of Algiers, the French found a large frigate in dock, and two others in the port, 2 corvettes, 8 or 10 brigs, several xebecks, and 32 gun-boats.—(*Rozet*, iii., p. 362–380.) The French troops in Algiers in 1837 amounted to 35,474, exclusive of nearly 6000 native troops. This, however, was a much larger force than had been imbodied in any previous year; though, considering the extent of the country and the predatory warlike habits of the natives, it does not appear likely that it can be advantageously reduced.

Justice has been continued by the French, except in political cases, much on the same footing as under the Turkish dominion; being administered by the rabbins among the Jews, and by cadis and other officers, according to the Mussulman law, among the Turks, Moors, Arabs, &c. In Algiers, questions among Europeans are decided by a civil court, and a correctional and criminal court. The civil court finally decides upon all cases in which the sum in dispute is under 12,000 fr.; when the sum exceeds this limit, an appeal may be made to the royal court of Aix in France. At Oran and Bona there are French judges, who decide cases under appeal to the courts of Algiers. In their procedure no departure from the French code is permitted.

Religion.—That of the French, and consequently now of the state, is Roman Catholic; but the great bulk of the people profess Mohammedanism. The Negroes, however, are mostly addicted to fetichism; and the creed of the Berbers is scarcely known, as they suffer no strangers to witness their rites: they pay great reverence to their marabouts or *mourabeys*, persons who practise a rigid and austere life, and who sometimes affect to perform miracles. They regard them as inspired, and honour their tombs. This custom has crept in among the Jews, who venerate the sepulchres of their rabbins, and convert them into synagogues. Since the French occupation, a good many mosques have been converted into Christian churches.

Morals are at an extremely low ebb; the inhabitants, particularly the Moors, being in general grossly sensual, debauched and corrupt. Public women are numerous, and syphilitic diseases common, and endemic. Drunkenness is not very frequent among the natives, but the French have lost 3000 men annually from excess.

Public Instruction.—The Moors and other inhabitants of the towns can, for the most part, read the Koran and write, which, however, comprise the whole of their instruction: few understand arithmetic, or go beyond the first two rules; and this limited instruction, it will be observed, is enjoyed by the male sex only, women being brought up in the most complete state of ignorance. The Moors often transact business by placing their fingers on different parts of each other's hands, without speaking; each finger and joint denoting a different number. Few books except the Koran, and some encomiastic commentaries upon it, are ever seen or sought after. The education of children in the Koran goes on for three or four years, when their tuition ceases. The French have established schools of mutual instruction in all the principal towns, which are chiefly superintended by Jews, and tolerably well attended. In 1837, there were 1202 pupils at the French schools in Algiers, Oran, Bona, &c.; out

of these no fewer than 865 were Europeans, who were mostly instructed in Arabic. The native schools in Algiers were attended by 695 pupils, of whom more than a half were Moors, and the rest Jews. Hitherto very little progress seems to have been made in diffusing a knowledge of French among the Arabic population.—(*Tableau de la Situation, &c.*, p. 254.)

Arts and Sciences.—The Arabs of Algiers, though descended from the people who gave algebra to Europe, and preserved medicine during the dark ages, have no notion either of arithmetic, or of the correct measurement of time or distance. Their medicine, too, is in the rudest state, and few diseases occur that do not, under their treatment, become either chronic or mortal. Their remedies consist chiefly of superstitious practices, as pilgrimages, *&c.*; or inert decoctions, as that of mallows. They are accustomed, in cases of rheumatism and pleurisy, to puncture with a red-hot iron; to dress wounds with hot butter, and sometimes with pepper, salt, and brandy; and on the field of battle to thrust wool into them. When amputation is resorted to, it is performed by the stroke of an *saghan*, and followed by the application of hot pitch. Hence, notwithstanding their aversion to change, we need not wonder that latterly the French army surgeons have been in great request by the natives. Hospitals have been established in the principal towns, and vaccination has been introduced.—(*Shaw*, p. 196–199; *Campbell*, Let. 20.)

Buildings, Furniture, &c.—The Berbers or Kabyles live in cabins (*gurbies*) made of the branches of trees plastered with mud and straw, with a low door and narrow glazed holes serving for windows; these huts are collected together in small groups or *dashkras*. The Moors, Jews, Negroes, and most others, except the Arabs, live in houses built on a uniform model, which, from the earliest times, has not varied. An open court-yard forms the centre, around which are various apartments, opening upon galleries supported by light pilasters: the roofs are flat, surrounded by a battlement breast-high, and built with a composition of sand, wood-ashes, and lime, mixed with oil and water, called *terrace;* whence our word. The rooms are floored and cisterns are made of this composition. Water-courses are composed of tow and lime only, mixed with oil; this mixture, as well as the former, soon acquiring the hardness and imperviousness of stone. In most habitations there is in each apartment a raised platform for sleeping on, the bed being composed of junk, matting, sheep-skins, or more costly material, according to circumstances. The other furniture consists, among the nomadic tribes, of two large stones for grinding corn, wrought by women; a few articles of pottery and bronze, and a rude frame for weaving. The better classes have cushions and carpets to their rooms, the lower part of their walls being adorned with coloured hangings, and the upper part painted and decorated with fret-work. The tents of the Arabs (the *magalia* of the ancients) are sometimes called *khymas*, from the shelter they afford; and sometimes *beet-el-shaar*, or houses of hair, from the webs of goat's hair of which they are made. They are constructed at this moment precisely in the way described by Livy (lib. xxix., § 31), Sallust (*Bell. Jug.*, § 21), Virgil, *&c.* They are of an oblong shape, not unlike the bottom of a ship turned upwards, and are easily set up and taken down.—(*Shaw*, p. 206–222.)

Dress, Food, &c.—The dress of the Berbers is very rude and coarse; that of the other classes varies greatly; but it is common with both sexes to wear abroad a *haik*, or toga, and a *bernous*, which covers the head and shoulders: the faces of the women are very much concealed. Vegetables form the chief diet of all classes, not a fourth part of the animal food being consumed by them that is consumed by an equal population in Europe. Bread, couscouson (a kind of Irish stew), legumes, potatoes, tomatas, and other vegetables, dressed with spices, oil, butter, or aromatic herbs; Indian figs, raisins, melons, and other fruits; with water, sherbet, and coffee—form the main articles of consumption. (See Arabia and Barbary.)

Amusements.—Drinking coffee and smoking tobacco constitute never-failing amusements. Almost all the male inhabitants of the towns have a pipe attached to the button of their vest; and the more indolent and opulent will sit for days in cafés, unmindful of their families, smoking incessantly, or playing at chess. In the country, fowling, hawking, and hunting the wild boar and lion are actively pursued. Theatres are now opened in the principal towns.

The Language is mostly Arabic, but mixed with Moorish and Phœnician words. The Kabyles have a peculiar language, so very poor that it is without conjunctions or abstract terms, and is indebted to the Arabic for these, and for all terms of religion, science, *&c.* In conversing with Europeans, a *lingua Franca* is made use of; a mixture of Spanish, Italian, French, Portuguese, *&c.* (See Barbary.)

History.—This country formed part of the Roman empire; but during the reign of Valentinian III., Count Boniface the governor of Africa, having revolted, called in the Vandals to his assistance. The latter having taken possession of the country, held it till they were expelled by Belisarius, A.D. 534, who restored Africa to the E. empire. It was overrun and conquered by the Saracens in the 7th century; and was soon after divided into as many kingdoms as there are now provinces. Ferdinand of Spain having driven the Saracens from Europe, followed them into Africa, and in 1504 and 1509 took possession of Oran, Bugia, Algiers, and other places. The natives, wishing to throw off the Spanish yoke, had recourse to the famous corsairs, the brothers Aroudj and Khayr-ed-Dyn, better known by the names of Barbarossa I. and II., who had distinguished themselves by the boldness and success of their enterprises against the Christians. The brothers speedily succeeded in expelling the Spaniards from all their possessions in Africa, with the exception of Oran, which they held to the end of the 18th century. Algiers became the centre of the new power founded by the Barbarossas; the survivor of whom obtained, in 1520, from Sultan Selim, the title of *Dey*, and a re-enforcement of 2000 troops. Since then it has been governed nearly in the manner described above; and has, with few interruptions, carried on almost incessant hostilities against the powers of Christendom, capturing their ships and reducing their subjects to slavery. Attempts have been made at different periods to abate this nuisance. In 1541, the emperor Charles V., who had successfully achieved a similar enterprise at Tunis, arrived with a powerful fleet and army in the vicinity of Algiers; but the fleet having been immediately overtaken and nearly destroyed by a dreadful storm, the troops, without provisions or shelter, underwent the greatest privations; and the emperor was compelled forthwith to re-embark such of them as had escaped the fury of the elements and the sword of the Turks. (*Robertson's Charles V.*, cap. 6.) This great disaster seems for a lengthened period to have discouraged all attempts at capturing Algiers. France, however, as well as England and other powers, repeatedly chastised the insolence of its banditti by bombarding the town; but in general the European powers preferred negotiating treaties with the dey, and purchasing an exemption from the attacks of the Algerine cruisers, to making any vigorous or well-combined effort for their effectual suppression. In 1815, the Americans captured an Algerine frigate; and the dey consented to renounce all tribute from them, and to pay them 60,000 dollars as an indemnification for their losses. But the most effectual chastisement they ever received was inflicted so late as 1816, by the British under Lord Exmouth; when Algiers was bombarded, the fleet in the harbour destroyed, and the dey compelled to conclude a treaty, by which he set the Christian slaves at liberty, and engaged to cease in future reducing Christian captives to that ignominious condition. But it is exceedingly doubtful whether these stipulations would have been better observed than others of the same kind previously entered into by his predecessors.

The last of the Algerine deys got entangled in altercations with the French government. Provoked by the discussions that had taken place, and the claims that had been put forward, he had the temerity to strike the French consul on the latter paying him a visit of ceremony. Redress was, of course, demanded for this gross insult; but instead of complying with any such demand, the dey took and demolished the French post at La Calle. This was equivalent to a declaration of war; and France determined on being avenged. In this view, she fitted out a powerful armament, including a land force of nearly 38,000 men, with a formidable train of artillery, under the command of General Bourmont. The armament arrived on the Algerine coast on the 13th of June, 1830; and having effected a disembarcation on the following day, Algiers capitulated, after a feeble resistance, on the 5th of July. The dey was allowed to retire unmolested to Italy, and his troops to wherever they chose.

The French found in the treasury of the dey gold and silver, coined and uncoined, of the value of 47,639,011 fr., exclusive of stores of various kinds valued at 7,089 926 fr.

The towns of Oran and Bona soon after submitted, and the bey of Titteri was also reduced to obedience. But the bey of Oran, or Tlemsen, carried on for a lengthened period a series of contests and negotiations with the French, which were terminated in 1837 by the treaty of Tafna; by which he agreed to abandon the maritime parts of the province, and to recognise the supremacy of the French in Africa. The bey of Constantine was less easily dealt with. Trusting to the strength of his principal city, its distance from Bona, the nearest port, and the badness of the roads, he braved the hostility of the French. In November, 1836, a force of 8000 men, under Marshal Clausel, advanced against Constantine. But the expedition, having been too long delayed, encountered the greatest difficulties on its march, from the severity of the weather, and the impracticable nature of the country; so that when it arrived before Constantine, it was unable to undertake the siege of the place,

and with difficulty effected a retreat. To wipe off this disgrace, a powerful army left Bona in the following autumn for the attack of Constantine, before which it arrived on the 6th of October. The Arabs made a vigorous resistance; but breaches having been effected in the walls, the city was carried by storm on the 13th. The French commander-in-chief, General Damremont, was killed during the siege.

The occupation of Algiers by the French has excited some jealousy in this country, but without any reason. Such a conquest must undoubtedly weaken, instead of increasing, the power of France. But though in this respect it were otherwise, the benefits which it cannot fail in the end to confer on humanity are so great and obvious as to outweigh all other considerations. The French, ignorant of some of the peculiarities of Mohammedan law, and especially of the practice of bequeathing property in trust for individuals to the church, appear to have committed some injustice. But abuses of this sort will speedily disappear; and it is impossible to overrate the advantages that must result from the introduction of European laws, arts, and sciences into this part of Africa. Its wealth, population, and influence in antiquity show what it may become. But it was idle to expect that it should ever make any improvement so long as it was domineered over by a brutal soldiery, or till it was placed under an enlightened government capable of enforcing order, and of making its regulations and itself be respected. It were, in fact, much to be wished that all N. Africa were taken possession of and occupied by European powers. It would be impossible for them to extend their empire in this quarter without putting down intolerance, barbarism, and ignorance, and establishing in their stead liberality, civilization, and science. (The best authorities in relation to Algiers are the excellent work published by the minister of war, in Paris, entitled, *Tableau de la Situation des Etablissements Français dans l'Algerie*, Paris, 1838; and Dr. Shaw's learned and invaluable Travels.)

ALGIERS (Al Jezair, or the Islands), a maritime city of N. Africa, cap. of the above country, now in possession of the French, on the Mediterranean coast, on the W. side of a bay about 11 m. in width and 6 deep, in lat. 36° 48′ 30″ N., long. 3° 1′ 20″ E. It is built amphitheatrewise, on the face of a pretty steep hill, having for its highest point the *Kasba* or citadel, 700 feet above the level of the sea. It is nearly two m. in circ., being surrounded by thick and high walls, flanked with towers and bastions. The fortifications towards the sea are comparatively strong, but those on the land side are incapable of any very vigorous defence, and are, in fact, commanded by the adjoining heights. Algiers had, previously to the French invasion, 5 gates, 2 on the sea, and 3 on the land side; about 160 streets, 5 squares, 2 palaces, 4 large and 30 small mosques (some of which are now converted into Christian churches), 2 large and 12 small synagogues, many buildings for the military, and about 10,000 private houses. The pop. was formerly estimated at from 110,000 to 180,000; but there can no longer be any doubt that the lowest of these numbers was very far beyond the mark. It appears from a census taken on the 12th of February, 1838, that the pop. amounted at that epoch to 25,962 individuals, exclusive of about 3000 Kabyles and others not classified. It is true that a considerable emigration of Turks and others took place after the occupation of the city by the French; but estimating the number of emigrants at 10,000, which is probably beyond the truth, still the population would not exceed 40,000. Of the classified population in 1838, about 7,500 were Christians, 6000 Jews, and 12,300 Mohammedans. The city has a very imposing appearance from the sea, looking like a succession of terraces, the houses, which are all whitened, giving it a brilliant aspect; but, on entering, the illusion vanishes: the streets are filthy, dark, crooked, and so narrow that, until latterly, the widest was but 12 feet across. The French have, however, taken down many buildings to enlarge the streets, among others the principal mosque, in the view of making the *Place du Gouvernement*, in the centre of the city, a large and handsome square in the European style. The houses have flat roofs, that command a fine view of the sea; they vary from two to three stories in height, and have a quadrangle in their centre, into which the windows uniformly open. The streets have, in consequence, a gloomy appearance; and they are further darkened by the successive stories of the houses projecting over each other, and by their being frequently propped up by timbers across from one to another. The "*islands*" whence Algiers derives its name, are two rocky ledges opposite its N.E. quarter, which have been united, strongly fortified, and connected with the main land by a mole; another mole, stretching S.W. from these islands, and furnished with two tiers of cannon, incloses the harbour, which is rather small, and incapable of accommodating any vessel larger than a middle-sized frigate. A light-house is erected on one of the islands at the junction of the two moles. The *Kasba* or citadel is surrounded by strong walls, and its fortifications have been repaired and strengthened by the French. It is, in fact, a little town in itself. It was here that the French found the treasure belonging to the dey referred to in the previous article. The mosques are octagon buildings, with a dome and minarets, often elegant, and adorned with marble colonnades. There are numerous public and private fountains, and baths of all kinds; for though formerly destitute of water, Algiers is now well supplied with that important element, which is brought to the town by aqueducts constructed in the last century, and which, previously to the French occupation, were kept in repair by funds set apart for that purpose. Many shops have been opened by Europeans; they consist of recesses in the sides of the houses, about 7 feet by 4; but business is mostly transacted in the bazars, which, with the barbers' shops and cafés, are the chief places of resort for the natives. Algiers is now the residence of the governor-general of the French possessions in Africa, and of the principal government functionaries and courts of justice. It was created the seat of a bishopric in 1838; it is strongly garrisoned, and has a regular intercourse by steam-packets with Marseilles. The manufactures are chiefly those of silk stuffs, girdles, purses, clocks, jewelry, woollen cloths, *haïks*, *bernous*, sandals, harness, carpets, junk, bronze utensils, &c. The markets are well provided with meat, vegetables, and fruit; provisions generally cheap, excepting bread, which is dear: there were no ovens, and only hand-mills for grinding corn, before the occupation by the French. European manners, habits, and dresses are common; as many hats are seen as turbans; cigars replace pipes, shops bazars; grand hotels, cafés, billiard-tables, eating-houses, *cabinets littéraires* have been set up, and a circus, cosmorama, and opera established. The streets have all received French names. In 1837 there were at Algiers 223 fine days, 63 on which it rained, and 69 during which the sky was covered with clouds. There arrived at Algiers in 1837, 995 vessels of the burden of 74,762 tons. Of these 29 vessels, tonnage 6363, were from England; and 25 vessels, tonnage 4581, from British possessions in the Mediterranean. The environs of Algiers are very beautiful, and for some miles round interspersed with great numbers of elegant villas. There are two small suburbs, those of Bab-el-Oued and Bab-a-Zoun; the former to the N., the latter to the S. of the city. About a mile S. of the Kasba is the *Sultan Kalessi*, or fort of the emperor, an irregular polygon without fosse or counterscarp, about ¼ mile in circ. It stands on the spot where Charles V. encamped, A.D. 1541, and completely commands the town; but is itself commanded by mount Boujereah. The ancient city of Rustonium, the capital of Juba, was situated not far from Algiers, to the W. of Torretta Cica; some ruins of this city still exist. Algiers was founded A.D. 935. For some notice of its history, see the previous article. (See *Tableau de la Situation, &c.*; *Rozet*, iii., p. 14–88; *Shaw's Travels*, p. 33–35.)

ALGOA BAY. See PORT ELIZABETH.

ALHAMBRA. See GRANADA.

ALHANDRA, a town of Portugal, prov. Estremadura, on the Tagus, 18 m. N.N.E. Lisbon. Pop. 1600.

ALICANT (an. *Lacentum*), a sea-port town of Spain in Valencia, cap. prov. same name, on the Mediterranean, lat. 38° 20′ 41″ N., long. 0° 30′ W. Pop. about 14,000, having declined from 21,500 in 1810. It is situated between mountains at the bottom of a spacious bay, having cape la Huerta at its N.E. extremity, and Isla Plana on the S. Large vessels anchor from ½ to 1 m. from shore, and small craft lie alongside the pier, which, though incomplete, is about 390 yards in length. Alicant is defended by a castle on a rock about 400 feet high. Streets narrow and crooked; but when visited by Mr. Townsend they were well paved and clean. None of its churches, convents, or other public buildings deserve notice. It has a school of navigation, and has, or at all events had, an institution for providing for orphans, deserted children, and the sons of soldiers. We are not aware whether the "House of Mercy," founded in 1786, and intended to assist in the suppression of mendicity, still exists. (*Townsend*, iii., p. 184.) The trade of Alicant, though still considerable, has fallen much off, partly in consequence of the emancipation of America, but more through the influence of oppressive duties and the disturbed state of the country. Its exports consist principally of wine, almonds (10,000 cwt.), barilla (50,000 to 90,000 cwt.), olives and olive oil, brandy, figs, salt, esparto-rush, wool, silk, linen, &c. The imports consist principally of linens, salted-fish, corn, cotton and cotton stuffs, colonial produce, timber, &c. (Besides *Townsend*, see *Inglis's Spain*, ii., 304; *Communications from British Consul, &c.*)

ALICATA, or LICATA, a sea-port town on the S. coast of Sicily, Val di Girgenti, at the mouth of the Salso, lat. 37° 4′ 23″ N., long. 13° 55′ 40″ E. Pop. 13,465. It is built partly on the beach and partly on the slope of some hills. Its walls have gone to decay, and neither of its two castles is of any considerable strength. It is a poor-looking place, but exports considerable quantities of corn, with sulphur and soda,

pistachio nuts, almonds, maccaroni, &c. The port is shallow, so that large vessels must load in the offing or road, about a mile S.W. of the town, where they are exposed to the southerly winds. (*Swinburne's Two Sicilies*, ii., p. 297, 4to ed.; *Smyth's Sicily*, p. 199.)

ALICUDI, the most W. of the Lipari islands, 56 m. E.N.E. Palermo. Pop. 260. It is about 6 m. in circ., rises abruptly from the sea, with irregular ravines and precipitous hills. It is cultivated, wherever there is any soil, with singular and laborious industry, and produces most excellent wheat, barilla, flax, capers, &c. The people are said to be exceedingly healthy; it has only two unsafe landing-places, and is rarely visited by strangers. (*Smyth's Sicily*, p. 277.)

ALIGHUR, a strong fort of Hindostan, in the district of the same name, between the Ganges and the Jumna, 52 m. N. Agra, lat. 27° 56′ N., long. 77° 59′ E. It was taken by storm in 803; and was soon after made the headquarters of a civil establishment for the collection of the revenue, and the administration of justice. The N. portion of the district of Alighur is a desolate tract, overspread with low jungle; but the S. portion is fertile and highly cultivated. The natives, though turbulent, are superior to the Bengalese, and other tribes more to the East.

ALKMAAR, a town of N. Holland, cap. arrond. and cant., on the great ship canal from Amsterdam to the Helder, 20 m. N.N.W., the former, lat. 52° 38′ N., long. 4° 44′ 48″ E. Pop. 9560. It is strongly fortified and well built; there are many fine canals, shaded with trees, and the whole town has a strikingly clean and comfortable appearance. The *Hôtel de Ville* and the arsenal are the only public buildings that deserve notice. It is the seat of a court of primary jurisdiction, and has a college, physical society, theatre, concert hall, &c. Vast quantities of excellent butter and cheese are produced in the surrounding meadows. Exclusive of butter, about 40,000 tons of cheese are said to be annually disposed of in its markets. It also manufactures canvass, and has a considerable trade in cattle, corn, tulips, &c. Its commerce has been materially facilitated by the construction of the great canal. Without the town is a fine promenade, similar to those at the Hague and at Haarlem. In 1573, Alkmaar was invested by the Spaniards; but, having been repulsed with great loss in an attempt to take the town by storm, they abandoned the siege. In 1799, the Anglo-Russian army, under the Duke of York, advanced from the Helder as far as Alkmaar. (*Dict. Géographique; Murray's Hand-book, &c.*)

ALLAHABAD, an extensive and populous province or soubah of Hindostan proper, between the 24th and 26th deg. N. lat., and 79th and 83d E. long. It is bounded on the N. by Oude and Agra, S. by Gundwana, E. by Behar and Gundwana, and W. by Malwah and Agra. It is about 270 m. in length by about 120 in breadth.

It is divided into the following zillahs or districts, viz.: 1. Allahabad; 2. Benares; 3. Mirzapoor; 4. Juanpoor; 5. The Rewah territory; 6. Bundelcund; 7. Cawnpoor; 8. Mainpoor territory. It is watered by the Ganges, Jumna, and other great rivers. Adjacent to the former, the country is flat and very productive, but in the S.W., in the Bundelcund district, it forms an elevated table-land, diversified with high hills containing the celebrated diamond mines of Poonah. The flat country is extremely sultry, and subject to the hot winds, from which the more elevated region is exempted. In the hilly country, where the rivers are less numerous than in the plains, the periodical rains and well-water are chiefly relied on for agricultural purposes. On the whole, however, Allahabad is one of the richest provinces of Hindostan. The principal articles of export are sugar, cotton, indigo, cotton cloths, opium, saltpetre, diamonds, &c.; and, in addition, it produces all kinds of grain and a vast variety of fruits.

The chief towns are Allahabad, Benares, Callinger, Chatterpore, Chunar, Ghazypore, Juanpore, and Mirzapore. The whole of this extensive province is now subject to the British government; the Benares district having been ceded in 1775; Allahabad and the adjacent territory in 1801; and the districts of Bundelcund in 1803. Seven eighths of the inhabitants are supposed to be Hindoos, the remainder Mohammedans.

ALLAHABAD, an ancient city of Hindostan, cap. of the above prov. and dist., near the confluence of the Ganges and Jumna, being, by the course of the river, 830 m. from the sea, but the distance in a direct line from Calcutta is only 475 m.; from Benares, 75 m., and from Agra, 260 m.; lat. 25° 27′ N., long. 81° 50′ E. At a short distance from the city, at the junction of the rivers, is situated the fortress, founded by the emperor Acbar, in 1583; but much improved since it came into the possession of the British. It is lofty and extensive, completely commanding the navigation of both rivers. On the sea side it is defended by the old walls; but on the land side it is regularly and strongly fortified. It could not be taken by a European army, except by a regular siege; and to a native army it would be all but impregnable; and hence it has been selected as the grand military depôt of the upper provinces.

Being situated at the point of union of two great navigable rivers, Allahabad would seem to be in one of the finest positions in India for being the seat of an extensive commerce. And if we suppose, with D'Anville and Dr. Robertson, that it occupies the site of the ancient Palibothra, it certainly ranked among the first commercial cities of antiquity.* But in modern times it does not appear to have ever attained to the magnitude or importance that might have been anticipated. Formerly, however, it was both more populous and flourishing than at present. A considerable cotton manufacture is said to have been driven from the town by the exactions of the native officers of the Oude government. According to Hamilton, the pop. amounted, in 1803, to about 20,000, exclusive of the military; and there is no room for thinking that it has been materially increased in the interval. The houses are of mud, raised on the foundations of more substantial brick edifices that have fallen into decay. Heber says, it has a desolate, ruinous appearance, and that it has obtained among the natives the name of *Fakeerabad* (beggar abode!). It is the permanent station of a high court of justice—*Sudder Mofussil*, commission—and has a school formed, in 1825, for the education of the natives. Allahabad has been in possession of the British since 1765.

Besides the Ganges and Jumna, the Hindoos believe that another river, the Sereswati, joins the other two from below ground. In consequence of this extraordinary junction, Allahabad is reckoned peculiarly holy, and is annually visited by many thousands of pilgrims, who come from all parts of Hindostan to bathe and purify themselves in the sacred stream: in some years their numbers have amounted to nearly 200,000, each of them paying a small tax to government: "When," says Mr. Hamilton, "a pilgrim arrives, he sits down on the bank of the river, and has his head and body shaved, so that each hair may fall into the water, the sacred writings promising him one million of years' residence in heaven for every hair so deposited. After shaving, he bathes; and the same day, or the next, performs the obsequies of his deceased ancestors. The tax accruing to government for permission to bathe is three rupees each person; but a much greater expense is incurred in charity and gifts to the Brahmen, who are seen sitting by the river-side. Many persons renounce life at this holy confluence, by going in a boat, after performance of certain solemnities, to the exact spot where the three rivers unite, where the devotee plunges into the stream, with three pots of water tied to his body. Occasionally, also, some lose their lives by the eagerness of these devotees to rush in and bathe at the most sanctified spot, at a precise period of the moon, when the immersion possesses the highest efficacy. The Bengalese usually perform the pilgrimages of Gaya, Benares, and Allahabad in one journey, and thereby acquire great merit in the estimation of their countrymen." (*Hamilton's Gazetteer*, *Heber*, i., p. 441–445.)

ALLAHABAD (DISTRICT OF), consists of the territory immediately adjacent to the city of Allahabad. In 1815, it contained 1,665,106 begahs† of cultivated land, assessed at £279,394 a year of *jumma*, or land revenue. At the same time it contained 395,012 begahs of land, fit for cultivation, and 1,109,777 waste. It is watered by the great rivers Ganges and Jumna, and, when well cultivated, is remarkably fertile. Wheat is the principal crop; but the culture of cotton and indigo has greatly increased—and that of opium has also been introduced. A considerable quantity of cotton cloths and chintzes were formerly produced; but this branch of industry is now nearly annihilated in consequence of the native manufactures being undersold by the British. This district suffered considerably from the jumma, or land revenue, having been fixed at too high a rate when the perpetual assessment was introduced. It has been the theatre of a considerable number of gang robberies, but these have been either wholly suppressed, or greatly diminished in consequence of the introduction of a more efficient police. (*Parl. Papers*, No. 753, iii., Sess. 1832, p. 69, &c.; *Hamilton's Gazetteer*.)

ALLAN (BRIDGE OF), a neat village of Scotland, on the Allan, 3 m. N.W. Stirling. It is a good deal resorted to in summer by visiters, on account of a mineral spring in the vicinity.

ALLAUCH, a town of France, dep. *Bouches du Rhone*, 5 m. E.N.E. Marseilles. Pop. 3868. It is built on the declivity of a hill, and is very ancient.

ALLEGAN, co., Mich. Situated in the W. part of the state, and contains 840 sq. m. Bounded W. by lake Michigan. Watered by Kalamazoo, Black, and Rabbit rivers.

* Major Rennell denies this, and contends that Patna occupies the site of Palibothra. (*Memoirs of a Map of Hindostan*, 3d ed., p. 49.) But the reasoning of Dr. Robertson, founded on the statements of Strabo and Arrian, seem to prove conclusively the identity of Palibothra and Allahabad. (*Disquisition on Ancient India*, note xiii.)

† A begah varies in size, but is generally about one third of an acre.

On the rivers the soil is a fertile alluvion, on the lake shore it is sandy, and in other parts a mixture of clay and sand. In 1840 there were 1511 neat cattle, and 2966 swine; and there were produced 13,815 bushels of wheat, 14,725 of Indian corn, and 118,845 pounds of sugar. It contained one furnace, two flouring-mills, one grist-mill, fifteen saw-mills, one academy, 15 students, twelve schools, 305 scholars. Pop. 1783. Cap. Allegan.

ALLEGAN, p. t., capital of Allegan co., Mich., 161 W. by N. Detroit, 636 W. Situated on both sides of Kalamazoo r., over which are here two bridges. It is at the head of navigation on the river, which has here a fall of eight feet, furnishing a valuable water power. The ground on which it stands is elevated thirty feet above the river, and the soil is dry and sandy. It exports three or four million feet of lumber annually, and has one furnace, one flouring-mill, four saw-mills, one academy, 15 students, three schools, 61 scholars. Pop. 624.

ALLEGHANY RIVER, rises in M'Kean and Potter counties, Pa., and, after the union of its head branches, passes N.W. into the state of N.Y., and thence, by a considerable bend, it returns again into Pa., and proceeds in a S.W. course until it unites with the Monongahela river at Pittsburg, to form the Ohio river. Its length is about 375 m., and it is 400 yards wide at its mouth. It is navigable for keel boats of ten tons to Olean, N.Y., 200 m. above Pittsburg. Nearly 30,000,000 feet of plank descend this river annually. The *Genesee Valley canal*, will, when completed, connect the Erie canal at Rochester with this river at Olean.

ALLEGHANY, or APPALACHIAN MOUNTAINS, extend from the Catskill mountains in N.Y., in a S.W. direction, to Ga. and Ala. where they sink to elevated hills, though some choose to extend them much farther to the N.E., reaching to the White mountains in N.H., and even further. But N.E. of the Catskill, the range is not continuous and well defined. They consist of a number of ridges, denominated the Blue ridge, North mountain, Jackson's mountain, Laurel mountain, Cumberland mountain, &c., the whole from 30 to 200 m. in breadth, and from 50 to 130 m. from the ocean, and nearly parallel to it. They have a mean elevation of about 2200 feet above the level of the sea, though in Yancey co., N.C., are some peaks over 6000 feet high, which are a little higher than the highest peaks of the White mountains, N.H., and constitute the highest land in the U. States E. of the Rocky mountains. This great chain divides the waters which flow into the Atlantic from those which flow into the Mississippi. These ridges are generally wooded to the top, and between them are extensive and fertile valleys. Their steepest side is towards the E., where granite gneiss and other primitive rocks prevail. On the W. they descend by a more gradual slope towards the Mississippi. The anthracite coal, so extensively found, is on the E. side of these mountains, while among them, and W. of them, bituminous coal prevails. A spur of these mountains, called the Highlands, crosses Hudson river, and the tide flows through them with deep navigable water, which is the only instance on the Continent, excepting the St. Lawrence, where the tide passes through a primitive mountain.

ALLEGHANY, co., N.Y. Situated in the S., towards the W. part of the state, and contains 1165 sq. m. Watered by Genesee river and its branches. The surface is an elevated table-land, and much of the soil is very fertile. The Genesee valley canal passes through it, and will connect the Erie canal at Rochester with the Alleghany river at Olean, forming a navigable communication with the Ohio at Pittsburg. In 1840, it contained 45,864 neat cattle, and 129,655 sheep, and produced 239,471 bushels of wheat, 66,137 of Indian corn, and 583,945 of potatoes. It had thirteen stores, twenty-four fulling-mills, four woollen factories, thirty-one tanneries, two distilleries, three flouring-mills, thirty-six grist-mills, 204 saw-mills, six furnaces, three printing-offices, and two weekly newspapers, one academy, 47 students, 215 schools, 9157 scholars. Pop. 40,975. Cap. Angelica.

ALLEGHANY, co., Pa. Situated in the W. part of the state, and contains 575 sq. m. The Alleghany and Monongahela rivers unite in this county to form Ohio river, which runs 14 m. in the county. The surface is hilly; soil fertile. It had, in 1840, 21,512 neat cattle, 56,450 sheep, and 34,635 swine; and produced 461,167 bushels of wheat and 289,797 of Indian corn. It had thirty-nine commercial and commission houses in foreign trade, 551 stores, five woollen factories, five cotton factories, with 17,270 spindles, fourteen distilleries, six breweries, seventeen glass-houses, thirty-seven flouring-mills, fifty-two grist-mills, eighty-one saw-mills, twenty-eight furnaces, eighteen printing-offices, four daily and eleven weekly newspapers, and ten periodicals, two colleges, 81 students, twenty-one academies, 1186 students, 208 schools, 10,281 scholars. Pop. 81,235. Cap. Pittsburg.

ALLEGHANY, co., Md. Situated in the W. part of the state, and contains 560 sq. m. The surface is broken and rough, the main branch of the Alleghany mountains passing through it. The N. branch of Potomac river bounds it on the S.E. Drained by Youghiogheny river. Along these rivers the Chesapeake and Ohio canal is to pass. The Great National road, extending in the western states, commences at Cumberland, in this county. It contained, in 1840, 10,031 neat cattle, 13,763 sheep, and 11,490 swine; and produced 86,648 bushels of wheat and 121,747 of Indian corn, and had sixty-three stores, two woollen factories, eight tanneries, eight distilleries, eleven flouring-mills, eighteen grist-mills, forty-four saw-mills, one furnace, two printing-offices, three weekly newspapers, one academy, 65 students, twenty-nine schools, 802 scholars. Pop.: whites 14,663, slaves 812, free coloured 215; total, 15,690. Cap. Cumberland.

ALLEGHANY, co., Va. Situated in the central part of the state, and contains 521 sq. m. Drained by branches of James river. The surface is uneven; some of the soil is fertile, particularly on the streams, while in other parts it is barren. A stream, issuing from a spring, has a fall of 180 feet, and proceeds, by a succession of cataracts, to Jackson's river. There were, in 1840, 2666 neat cattle, 3647 sheep, and 4578 swine; and there were produced 25,449 bushels of wheat, 70,828 of Indian corn, and 42,500 pounds of tobacco. It had five stores, five distilleries, four flouring-mills, twenty grist-mills, twenty-one saw-mills, one furnace, five schools, 88 scholars. Pop.: whites 2142, slaves 547, free coloured 60; total, 2749.

ALLEGANY, t., Armstrong co., Pa. It has five stores, three grist-mills, three saw-mills, and some salt-works. Pop. 1839.

ALLEGHANY, t., Huntingdon co., Pa. It has six stores, two woollen factories, one furnace, two tanneries, three grist-mills, twenty saw-mills. Pop. 2225.

ALLEGHANY, t., Venango co., Pa. It has three stores, two tanneries, one pottery, three grist-mills, one saw-mill, four schools, 108 scholars. Pop. 804.

ALLEGHANY, t., Somerset co., Pa. It has one store, three grist-mills, eight saw-mills. Pop. 633.

ALLEGHANY, t., Potter co., Pa. Pop. 238.

ALLEGHANY, t., Westmoreland co., Pa. It has five stores, six flouring-mills, five saw-mills, eleven schools, 343 scholars. Pop. 2641.

ALLEGHANY, t., Cambria co., Pa. It has three stores, two grist-mills, eight saw-mills, seven schools, 256 scholars. Pop. 1217, including Loretto v.

ALLEGHANY city, Ross t., Alleghany co., Pa. Situated on a point of land formed by the Ohio and Alleghany rivers, opposite to Pittsburg, with which it is connected by a covered bridge 1122 feet long, resting on five piers of hewn stone, which cost $95,949. Incorporated in 1828; and contains fifty-eight stores, nine lumber-yards, three cotton factories, with 14,270 spindles, two tanneries, one brewery, and one rope-walk. Pop. 10,089. See PITTSBURG.

ALLEN, co., O. Situated in the N.W. part of the state, and contains 554 sq. m. Watered by Anglaize river. The soil is fertile. It contained, in 1840, 9085 neat cattle, 3723 sheep, 18,869 swine. There were produced 60,381 bushels of wheat, 168,545 of Indian corn, 106,744 pounds of sugar. It had nineteen stores, four tanneries, two distilleries, seven grist-mills, six saw-mills, nineteen schools, 418 scholars. Pop. 9079. Cap. Lima.

ALLEN, co., In. Situated in the N.E. part of the state, and contains 680 sq. m. Watered by St. Joseph and St. Mary's rivers, which unite at fort Wayne to form Maumee river. The Wabash and Erie canal passes through the co. It had, in 1840, 2654 neat cattle, and 8524 swine. There were produced 34,819 bushels of wheat, 84,275 of Indian corn, and 94,865 pounds of sugar. It had forty-one stores, three flouring-mills, two grist-mills, fourteen saw-mills, one printing-office, issuing a weekly newspaper, thirty-two schools, 920 scholars. Pop. 5942.

ALLEN, co., Ky. Situated in the S. part of the state, and contains 400 sq. m. Watered by Big Barren river and its branches. It had, in 1840, 8051 neat cattle, 11,419 sheep, and 28,165 swine. There were produced 47,157 bushels of wheat, 312,665 of Indian corn, 508,870 pounds of tobacco, 17,869 of cotton, 35,113 of sugar. It had eleven stores, forty-nine distilleries, six flouring-mills, three grist-mills, nine saw-mills, five schools, 104 scholars. Pop.: whites 6375, slaves 935, free coloured 19; total, 7329.

ALLEN, p. t., Cumberland co., Pa., 18 m. W.S.W. Harrisburg, 109 W. It has six stores and two fulling mills. Pop. 2122.

ALLEN, t., Northampton co., Pa. It has two Lutheran churches, eleven stores, six flouring-mills, four grist-mills, two saw-mills, two tanneries, three distilleries, one academy, 59 students, seven schools, 275 scholars. Pop. 2547.

ALLEN, t., Hillsdale co., Mich. It has three schools, 96 scholars. Pop. 465.

ALLEN, t., Darke co., O. Pop. 194.

ALLEN, t., Union co., O. Pop. 713.

ALLEN, t., Noble co., In. It has one school, 18 scholars. Pop. 179.

ALLEN (Bog of), the name usually given to the extensive tracts of morass situated in Kildare, and King's and

Queen's counties, and the adjoining counties of Ireland. These do not, however, form, as is commonly supposed, one great morass, but a number of contiguous morasses separated by ridges of dry ground. Though flat, the bog has a mean elevation of about 250 feet above the level of the sea, and gives birth to some of the principal Irish rivers, as the Barrow, flowing S., and the Boyne, E.

ALLEN (LOUGH), a lake, co. Leitrim, Ireland, about 10 m. in length, and from 4 to 5 in width. This lake is generally supposed to be the source of the Shannon, and it has perhaps the best title to that distinction. It is elevated 144 feet above the level of high water-mark at Limerick; and the Shannon has been rendered navigable as far as the lough.

ALLENDORF, a town of Hesse Cassel, on the Werra, 23 m. E.S.E. Cassel. Pop. 3500. There is in the vicinity a considerable salt-work.

ALLENSTEIN, a town in East Prussia, cap. circ., on the Alle, 27 m. S.S.W. Heilsberg. Pop. 3000. It has a gymnasium, and fabrics of cloth and earthenware.

ALLENSTOWN, p. t., Merrimac co., N. H., 10 m. S.E. Concord, 480 W. It has four schools, 106 scholars. Pop. 445.

ALLENTOWN, p. v., Wilcox co., Ala., 111 m. S. Tuscaloosa, 903 W.

ALLENTOWN, p. v., Upper Freehold t., Monmouth co., N. J., 12 m. E. by N. Trenton, 178 W. It contains one Presbyterian and one Methodist church, one grist-mill, two saw-mills, one cotton factory, and about eighty dwellings, some of them of brick.

ALLENTOWN, p. t., capital of Lehigh co., Pa., 87 m. E.N.E. Harrisburg, 180 W. It is regularly laid out with streets crossing each other at right angles, with a square in the centre, and contains a court-house, jail, county offices, a bank, four churches, one Presbyterian, one Episcopal, one Lutheran, and one German Reformed, fifteen stores, two tanneries, four printing-offices, four weekly newspapers, one academy, 30 students, seven schools, 425 scholars, 300 dwellings, and 2493 inhabitants.

ALLESTAR, a town in the peninsula of Malacca, which contained, in 1823, 2000 houses.

ALLEVARD, a town of France, dep. Isère, cap. cant., 21 m. N.E. Grenoble. Pop. 2599. There are valuable iron and copper mines in its vicinity, and foundries where iron of an excellent description is prepared for conversion into steel, and also for being cast into cannon. In the neighbourhood are the ruins of the castle of Bayard, the birthplace of the famous knight of that name—the *chevalier sans peur et sans reproche.*

ALLIER, a dep. almost in the centre of France, so called from the river Allier, one of the principal affluents of the Loire, which traverses it from S. to N. between 45° 58′ and 46° 47′ N. lat., and 2° 16′ and 3° 57′ E. long. Area, 723,981 hect., whereof about 468,000 are cultivated land, 70,000 meadows, 18,000 vineyards, 64,000 woods, 28,700 heaths, moors, &c. Pop. 309,270. Exclusive of the Allier, it is bounded E. by the Loire, and is traversed by the Cher, and other lesser rivers, &c. The ponds and smaller lakes are so numerous, that they are said to have an injurious influence over the climate. Surface undulating, and in parts hilly; soil generally fertile, producing a surplus of corn and wine for exportation, with great numbers of cattle, sheep, and excellent horses. A good deal of the timber in the forests is oak, suitable for ship-building. Agriculture in this, as in many other departments of France, is in a very backward state. The peasantry are small proprietors, and wedded to the practices of their forefathers. *En vain leur indiquerait-on de nouveaux procédés agricoles, ils cultivent comme faisaient leurs pères. Une aveugle routine sert de bornes à leur étroite intelligence.* There are valuable mines of coal, iron, and antimony; and quarries of marble and granite. Among the manufacturing establishments may be mentioned the glass-works of Sourigny and Commentry, which employ about 800 work-people; the iron-works of Tronçais, which employ above 500 ditto, and furnish annually above 500,000 kilogs. of iron; and there are also manufactures of cutlery, earthenware, cloth, and paper, with spinning-mills, and numerous breweries, rope-walks, &c. It is divided into four electoral arrond.; returns four m. to the ch. of deputies; and had, in 1838, 1617 electors. Public revenue, in 1831, 6,444,045 fr. Chief towns, Moulins, Montluçon, Gannat, La Palisse, &c. (*Hugo, France Pittoresque*, art. *Allier*; *French Official Tables.*)

ALLISON, t., Clinton co., Pa. It has six stores, one tannery, one brewery, two printing-offices, two weekly newspapers, one school, 70 scholars. Pop. 643.

ALLOA, a sea-port and m. town of Scotland, co. Clackmannan, on the Forth, at the point where it ceases to be a river, and becomes a frith, 25 m. W.N.W. Edinburgh. Pop. of town, 4417; of parish and town, 6377. It is irregularly built, but has recently been much improved. A church, opened in 1819, has a spire 200 feet in height. The harbour is excellent; vessels of large burden lying close to the quays; there is also a dry dock and two yards for ship-building. The trade of the town is considerable, and it has nearly 8000 tons of shipping. There are very extensive collieries, distilleries, and iron-works in the neighbourhood, the produce of which is principally shipped here: and in the town and its vicinity are extensive breweries, which produce ale rivalling that of Edinburgh, with an iron-foundry, two woollen manufactories, glass-works, tile and brick-works, &c. The justice of peace, and sheriff courts for the county are held here. In a park adjoining the town are the ruins of a seat of the Earl of Mar, part of which consists of a tower of the 13th century, 90 feet in height. (*Revised at Alloa.*)

ALLOWAY KIRK: the church (Scottice, Kirk) of a parish on the coast of Ayrshire, long united with that of Ayr, near the mouth of the Doon, on the road from Ayr to Maybole, about 3 m. S. from the former. The Kirk has been for a lengthened period in ruins, but being prominently brought forward in Burns's inimitable tale of Tam O'Shanter, and having in its immediate vicinity the poet's birth-place, and the monument erected to his memory, it has become an object of great interest. Though roofless, the walls are in pretty good preservation; and the feelings with which they are now associated will protect them from depredation. The church-yard, which is still used as a burying-ground, contains the graves of Burns's father and mother; and, such is the *prestige* with which it has been invested, that latterly it has become a favourite place of interment. Between Alloway Kirk and Ayr, but much nearer the former than the latter, is the cottage in which Burns was born (on the 25th of February, 1759), a one-story house, of humble appearance, with a thatched roof, and long used as an inn. About ¼ m. on the other side of the Kirk are the "Auld brig o' Doon," and the new bridge—the latter about 100 yards below the former, and built since the time of Burns; and on the summit of the acclivity of the E. bank of the river, about half way between the old and new bridges, is the monument of the poet. This elegant structure was finished in 1823, at an expense of about £2000. It is built in imitation of the monument of Lysicrates at Athens, and consists of a triangular basement, on which rises a peristyle of nine Corinthian columns, 30 feet in height, supporting a cupola, surmounted by a gilt tripod. It is above 60 feet in height; is built of fine white freestone, and has a chaste, classical appearance. Independently of the peculiar associations connected with the place, the scenery around is equal in richness and variety to any in Scotland. The celebrated statues of Tam O'Shanter and Souter Johnnie are appropriately placed in a grotto within the grounds attached to the monument. (*New Statistical Account of Scotland*, art. *Ayr*; *Chambers's Land of Burns, &c.*)

ALLOWAYSTOWN, p. v., Upper Alloways t., Salem co., N. J., 60 m. S.S.W. Trenton, 171 W. It contains one Baptist and one Methodist church, five stores, two saw-mills, employed in cutting ship timber, and about eighty dwellings.

ALMADA, a town of Portugal, prov. Estremadura, on the Tagus, opposite to Lisbon. Pop. 4000. There is an old castle on a rock, an hospital, a Latin school, with large magazines for wine.

ALMADEN, a town of Spain, prov. La Mancha, in the Sierra Morena, 57 m. W.S.W. Ciudad Real. Within a very few miles of this town is a famous mine of cinnabar, whence mercury used to be obtained, to the extent of from 12,000 to 15,000 quintals a year, for the supply of the silver mines of Mexico. This mine is very ancient, and is believed, indeed, to have been wrought by the Romans. But the statements of Pliny (*Hist. Nat. Lib.*, 337) apply distinctly to Sisapo in Bætica, that is, to *Almaden de la Plata*, 27 m. N.N.W. Seville, where there is, also, a very productive mine. These are mines of the same sort in other parts of Spain.

ALMAGRO, a town of Spain, prov. La Mancha, 12 m. E.S.E. Ciudad Real. Pop. 8000. It has an important manufacture of blondes. The country round is celebrated for its mules and asses, of which there is annually a large fair.

ALMANZA, a town of Spain, prov. Murcia, 56 m. N.W. Alicant. Pop. 5000. It is well built, has broad streets, linen fabrics, and a great annual fair. In the neighbourhood of this town, on the 25th April, 1707, the French, under the Duke of Berwick, gained a complete victory over the allied forces in the interest of the Archduke Charles. The latter lost 5000 men killed on the field, and nearly 10,000 taken prisoners.

ALMAREZ, a town of Spain, prov. Estremadura, on the Tagus, 32 m. S.E. Plasencia. Pop. 1000. Towards the middle of the 16th century, a fine bridge, in the Roman style, was carried over the river at this point. In 1810, an obstinate conflict took place near this town, between an Anglo-Spanish and French force.

ALMEIDA, a fortified town of Portugal, prov. Beira, 24 m. W. by N. Ciudad Rodrigo. Pop. 6000. From its position on the frontier of the kingdom, it has always been deemed a military post of the greatest importance. In 1762, it was

taken by the Spaniards, after a long siege. In 1810, it was taken by the French under Massena: who abandoned it in the following year, after blowing up the fortifications.

ALMELO, a town of the Netherlands, prov. Overyssel, on the Vecht, 22 m. E.N.E. Deventer. Pop. 4000. It has a college, a commission of agriculture and manufacture, and bleaches fine linen.

ALMERIA (an. *Murgis*), a sea-port town of Spain, Granada, near the mouth of the river of the same name, and at the bottom of the gulf, lat. 36° 51′ 29″ N., long. 2° 32′ W. Pop. 19,000. It is the sent of a bishop, and has fabrics of soda and salt-petre, and of cordage and other articles made of the esparto-rush. The harbour is large, well sheltered, and is protected by a castle; the water is so deep, that large vessels anchor half a mile from shore, in from 9 to 14 fathoms, and smaller vessels anchor, close in shore, in from 5 to 9 fathoms. The ancient sovereigns of Granada considered this as the most important town of their dominions, as well on account of the fertility of the surrounding country, as of its manufactures and commerce. But it is now much fallen off.

ALMODOVAR DEL-CAMPO, a town of Spain, with a castle, prov. La Mancha, 18 m. S.S.W. Ciudad Real. Pop. 3000.

ALMONBURY, a pa. and township of England, W.R. co. York, wap. of Agbrigg, divided by the Colne from the pa. of Huddersfield. The pa. is very extensive, containing 30,140 acres, with a pop. of 30,606. It contains several villages, of which Almonsbury, 1½ m. S.E. Huddersfield, is the principal. Pop. of Almonbury township 7086, mostly engaged in the manufacture of woollens and cottons, especially the former. (*See* HUDDERSFIELD.)

ALMOND, p. t., Alleghany co., N.Y., 14 m. E. Angelica, 246 W. by S. Albany, 321 W. It is watered by Canisteo river, and contains four stores, one fulling-mill, one grist-mill, three saw-mills, one furnace, twelve schools, 565 scholars. Pop. 1434. The village contains one Presbyterian and one Baptist church, sixty dwellings, and about 400 inhabitants.

ALMORA, a town of Hindostan, cap. Kumaon, in the N.E. part of India, 90 m. N. by E. Bareilly; lat. 29° 35′ N., long. 79° 40′ E. It stands on a ridge 5337 feet above the level of the sea, and is compactly built. The houses of stone, and slated, are generally two and some three stories high; the ground-floor being occupied as shops. The old Gorkha citadel stands on a commanding point of the ridge at the E. extremity of the town, and several martello towers have been erected on peaks to the eastward. This place was acquired by the British in 1815. The surrounding country is remarkably bleak and naked. (*Hamilton's E. I. Gazetteer.*)

ALMUNECAR, a sea-port town of Spain, Granada, lat. 36° 47′ 50″ N., long. 3° 51′ W. Pop. 2100. The surrounding country produces cotton and sugar. The anchorage is fit only for small vessels, and should not be used by them except in cases of emergency, as the E. winds common on this coast are dangerous.

ALMUNIA, a town of Spain, Arragon, 18 m. N.E. Calatayud. Pop. 3000.

ALMURRADIEL, a town of Spain, in La Mancha, 8 leagues from Manzanarez.

ALNA, p. t., Lincoln co., Me., 10 m. N. Wiscasset, 20 S. by E. Augusta, 598 W. Watered by Sheepscot river. It contains six stores, one fulling-mill, three tanneries, two grist-mills, four saw-mills. Pop. 990. Capital in manufactures, $2250.

ALNMOUTH, a village of England, in Northumberland, at the mouth of the Aine, 5¼ m. E.S.E. Alnwick. It exports considerable quantities of corn and other produce.

ALNWICK, a m. town of England, cap. co. Northumberland, on a declivity near the river Aine, 275 m. N. by W. London. Pop. 6788. There is a spacious square where a weekly market is held, and a large town-house, where the county courts meet, and the members for the county are elected; the assizes, however, are not held here, but at Newcastle. Alnwick was formerly fortified, and vestiges of its walls and gates still remain. At the N. entrance to the town stands Alnwick castle, once a principal stronghold of the kingdom on the side of Scotland, and now a magnificent baronial residence of the Dukes of Northumberland. It underwent, not many years ago, a complete repair and renovation, executed in good taste. At the entrance to the town, a column is erected in honour of one of the Dukes of Northumberland. A cross, called Malcolm's Cross, stands on the spot where Malcolm III., king of Scotland, is said to have been killed, in 1093, by a soldier who came to offer him the keys of the castle on the point of a spear. (See *Hailes's Annals of Scotland*, anno 1093, and *Dr. Percy's note* on the same subject.)

ALOST (Flem. *Aalst*), a town of Belgium, prov. East Flanders, on the Dender, about half way between Brussels and Ghent. Pop. 14,807. It is surrounded by walls, and is clean and well built; the parish church, the largest in the country, is not finished; it has a college, and several other educational establishments; a town-house, remarkable for its antiquity, with manufactures of linen, cotton, lace, hats, &c., print-works and dye-works, breweries and distilleries, tanneries, soap-works, iron and copper foundries, and potteries. Vessels of small size come up to town by the river; and it has a considerable commerce in the produce of its manufactures, and in hops of an excellent quality, grown in the neighbourhood, rape-oil, &c. At Alost is the tomb of the celebrated Thierry Martens, the friend of Erasmus, who introduced the art of printing into Belgium. (*Vander Maelen, Dict. Geog. Flandre Orientale*, p. 3.)

ALPHEN, a town of the Netherlands, prov. S. Holland, cap. cant. on the Rhine, 7½ m. E. Leyden. Pop. 2200. It has manufactures of earthenware and pipes.

ALPNACH, a village of Switzerland, cant. Unterwald, on the S.W. arm of the lake of Lucerne. Pop. 1300. A very singular road, called the *Slide of Alpnach*, is constructed in the immediate vicinity of this town, for conveying trees from mount Pilatus to the lake, from which they are forwarded to Holland, &c. (See *App.* to *Inglis's Switzerland*).

ALPS (THE), constitute (Caucasus excepted) the most extensive, and, at the same time, the highest mountain system of Europe. They extend from the banks of the Rhone in France on the W., to the rivers Verbas and Narenta on the E.; of which the former falls into the Save, a confluent of the Danube, and the latter into the Adriatic. Hence they occupy the whole space between the 5th and 18th degree E. long., forming a vast semicircular bulwark which encompasses, on the N., Italy and the Adriatic sea. The extremities of this semicircle approach 43° N. lat., but the great body of the range occupies the space between the 46th and 48th degrees N. lat.

The Alps are closely united to two other mountain ranges; on the W. to the Apennines, which traverse Italy in its whole length; and on the E. to the Balkhan, which covers Turkey and Greece with its numerous ramifications. The boundary line between the Apennines and the Alps is difficult to determine. It seems to be most expedient to suppose that the Alps begin on the W. side of the great road over the Bochetta pass (2550 feet above the level of the sea), which leads from Genoa to Novi in Piedmont. That portion of the range which begins at this road and extends E. to the sources of the Tinea, a tributary of the Var, is called the *Maritime Alps*, and does not contain any very high summits; but it is extremely steep, and is traversed only by one road practicable for carriages. This road connects the town of Nice with the town of Coni in Piedmont, and traverses three ridges by the *cols* or mountain passes of Brous, Brovis, and de Tende. The last col is in the main ridge of the range, and rises to 5984 feet above the level of the sea.

Between the plain of the Po and the valley of the Rhone, the mountain mass lies in its greatest extent S. and N., reaching from the shore of the Mediterranean, or from nearly 43°, to the lake of Geneva, or to nearly 46° 30′ N. lat. Its length is here, consequently, about 230 m., and its width averages about 100 m. The watershed between the rivers falling into the Po, and those emptying themselves into the Rhone, does not traverse the middle of the mountain region, but is found at about 30 miles from its E. border. On it rise some very high summits. The most remarkable are, mount Viso, 13,853 feet above the sea, and on whose E. declivities the Po takes its origin; mount Genevre attains 11,784, mount Cenis 11,795, and mount Iseran 13,986 feet above the sea. Farther N. is the immense mass of rocks that constitute Mont Blanc, whose highest point, the *Bosse de Dromedaire*, in lat. 45° 50′ N., long. 6° 51′ E., 15,748 feet above the sea, is the highest elevation to which the Alps attain. The valleys both to the E. and W. branch off at right angles from the watershed. Those to the east are short, straight, and deep, and terminate in the plain of the Po; those to the west are of much greater length, and rather winding. On this side, especially in the dep. *des Hautes Alpes*, between the upper branches of the rivers Isere and Durance, are placed a considerable number of very high summits; mount Loucyra attains 14,451 feet, mount Loupilla 14,144 feet, mount Pelloux de Vallouise 14,119 feet, and at least twelve others rise above 11,000 feet. The peculiar disposition of the valleys in this portion of the Alps has rendered the communication between France and Italy comparatively easy. The roads follow the valleys up to the watershed, and have then only to traverse one high ridge. Three great carriage roads lead over it. The farthest to the S. is the road of mount Genévre, which ascends from the banks of the Rhone along the valley of the Durance to Briançon, and traverses the ridge N. of mount Genévre, where it attains 6197 feet above the sea; whence it descends in the valley of the river Dora to Susa. The second is the road of mount Cenis, which on the side of France may be said to begin at Grenoble. It ascends first the valley of the Isere,

and afterwards of the Arc, a tributary of the former, and traverses the ridge N. of mount Cenis, where it is 6784 feet above the sea. Hence it descends into the valley of the Dora to Susa. The latter is by far the most used of all the roads over the Alps; and it is stated that annually from 16,000 to 17,000 carriages of all kinds, and from 45,000 to 50,000 horses and mules pass along it. The third carriage road is that of the little S. Bernhard, which ascends the valley of the Isere, passes the ridge between mount Iseran and Mont Blanc, and descends in the valley of the Dora Baltea to Aosta. It attains in its highest point to an elevation of 7200 feet above the sea; and it is most commonly supposed that it was by it that Hannibal penetrated into Italy. This portion of the Alps comprehends what commonly are called the Cottian, Graian, and partly the Pennine Alps, together with those of Dauphiné and Savoy.

At Mont Blanc the direction of the range is changed. It runs hence E.N.E., and the N. ridges continue in that direction to their termination in the neighbourhood of Vienna. With the change of direction a change in the disposition of the valleys is observed. The range is divided into two or more ridges, running nearly parallel, and including extensive longitudinal valleys. From the ridges enclosing these longitudinal valleys short transverse valleys descend S. and N. to the plains which bound the mountain range. This disposition of the ranges renders the communication between Italy on one side, and Switzerland and Germany on the other, much more difficult than the communication between Italy and France; for the roads must either traverse two or more ridges, or great deflections must be made to avoid one of them.

E. of Mont Blanc the range is divided into two high ridges, which enclose the valley of Valaise, and unite about 8° 30′ E. long., at the sources of the Rhone. The southernmost of these ranges, which is immediately connected with Mont Blanc, contains nearly in its middle mount Rosa, the second highest summit of the Alps, being 15,170 ft. above the sea. W. of it stands mount Cervin, or Matterhorn, the third highest summit, rising to 14,778 ft. Then follow mount Combin, which has 14,136 ft., and mount Velan, which attains 11,640 ft. E. of mount Rosa, and near it, is the Cima de Saci, 13,740 ft. high. This chain comprises the greater part of the Pennine and a portion of the Lepontine Alps, but is commonly called the Alps of Valaise. In the chain which encloses the valley of Valaise on the N. the greatest Burpoean glacier is found, not far W. of the source of the Rhone. Here a great part of the chain rises above the line of congelation, and is always covered with ice. It is stated to have an area of 260 sq. m. Many high summits rise out of it in the form of pyramids; and as the snow does not adhere to their steep sides, they form a sublime contrast with the sea of ice that surrounds them. The most famous of these summits are the Finsteraarhorn, 14,085 ft.; the Monch (Monk), 13,507 ft.; the Jungfrau (Virgin), 13,713 ft.; the Schrekhorn, 13,454 ft.; the Vischerhörner in Grindelwald, 13,333 ft.; and the Eiger, 13,032 ft. high. The glaciers of Grindelwald and Lauterbrunnen, which attract so many travellers, are only small detached portions of this immense glacier. W. of the great glacier the chain still contains many summits rising to 11,000, and even to 12,000 ft. of elevation; as the Altels, the Blümlisalp, and others. It may be considered as terminating on the W. with the Diablerets, or Teufels-hörner, which attains about 10,600 ft. of elevation. W. of them the mountains are of moderate height, and towards the lake of Geneva they sink into elevated hills. This chain goes commonly by the name of Alps of Bern (Berner Alpen).

The depression of this chain at its western extremity has afforded an opportunity of establishing a carriage communication between Geneva and Bern in Switzerland, and Milan in Lombardy. The road runs along the shores of the lake of Geneva, and enters at its eastern extremity the valley of the Rhone or of Valaise. It then ascends the valley as far as the town of Brigg, and passes thence over the S. range by the pass of the Simplon to Domo d'Ossola and the shores of the Lago Maggiore. The highest point of this road is 6585 ft., the town of Brigg 2325, and Domo d'Ossola 1003 ft. above the sea. This road, made by order of Napoleon, partly at the expense of France, and partly of the then kingdom of Italy, is a noble work. It is about 26½ ft. wide, rising 1½ inch each yard. In some places it is tunnelled to a considerable distance through the solid rock. It is the only carriage road over this range; but another road, used only by mules, has obtained celebrity by Napoleon having passed it in 1800, previously to his famous Italian campaign. This is the road of the Great S. Bernhard; it begins at Martigny on the Rhone, ascends the vale of the small river Drance to its source, where it passes over the chain near the celebrated hospice at an elevation of 8031 ft. above the sea, and descends hence to Aosta on the Dora Baltea.

E. of the sources of the Rhone is the only place in the Alps running W. and E. where the range is not divided by longitudinal valleys, but is intersected by the two transverse valleys of the Reuss and Tessino. Hence there has existed time immemorial a line of communication in this point between Switzerland and Italy. This is the road of the S. Gothard, uniting Zurich and Lucerne with Milan, running first along the shores of the lake of the four cantons (or of Lucerne) to Altorf, and afterwards in the valley of the upper Reuss to Andermatt. It passes the ridge at an elevation of 6850 ft., descends to Aviolo on the Tessino in Val Leventina, and runs in this valley to the Lago Maggiore, and thence to Milan. This much-frequented road has only in modern times been rendered practicable for carriages, on account of the poverty of the small cantons which it traverses.

That portion of the mountain system which lies between Mont Blanc and the road of the S. Gothard is less broad than any other part. It probably does not measure more than 80 m. across in a straight line; but its valleys, both to the S. and the N., but especially the latter, known by the name of Highlands of Bern (Berner Oberland), are considered as exhibiting the richest mountain scenery in the Alps.

E. of the road over the S. Gothard pass, the mountain system widens considerably; so that between 9° and 13° E. long. its average breadth may be estimated at between 120 and 130 m. But at the same time the high summits are less numerous, a few only attaining 12,000 ft., though a great number still exceed 10,000 ft., and pass the line of congelation. The height of the mountain passes shows evidently that the elevation of the whole mountain mass has rather increased than decreased, at least W. of the pass over the Brenner.

That portion of the range which approaches the pass of the S. Gothard is called the Rhaetian Alps, or the Alps of the Grisons. It is divided into four ridges, which enclose three longitudinal valleys; those of the Upper Rhine, of the Inn and Mera, and of the Adda. The central valley is divided by a high transverse ridge into two, of which the W. or shorter, called the vale of Bregaglia, is drained by the river Mera, which runs W., and falls into the lake of Como, or rather of Mesola; and the E. and much longer by the Inn, which falls into the Danube. The valley of the Upper Rhine, extending first E.N.E., turns afterwards suddenly N., and affords two openings towards the low country: one to the lake of Constance, and the other to the lake of Wallstadt. Thus the town of Chur or Coire, situated where the Rhine turns N., has an easy communication both with Germany and Switzerland. Though a small place, by far the greater part of the commercial intercourse between Bavaria, Wirtemberg, Baden, and Switzerland on one side, and Italy on the other, is carried on by the road passing through it. The canton of the Grisons, sensible of the advantage accruing from this commercial intercourse, has constructed three excellent roads over the range, which divides the affluents of the Rhine from those descending into the plain of the Po. A road runs from Coire along the Rhine to the place where the Vorder Rhein and Hinter Rhein join, and thence ascends in the valley of the latter to the village of Splüghen in the Rheinwald. At this place the road divides in two. One continues to ascend the valley of the Hinter Rhein to a village called also Hinterrhein, and passes thence over the high mountain ridge to S. Bernardino; it is called the road of S. Bernardino. From this village it descends in the Val Misocco or Miso along the river Moosa, which opens near Bellinzona into the small plain surrounding the N. extremity of the Lago Maggiore. This road, which rises to 6390 ft. above the sea, has been made in modern times to avoid the heavy duties which the Austrian government laid on the foreign commodities passing through its territories; for from Bellinzona they now can pass to Turin and Genoa without traversing any portion of the Austrian dominions. The other road leaves the Rheinwald at the village of Splüghen, and directly passes over the mountain ridge to Val Giacomo, which opens into Val Bregaglia near Chiavenna. The highest part of this road between Splüghen and Isola is 6560 ft. above the sea. Another road runs from Coire nearly directly S. over some mountains of moderate height, till it enters the valley of Oberhalbstein, which it ascends nearly to its upper extremity, where it divides into two branches, of which the E. passes mount Julier at an elevation of 7985 ft.; it leads to the valley of Engadien, and is not a commercial line of communication. The W. road passes over the Maloja and descends into Val Bregaglia, where it continues to the town of Chiavenna. It rises to 8250 ft. above the sea, and though practicable only for small carts, is much used.

The next road further E. is rather a military than a commercial line, and was recently made by the Austrian government to open a carriage communication between the newly-acquired Valteline and Tyrol. It begins at Innsbruck, ascends along the Inn as far as Finstermünz, near the boundary line between Tyrol and Switzerland; turns then southward, and passes the watershed of the Alps be-

tween Nanders and Reshen, where its highest point is about 6000 ft. above the sea. Then it descends along the valley of the Adige to Glurns; but a few m. S. of this it leaves the valley, and turning S.W. traverses a very lofty lateral chain of the Alps, which at the place where it is crossed by the road is called Monte Stelvio. It then rises to the height of 8960 ft., being the highest elevation of any carriage road in Europe. From this point it descends rapidly into the valley of the Adda to Bormio and Sondrio, and thence to Milan. It is commonly 16 ft. wide, and has been made at a vast expense, and with great skill.

This road encircles on three sides an extensive mountain region, filled up by snow mountains and glaciers, occupying the greater part of the country between Innsbruck and Glurns, and displaying the wildest scenery of the Alps. Eternal snow covers here a space not much less in extent than that which surrounds the Finsteraahorn and Virgin, and it is likewise overtopped by numerous steep summits of a pyramidical form, many of them rising to more than 10,000 ft. above the sea; as the Gebatch Ferner, 12,966 ft.; the Wildspitz Ferner, 12,364 ft.; the Glockthurm, 11,984 ft., and others. Where the road traverses Monte Stelvio it passes near another mountain group, less in extent, but rising to a greater elevation. In it is mount Ortelor or Orteler, the highest summit in Tyrol, 12,823 ft. above the sea; and near the latter, mount Hoch Ishernowald, 12,422 ft., and mount Zebru, 12,261 ft. high.

To the E., but at some distance from these mountain masses, is the road over the Brenner, which may be considered as the E. boundary line of the Rhaetian Alps. This road begins at Innsbruck, ascends the valley of the small river Sill, and passes thence over the watershed between the Inn and the Adige, where, N. of Sterzing, it attains the elevation of 4643 ft. It then descends in the valley of the Eisack from Brixen to Bolzano or Botzen, and thence to Roveredo and Verona. It is one of the most frequented commercial roads over the Alps.

This road may be considered as separating the W. from the E. Alps. The latter are distinguished from the former by being more distinctly divided by longitudinal valleys running W. and E.; by the greater number of separate ridges; their greater width and lesser elevation; the number of snow-topped mountains being comparatively few, and none of them occurring E. of 14° E. long. The northern half of this mountain region is known by the name of the Noric Alps; and the southern by those of Carinthian, Crainian or Julian, and Dinarian Alps.

Not far distant from, and nearly parallel with, the N. border of this mountain region, extends a very long longitudinal valley from 11° to 15° E. long.; but it is divided by two transverse ridges into three valleys, in which flow the rivers Inn, the Upper Salzach, and the Upper Ens, all of them running E. To the S. of the valley of the Salzach is placed the highest part of the Noric Alps. Many summits rise above the snow line, and between them are many extensive glaciers. The highest summits are the Gross Glockner, 12,567 ft.; the Gross Wiesbach or Krummhorn, 11,844; and the Ankogel, 11,873 ft. above the sea. The longitudinal valley S. of this range is divided by a transverse ridge into two valleys, of which the W. is drained by the Eisach, which runs W. and falls into the Adige. The E. valley is drained by the Drave, running E., and one of the largest tributaries of the Danube. The mountain chain dividing these from the plain of Lombardy is much less elevated, rising only in a few summits to above 8000 ft., and none of them exceeding 9090 ft. above the sea. Only the Terglou, which rises near 14° E. long., at the sources of the Save, attains a height of 9884 ft., and is by many considered as the most E. snow mountain of the S. range of the Alps.

E. of 14° E. long. the Alps are divided into five ridges by four longitudinal valleys, all of them opening to the E. These valleys are traversed by the rivers Ens, Muhr, Drave, and Save. The Muhr suddenly turns S., and, running through a wide and open transverse valley, empties itself into the Drave. The ranges enclosing these valleys on their N. and S. sides gradually decrease in height as they advance towards the E.; so that, when arrived at 16°, they may rather be termed hills than mountains, except the ridge which divides the valley of the Drave from that of the Save, which preserves its mountainous aspect beyond 18° E. long.; where, at the confluence of the Drave with the Danube, it sinks into low hills, but rises again into mountains towards the confluence of the Danube and of the Save, where it takes the name of Sirmian mountains, or Fruzka Gora. This latter group may be considered as the most E. offset of the Alps, but rises hardly to more than 3600 ft.

The range which divides the valleys of the Muhr and of the Ens turns S., and continues for a distance in that direction, forming the E. boundary of the transverse valley of the Muhr; but on the boundary line between Styria and Hungary, it subsides into low hills, which are followed by flat high ground, connecting the Alps with the forest of Bakony. This name is given to a low mountain range which separates the two plains of Hungary from one another, terminating where the Danube suddenly turns southward, and which may also be considered as one of the E. offsets of the Alps.

The most N. ridge of the Noric Alps, which skirts the valleys of the Salzach and Ens on the N., is broken through by these rivers, where they turn N. to run to their recipient, the Danube. This ridge may be considered to terminate with the Schnieberg, near Neustadt, rising 6882 ft. above the sea. This ridge sends numerous lateral branches to the N., which terminate close to, or at a short distance from, the Danube, between Linz and Vienna. But they rarely attain the height of 4000 or 5000 ft.

Through this part of the Alps lie the roads by which the towns of Linz and Vienna communicate with Italy and Triest and Fiume. There are especially two great roads, with different branches; having, as central points, the towns of Villach on the Drave in Carinthia, and of Laybach on the Save in Carniola. The first, uniting Linz on the Danube with Italy and Triest, runs in the beginning mostly along the banks of the river Traun, in a W.S.W. direction, to the town of Salzburg on the Salzbach: it then follows the valley of the last-mentioned river up to the place where it is divided by a transverse ridge from that of the Ens, and then passes over that ridge to Radstadt. Hence it directly ascends the elevated range which separates the valley of the Ens from that of the Muhr, and is known by the name of the Tauern. The highest point of this road, at Hirschwand, rises to 5290 ft. above the sea. From S. Michael, in the valley of the Muhr, the road ascends again to pass over the third range, which divides the valley of the Muhr from that of the Drave. This chain, however, is much lower. The road leads to Spital on the Drave, and thence follows the banks of the river to Villach. From Villach it ascends the valley of the Gail, a tributary of the Drave, to Tarvis, where the roads leading to Italy and Triest separate. The road to Italy turns W., traverses the most S. ridge by the pass of Pontoba, 2572 ft. above the sea, and descends through the valley of the Tella to Treviso and Venice. The road to Triest runs from Tarvis S., attains its highest point at the pass of Predil (3840 feet high), and descends thence in the valley of the Isonzo to Goerz or Goriza, whence it turns S. to Veith and Triest. This road is connected with that over the Brenner by a transverse road, uniting the valley of the Drave with that of the Eisach. It ascends along the Drave from Villach to Spital and Lienz, passes over the transverse bridge separating the valleys by the pass of Innich, and descends the Eisach in the wide valley of Puster to Brixen, where it joins the road over the Brenner.

The road between Vienna and the towns on the Adriatic runs in the beginning along the E. skirts of the Alps to Neustadt on the Leitha, whence it ascends the ridge called the Sommering, on whose summit it is 3237 ft. above the sea. Hence it descends along the small river Mürz to Bruck on the Muhr. Along the last-named river it passes through Gratz to Marburg on the Drave. It then traverses the range separating the Drave and Save, passing through Wendish, Teistritz, Cilli, and the Trojana pass to Laybach. Between this place and Triest is the mountainous country called the Adelsberg and Karst. Near Adelsberg the road rises 2271 ft. above the sea; it thence descends to Senosetsh, and passing over the Karst arrives at Triest. From the pass of Adelsberg a road branches off to Fiume.

Two carriage roads unite this road with that which connects Linz with Italy. The most N. runs in the valley of the Muhr westward, beginning at Bruck, and traversing Leoben, Indenburg, and Muran; at St. Michael it joins the other road. The S. runs in the valley of the Drave, between Marburg and Villach, and traverses Klagenfurt.

The Dinarian Alps, which may be considered as the link connecting the mountain system with the Balkhan mountains, occupy the country between the gulf of Quarnero or Fiume and the rivers Verbas or Verbriza and Narenta in Turkey, and have obtained their name from mount Dinara, their highest summit (near 44° N. lat.), which rises to 6046 ft. above the sea. The principal ridge runs nearly parallel to the Adriatic, at a distance of about 30 miles more or less, and forms at the same time the watershed between the rivers falling into the Adriatic or joining the Save. Lower ridges, mostly parallel to the principal ridge, fill the country between it and the sea; but those branching off towards the Save run nearly S. and N. Opposite the gulf of Quarnero, the higher mountains cover only a space of less than 80 miles from W. to E.; and as here the fertile plains of Hungary approach nearest the sea, the Austrian government, desirous of devising some means by which the abundant produce of that country could be brought to the markets of the commercial world, made, in the last century, two roads over the numerous ridges which traverse the country. They are known by the names of the Caroline and Josephine roads; the former rising at one point to 4976 ft. above

the sea. But the lines were not judiciously chosen. They ran over a succession of steep acclivities and declivities; and as they traverse a country destitute of water, they could only be used by light carriages and mules. But in the beginning of this century a company of private individuals constructed another and very superior road, on which all steep slopes have been avoided; so that it is practicable for carriages conveying the most bulky commodities from the interior of Hungary to the coast. This road begins on the coast at Fiume, ascends directly the mountains, passes through Kumenjak and Skerbuteryak, and terminates at Carlstadt on the Culpa, where this river begins to be navigable.

On three sides the Alps are surrounded by plains. On the S. by that of Lombardy, on the N. by those of Switzerland and Bavaria, and on the E. by the great plain of Hungary. The plain of Lombardy is less elevated than those of Switzerland and Bavaria; for the Lago Maggiore is only 805 ft., and the lake of Como 697 ft.; while the lakes of Geneva, Zurich, and Constance are respectively 1307, 1310, 1304 ft. above the sea. The highest ranges of the mountains are much nearer to the plain of Lombardy than to the plains on the N.; and their descent is much steeper towards Italy than towards Switzerland or Germany. The mean elevation of the great plain of Hungary is only 300 ft. above the sea; and in it terminate the E. extremities of the ranges, which nowhere rise to a great height.

The central ridges of the Alps are composed of primitive rocks, especially of granite and gneiss, and are distinguished by their pointed peaks. On the N. side of this formation extends a slate formation of considerable width. This does not appear to accompany the range on the S., except along the E. Alps, where it has been observed to extend from Brixen on the Eisach to Marburg on the Drave, skirting that river on the S. Beyond the slate formation, the chalk occupies a considerable space. It is found to occupy the greatest extent on the S.E. of the mountain system, the whole Julian Alps being composed of it. On the opposite or N.W. side, the sandstone formation extends from the lake of Geneva as far as the S. boundary of Bavaria. The chalk formation is distinguished by its summits, which do not rise in pointed peaks, but form either cones or cupolas.

All those parts of the numerous ridges which rise above the line of congelation are of course covered with snow all the year round. In many places the snow occupies a considerable space on the upper parts and summits of the rocky masses, and from these "eternal reservoirs" of snow the *glaciers* are derived. The sides of the rocky mass are usually furrowed by long narrow valleys; and in these masses of snow, descending from the upper parts under the form of ice, extend the farther downward the greater the mass and height of the snow from which they are derived. These accumulations of snow and ice form glaciers, many of which are from 15 to 20 m. long. Near the upper part, or at their origin, they are generally narrow, sometimes not much more than 100 yards across; but as the valleys grow wider as they proceed downward, the glaciers also extend in width, taking the shape of a fan, and in some places are 2 miles across. The thickness of the ice masses varies from 100 to, perhaps, 600 feet. Though the snow line in the Alps is found at an elevation of about 8000 ft. above the level of the sea, some of the glaciers descend so far downward that their lower extremity is not more than 3500 ft. above it. The ice of the glaciers does not resemble that with which our rivers are covered in winter. It consists of a great number of crystals measuring from half an inch to two inches in length, and somewhat less in width, united by having been pressed strongly together. It is difficult to remove one of these crystals without breaking it; but when the first has been removed, the others may be easily taken up. The surface of the glaciers is very various, and depends on the degree of inclination with which the valley descends. Where the descent is gradual, the surface of the glacier is nearly level, and offers few crevices; but where the declivity is rapid and uneven, the glacier is rent with numerous chasms, and covered with elevations, rising from 100 to 200 feet, having the aspect of a sea agitated by a hurricane. The chasms are frequently many feet wide, and more than 100 deep. Their formation, which never takes place in winter, but is frequent during summer, is accompanied with a loud noise resembling thunder, and a shock which makes the adjacent mountains tremble. These chasms are subject to change every day, and almost every hour, and it is this circumstance that renders the ascent of the glaciers so dangerous to travellers. Sometimes there are found in the glaciers pyramids of ice of a considerable elevation and a regular form, on the tops of which are placed large pieces of rocks. At the lower extremity of the glaciers is an excavation in the form of a grotto, frequently 100 feet high and from 60 to 80 wide, whence issues a small river, bringing down a bluish water. Though every single crystal of the ice of the glaciers seems perfectly white, the whole mass is of a blue colour, passing through every shade from the most feeble sky-blue to that of the lapis lazuli; it is most pure and beautiful in the lower parts of the chasms. The glaciers impart one of the greatest charms to the scenery of the Alps, by the beauty of their colour, and their contrast with the surrounding country, their lower extremities being commonly contiguous to meadows covered with the finest grass and the most beautiful flowers, and the declivities of the mountains which enclose them exhibiting large tracts clothed with magnificent trees, especially firs.

Avalanches are more frequent in the Alps than in most other mountains, because of the steepness of their declivities. The most common consist of masses of snow, which, commencing their descent at the higher parts of the mountains, and increasing in magnitude and velocity as they roll down to the valleys, overwhelm, in their headlong career, men and cattle, destroy villages and forests, and dam up and obstruct the course of rivers. Four kinds of avalanches may, however, be distinguished. 1. The *drift* avalanche takes place when the upper parts of the mountains have been covered by a heavy fall of snow during a calm, followed by a strong wind before the mass has acquired consistency. An immense mass of loose snow is then suddenly brought by the wind into the valleys, where it frequently covers villages; but in general these avalanches do not occasion much damage, unless when they cause a compression of the air. This sort of avalanche usually occurs in the beginning of winter. 2 The *rolling* avalanches: these bring down great masses of compact snow, especially towards the end of the winter, when it begins to thaw. In their progress, they are increased by all the snow they meet in their descent; their impetus and mass being frequently such as to overwhelm and beat down everything, rocks not even excepted, that may interrupt their course. These, the most destructive of the avalanches, cause great loss of life and property. 3. The *sliding* avalanches are masses of snow descending slowly along the surface of a not very steep declivity. They take place in spring, when a long thaw has dissolved that portion of the snow which lies immediately on the rocks, and thus loosened the bond with which the whole mass is united to its base. They carry before them everything that is too weak to withstand their pressure. They sometimes occasion considerable loss, but not frequently. 4. The *ice* or *glacier* avalanches are formed by larger or smaller pieces of ice, detached from a glacier by the summer's heat. They are precipitated downwards with a noise like thunder. When seen from a distance, they resemble the cataract of a powerful river. As they generally descend into uninhabited places, they seldom do much damage.

The rolling and sliding avalanches expose travellers to the greatest dangers they have to incur in traversing the Alps. There are, in fact, certain localities on the most frequented roads to which they descend annually, and which are consequently very dangerous. To obviate the risk of accidents from this cause, in the construction of new roads, as of those of the Simplon and over Monte Stelvio, care has been taken at such places to excavate the mountain to a certain depth, and to cover over the road with strongly-built arches, which effectually provide for the safety of the traveller. A few places on the roads are also rendered unsafe by less or greater pieces of rock which descend with fearful velocity from the steep declivities of the mountains. This usually happens when, after some days' continued rain, a strong wind arises and shakes the higher portion of the mountains. Luckily, however, such places are not frequent. Travellers on the glaciers run the risk of falling into chasms, or of finding the ice under their feet suddenly opening in the progress of the formation of a new chasm.

The scenery of the Alps owes a part of its numerous charms to the great number of extensive lakes, of which nearly every one is distinguished by some peculiar beauties. Most of them have an easy access, being situated on or near the outskirts of the range, as the lakes of Geneva, Constance, and Zurich; or partly within and partly without the range, as the lake of the Four Cantons, and the Lago Maggiore and that of Como, and the beautiful lakes in Austria. Innumerable are the small lakes which occur on or near the summits of the high ridges and glaciers. Most of the rivers and torrents have their sources in such lakes.

The chalk formation of the Julian Alps offers the most interesting natural phenomena. It consists of a fine-grained, much-decomposed primitive chalk, which is rent by a great number of transverse crevices and precipices, and frequently forms deep depressions, in the fashion of funnels. In it occur numerous caverns and subterraneous galleries of great extent, in which everywhere the finest and most fantastic stalactites are formed. More than a thousand such caverns are already known, and many have never been visited. The most remarkable are those of Adelsberg (which see). Magdalen in its neighbourhood, Zirknitz, &c. Numerous,

age, are the rivers and torrents which suddenly disappear underground, precipitating themselves into a large chasm, and reappearing after a subterraneous course of many miles. Here are also many intermittent wells, which, at certain seasons, emit large quantities of water, and at others are dry. Several of them feed the lake of Zirknitz, which has acquired celebrity for being for several months quite dry, and for several others filled with water; so that it serves each year successively for tillage, pasturage, hunting, and fishing!

The Alps are not rich in metals, except iron. Some mines of gold and silver occur on the S. as well as on the N. declivity, especially in the Austrian dominions; but their produce is inconsiderable. Others of copper and lead are more productive; but they too are comparatively poor, except the Bleiberg (lead mountain) of Carinthia, which furnishes some of the best lead in Europe. The quicksilver mines of Idria, N.N.E. of Trieste, are reckoned among the richest of the globe. The iron mines of Styria, Carinthia, and Carniola are very productive, and their produce hardly inferior to any of Europe. Rock-salt occurs only in a very few places in the W. Alps; but on the N. side of the E. Alps are very rich layers of that mineral, running, as it seems, in a continuous line from the banks of the Inn at Halle to those of the Enns in Austria. They are worked with great industry at different places.

Vegetation covers the greater part of the Alps. The larger valleys, none of which rise to 5000 feet above the sea, contain some tracts fit for agricultural purposes. They consist, generally, of uneven ground, extending on both sides a river. Behind it the mountains rise with a steep and commonly inaccessible ascent, which is covered with high trees: in the lower parts with oak, beech, elm, &c.; and in the upper region with fir, pine, larch, and the *Pinus Cembra*. Near the region of the pastures the trees dwindle down to low bushes. The pasture region, which occupies the next place, offers commonly a plain strongly inclined towards the valley, and is in general of considerable width. It is called in Switzerland *the Alps*. Here are found the huts or *sennes* of the herdsmen, inhabited only in summer, when the cattle are brought to these pastures. The upper part of the range is occupied by bare rocks, many of which rise above the line of congelation. This line occurs in the Alps between 8000 and 9000 feet above the sea, and is lower on the N. than on the S. declivity.

Corn is grown on the N. side, not above 3800 or 4000 feet; but on the S. it succeeds 1500 feet higher. The highest place at which barley ripens is Sknia, in the Engadin, 5950 feet above the sea. High trees are found in some places not above 4500 feet, at others they ascend the declivities even to 7000 feet and more. Oak is found up to 4000 feet, elm to 4300, ash somewhat higher, beech to 5000, fir to 5300, mountain ash to 5600, birch to 5700, pines to 6500, and larch to 7000 or 7300 feet above the sea. Where the high trees begin to cease, the mountains are covered with bushes and the Alpine rose (*Rhododendron ferrugineum* and *hirsutum*).

The inhabitants of those ranges of the Alps which extend from the Mediterranean to the lake of Geneva are mostly of French origin, speaking a corrupt dialect of the French language. In the remainder of the mountain system the population is of Teutonic origin, only a few of the more open valleys, terminating in the plain of Lombardy, speaking a dialect of the Italian language. The most E. extremity of the whole range, between the rivers Muhr and Save, and the Julian Alps, is partly inhabited by a population of Slavonian origin, called the Wendes or Slovenzi. As the tracts of land are fit for agricultural purposes are of comparatively small extent, the rearing of cattle and the making of butter and cheese constitute the principal employment. Many of the inhabitants migrate, at certain seasons, to the neighbouring countries in search of work. Some of them return annually, some after the lapse of some years. Besides the dairy, the mines give employment to a number of inhabitants; but this is only the case in the E. Alps of Styria, Carinthia, and Carniola, where rich mines of iron and extensive layers of salt are found. In these districts, also, are some manufactures of hardware and iron utensils. In the other parts of the range manufacturing industry is almost unknown; but near its outskirts on the N. side it has in later times become so diffused, that it hardly yields to any other part of the continent. The inhabitants of the mountains are distinguished by their love of liberty, their opposition to every kind of oppression, the frankness of their behaviour, their adherence to their old manners and dress, and their fidelity and honesty.

The Alps did not become well known till the reign of Augustus. That emperor finally subdued the numerous and savage clans which inhabited the Alpine valleys, and cleared the passes of the banditti by which they were infested. He improved the old roads, constructed new ones, and succeeded in establishing free and easy communications across the mountains. The chain was then divided into separate portions, which have preserved their boundaries and denominations nearly to the present day.

See, for information on the Alps, *Saussure, Voyage dans les Alpes*, 1779; *König's Reise in den Alpen*, 1814; *Wyss, Reise in das Berner Oberland*, 1816 and 1817; *Reise in wenig besuchte Alpengegenden von Kiriel Escher*, 1829; *Bemerkungen of einer Alpenreise über den Susten, Gotthard, Bernardin, Oberalp, Turka und Grimsel von Kastenhofer*, 1830. Travellers will find much useful and interesting information with respect to the Alps in *Ebel's Manuel du Voyageur en Suisse*, 1817.

Alps (Lower), *Basses Alpes*, a frontier dep. in the S.E. of France, having E. the Sardinian states, S. the dep. of the Var, W. dep. Vaucluse, and N. the depts. Drome and Hautes Alpes. Area, 682,643 hectares. Pop. 159,045. This dep. derives its name from its being principally occupied by the W. slope of the Alps. Its aspect is highly varied and picturesque: presenting a succession of high, rugged mountains, crowned with eternal snow, vast sombre forests, and low, rich, smiling valleys. The mountains, hills, &c., occupy about half the surface, and the woods about a sixth part; the extent of cultivated land is estimated at 155,000 hect., of meadows at nearly 18,000, and vineyards at 14,000 do. The principal river is that of the Durance, which traverses the dep. from N. to S.; it is also in part intersected, and in part bounded by the Verdon, and is watered by many mountain streams, the inundations of which often occasion great mischief. The climate varies, of course, with the elevation and exposure of the soil. There is a good deal of spade husbandry; and mules and asses are used in preference to either horses or oxen. Produce of corn crops insufficient for the consumption. Potatoes extensively cultivated. Olive, fig, and mulberry trees are all cultivated in the lower and warmer districts, and dried and other fruits make a considerable article of export. The lower mountains afford excellent sheep pasture. They belong partly to individuals, and partly to communes; and besides the stationary sheep, or those that belong to the dep., about 400,000 head are annually brought from the adjoining depts. of the Var and the *Bouches du Rhone*, to be depastured for about four months in summer on the mountain referred to. They pay at the rate of from 1 fr. to 1 fr. 25 cent. per head; and both their size, and the quality of their flesh and wool, are said to be materially improved by the change. The shepherds never quit their charge either by night or by day. Besides the sheep belonging to the dep., the breed of which has been materially improved, it has a great number of goats; and the rearing of bees is also much attended to. There are mines, but not very productive, of iron, lead, copper, and coal. Manufactures have not made much progress; but there are several silk filatures and silk looms, with manufactures, of cloth, hats, earthenware, tanneries, &c. Great numbers of the poorer classes leave their homes for a portion of the year, to seek employment in the neighbouring depts. It has two electoral colleges, which return two m. to the Ch. of Deputies; and had, in 1838, 527 electors. Public revenue in 1831, 2,638,917 fr. Principal towns Digne, Sisteron, Barcellonette, in the picturesque valley of the same name. Forcalquier, &c.

Alps (Upper), *Hautes Alpes*, a frontier dep. in the S.E. of France, on the N. side of the dep. of the *Basses Alpes*, and having on the E. the Sardinian States. Area, 553,264 hect. Pop. 131,162. This dep. differs in few respects from that just described, except that it is more mountainous and less fruitful. Some of the mountains rank, in fact, among the highest in the immense chain of which they form a part. Mont Pelloux, the most elevated, rises 14,120 feet above the level of the sea, and mont Olan 13,461 do. The mean elevation of the mountains may be taken at about 9000 feet; and the elevation of the highest *cols* or passes from one valley to another sometimes exceeds 7000 feet. There are several glaciers in the N. part of the dep. Agriculture similar to that of the Basses Alps. Only 97,500 hect. of surface is cultivated; 77,000 hect. are occupied by woods and forests, and about 94,000 by meadows, the irrigation of which is an object of great importance. The valleys principally lie alongside the rivers Durance, Briuch, Drac, &c. Inhabitants poor and laborious; it is even said, that women are sometimes seen yoked, *avec des anes*, to the plough! *Greniere d'abondance*, are established in different communes, which make loans of seed and necessaries to poor families. There are mines of iron, lead, &c. Manufactures principally confined to coarse cloth, linen, stockings, hats, &c., required for the use of the inhabitants. The cheese and butter of the Briançonnais are highly esteemed. Bread made of potatoes is extensively used. Families using rye bread commonly bake it only once a year; it keeps for fifteen or eighteen months; is hard, and has to be broken to pieces by a hatchet. Between 4000 and 5000 of the peasants leave the dep. every year in the beginning of October, and return early in June. It is estimated that, at an average, about a fifth part of those that emigrate never return, and that those

who do, bring back with them about 200 fr. a piece; the emigrants principally take to the trades of pedlars, showmen, &c. It has two electoral colleges, which return two m. to the Ch. of Deputies, and had in 1836, 419 electors. Public revenue, in 1831, 2,307,152 fr. Principal towns Gap, Briançon, and Embrun. (For this and the prev. dep., see *Hugo*, arts. *Basses et Hautes Alpes*; the authorities there referred to; and the *French Official Tables*.)

ALRESFORD, a market town and two parishes of England; co. Hants, hund. Alton. The town is situated on the Itchin, at no great distance from its source, 87½ m. S.W. by London. It was formerly a place of much more importance than at present, and sent a member to the H. of C. Pop. of town and parishes, 1896.

ALSACE, a ci-devant prov. of France, forming the depts. of the Upper and Lower Rhine.

ALSACE, t., Berks co., Pa. Watered by Roush's creek, and contains two churches, common to Lutherans and Presbyterians, two fulling-mills, four grist-mills, three saw-mills. Pop. 2498.

ALSEN, a Danish island in the Baltic, separated by a very narrow channel from Sleswick, and by the Little Belt from Funen. Shape irregular, being about 20 m. long, and from 3 to 8 in breadth. Pop. 15,200. Surface pleasantly diversified with wood and open fields. All the country houses are surrounded by fruit-trees, and large quantities of fruit are annually exported. Principal towns Norborg and Sonderborg. Christian II., deposed by the states of Denmark in 1523, was confined for nearly seventeen years in a tower (since demolished) in the castle of Sonderborg.

ALSFELD, a walled town of Hesse Darmstadt, cap. Bailiwick, on its N. frontier on the Schwalm. Pop. 3019. It has manufactures of rateens, flannels, and linen, with considerable bleach-fields and print-works.

ALSLEBEN, a walled town and castle of Prussian Saxony, reg. Merseburg, on the Saale. Pop. 1700. The castle is the property of the Duke of Anhalt Dessau, to whom the town belongs.

ALSTEAD, p. t., Cheshire co., N.H., 14 m. N. Keene, 66 W. by S. Concord, 450 W. Watered by Cold river, and branches of Ashuelot river, and has four stores, one fulling-mill, two grist-mills, three saw-mills, two academies, 59 students, fourteen schools, 454 scholars. Pop. 1454.

ALTAI MOUNTAINS (THE), a very extensive mountain range in Asia, extending from the eastern banks of the Irtish, a tributary of the Oby (80° E. long.), to the shores of the Pacific, at the S. extremity of the sea of Okhotzk, opposite the island of Tarakai (142° E. long.). Its length, therefore, is little short of 2500 m. The several chains which compose this mountain system are chiefly found between 48° and 52° N. lat., but some detached ridges advance to 45° and 57° N. lat. The breadth of the whole system is probably nowhere less than 350 m., and at some places it widens to 700 m. and upwards. It is, however, not possible to determine it with any degree of exactness, since only the N. declivities of the range have been visited by travellers, the S. declivities lying within the territories of the Chinese empire being inaccessible to Europeans.

The most westerly portion of the system, between the river Irtish and the river Tshulyshman, the upper branch of the Oby, is properly called the Altai mountains, which name has been afterwards used to indicate the whole system. This portion bears also the name of the Ore Altai, because it contains numerous veins of the precious metals. It consists of several ridges, which mostly run W.N.W. and E.S.E. These ridges advance their W. extremities close to the banks of the Irtish, where they are 500 or 600 feet high, but at a distance of about 15 or 20 miles from the river, they attain from 3000 to 5000 feet, which elevation may be considered as the mean height of the greatest part of the ranges; only where they approach the lake Teletzkoi and the river Tshulysham, they rise still higher, even to 10,000 feet, and this part is always covered with snow. It is called Altai Bielhi, and is, so far as is known, the highest portion of the system.

Between the Tshulyshman and the great lake of Baikal, the mountains appear to form two great chains, running E. and W.; of which the S., which falls within the Chinese empire, and is called the Tangnu Oola, or Tangnu Shan, seems to be the principal range. It is divided from the N. chain by a long valley, in which run the Kemtshick from W. to E., and the Ta-kem from E. to W.; after their junction, the river is called Yenesei, and breaks through the N. chain. The portion of the latter situated W. of the Yenesei river is called the Sayanskian range, but the E. chain bears the name of Ergik Targak Taiga. Both chains unite about 100° E. long., at a considerable distance W. of the lake Baikal, at the sources of the Selenga, the most considerable river which empties itself into the lake. The united chain is here called Goorbi Uhden Dzong, which name it preserves to 108° E. long., running in general E. On the E. side of the meridian of 108° E. long. and the river Selenga, the direction of the mountain chains composing the Altai system is changed; they run N.E., and form a very extensive mountain region E. of the lake Baikal. This region is called the Baikalian or Daurian mountains; but the highest chain belonging to it, and lying within the Chinese empire, bears the name of the Great Khing-Khan. The most easterly portion of the Altai mountains, between 130° and 140° E. long., lies again nearly due W. and E.; but here it advances to 56° N. lat., and is called by the Russians Yablonoi Kherbet, and by the Chinese Khing-Khan Tugurik.

The *Aldan* mountains may be considered as a continuation of this latter chain. They separate from it at the sources of the river Aldan, a tributary of the Lena, enclose the valley in which it runs on either side, and continue on the E. side along the shores of the sea of Okhotzk up to the bay of Penshina, the most northerly corner of that sea. From this bay one branch runs N.E., and terminates at Behring's strait, with the East cape and the cape of Tshukotshoi-Noss. Another branch turns abruptly S., and traverses the peninsula of Kamtshatka, terminating at cape Lopatka. The highest summit of the Aldan mountains, adjacent to the road connecting Yakutzk with Okhotzk, was found by Erman to be 4955 feet above the sea. But the chain traversing the peninsula of Kamtshatka contains several volcanoes, some of which rise to a great elevation. Erman measured three of them. The highest peak of the volcano of Shivéluzk (56° 40′ 22″ N. lat.) rises to 10,591 feet; the volcano of Klutshavsk (56° 4′ N. lat.), 15,825 feet; and that of Tolbatchinsk, 6346 feet above the sea. If the Aldan mountains and the range traversing Kamtshatka be considered as a continuation of the Altai chain, more than 1500 miles must be added to its length.

The country extending N. of the Altai mountains to the shores of the Polar sea is one continuous plain, sometimes of an undulating surface, but mostly exhibiting immense flat lowlands, called, as others of a similar description, *steppes*. This plain, at the foot of the range, is hardly more than 500 feet above the sea, to which it gradually slopes down. On the other hand, the countries lying S. of the Altai mountains constitute a portion of the great elevated table-land of upper Asia. Their surface is much more uneven, being traversed in many parts by ridges of rocks and hills, while others present themselves as immense plains covered with sand. The mean elevation of these countries seems to be from 2000 to 3000 ft. above the level of the sea.

Roads.—Two roads lead over the Altai, and one over the Aldan mountains. That most to the W. is the great road of Kiachta, by which the commerce between Russia and China is carried on. It begins at Irkutzk, the capital of E. Siberia, situated on the lower Angara, not far from the point where it issues from the lake Baikal. From this town, which is 1440 feet above the sea level, goods are carried in summer by water, and in winter over the ice of the lake, to Udinsk, and hence to Seleginsk, where they are landed, and transported to Kiachta, the Russian commercial establishment, and exchanged with the goods brought by the Chinese to Maimatshin. The Chinese bring the goods to Urga, the provincial capital of the adjacent country; and, in advancing farther S., they attain the highest point of the range S. of Urga, on the mountain Dshirgulanta, S. of the river Tola, where it rises to 5065 feet above the sea. They afterward descend to the table-land, and traverse the great desert of Cobi, or, rather, Gobi, sometimes called Shamo. The other great road leads from Udinsk, on the river Selenga, to the mining district of Nertshinsk. From Udinsk it runs E. in the valley of the river Uda, a tributary of the Selenga, somewhat more than 250 m.; then it traverses the highest part of the range near 112° E. long., and descends into the valley of the Ingoda, in which it continues to Gorodiskatshenk, where the Ingoda unites with the Onon, and forms the Shilka river. On the banks of the last-mentioned river it continues to Nertshinsk. The great road over the Aldan mountains connects Yakutsk with Okhotzk. Yakutsk is only 287 feet above the level of the Polar sea. Between this place and the river Aldan, the road rises gradually, and attains, at Nokhinsk, on the heights, forming the W. bank of the Aldan river, 751 feet. In the valley of the Aldan it descends to 424 feet above the sea. E. of this river the road rises to 1531 feet at Garnastakh, and in the mountain-pass six miles W. from Kholnie to 2619. It continues nearly on this level for several miles, and then descends, with a rather steep declivity, towards the sea at Okhotzk. This latter place is only 13 ft. above the sea.

Mines.—The Altai mountains are rather rich in metals, especially in silver, gold, copper, and lead. The mines from which these metals are extracted have been worked on a large scale at some unknown period, and by an unknown nation. In the middle of the last century, the Russians, following the traces of the ancient mines, began to work them; but only at the W. extremity of the mountain system, between the Irtish and the Oby, and again on the

banks of the Shilka river, E. of the lake Baikal. The first mines are comprehended in the mining district of Barnaul, and the second in that of Nertshinsk.

The mining district of Barnaul, called by the Russians that of Kolywano-Woskresensk, comprises the mines in the Altai Ore mountains, where, at present, the richest mines are found in the valleys by which the W. declivity of the mountains, sloping towards the Irtish, is furrowed. Here are the mines of Syryanowsk, in the valley of the Bukhtarma, about 40 m. from the Irtish, and at no great distance from the boundary of the Chinese empire; they are productive of silver and lead. Farther to the N.W. are the mines of Rhiderskk and Krukow, in the valley of the small river Ulba, which, also, produce silver and lead, and are at present considered as the richest in this district. In the valley of the Uba, N.W. of Shamanaicho, are the mines of Semenoff, which produce silver and copper, but are not rich. In the valleys forming the N. declivity of the range are the mines of Schlangenberg, famous for the great quantity of silver extracted from them during the last century; but at present they are less considerable, and begin to be exhausted. W. of them are the mines of Loktewsk, producing great quantities of copper. To the E. of the Schlangenberg are the mines of Woskresensk, which furnish copper, but at present are not worked. The ores from these mines were formerly carried to Barnaul on the Oby, where they were smelted; but smelting houses are now erected in the neighbourhood of the most considerable mines. They are all worked on the account and for the benefit of the Russian government; and an imperial ukase directs that every year 950 pouds (34,200 lbs.) of gold and silver shall be sent to Petersburg from this district. Of this amount 920 pouds are silver, and 25 pouds of gold extracted from the silver. The quantity of copper and lead annually furnished by them is not stated. The former is partly coined in Siberia, in the mint of Susansk. At Kolywano Woskresensk are extensive polishing works, where granite, porphyry, jasper, agate, and marble are worked into tables, vases, chimney-pieces, basins, columns, &c. The material is brought from the river Korgon, and 300 workmen are employed in them at the expense of government. The mining district of Nertshinsk, on the Shilka, a tributary of the Amur, is much less important. The number of mines is stated to amount to upwards of 50, but many of them have been abandoned. The ore is smelted in several large smelting establishments, of which that of Nertshinsk is the most considerable. The silver is extracted from galena ore, a cwt. of which contains from ½ to to 2 ounces of silver. The annual produce is stated to be only 235 pouds, or 16,500 marcs of silver; consequently, less than a fourth part of the annual produce of the mines of Barnaul. The ore, though poor, is very abundant; but the want of fire-wood and coal in the neighbourhood of the mines prevents the increase of their annual produce. (See *Pallas, Humboldt, Ledebour, Von Bunge, and Erman.*)

ALTAMURA, a town of Naples, prov. Tera di Bari, at the foot of the Appenines, 29 m. S.W. Bari. Pop. 16,000. It is surrounded by walls, has a magnificent cathedral, founded by Frederic II., an hospital, and a lyceum, and is one of the handsomest best built towns in the province. Having taken part with the republican party in 1799, it was taken by the royalists, and given up to military execution; but it has since recovered its former prosperity. Altamara is supposed to be founded on or near the site of the ancient *Lapazia.*

ALTAVILLA, a town of Naples, prov. Principato Ultra, cap. cant., 7 m. N. Avellino. Pop. 2600. This also is the name of a town in the prov. Principato Citra, S. Campagna. Pop. 9400.

ALTDORF, a town of the grand-duchy of Baden, on the great road from Bale to Frankfort. Pop. 1200. It is the property of baron Turkheim, who has here a fine castle and a valuable botanical garden.

ALTDORF, a town of Bavaria, circ. Rezat, 13 m. S.E. Nuremberg. Pop. 2000. All sorts of wooden toys are manufactured here, and are exported to all parts of Europe and to S. America. There are also considerable breweries. The surrounding country is beautiful and fertile.

ALTEA, a town of Spain, Valencia, near the sea, 30 m. N.E. Alicant. Pop. 4800. It has glass-works, and the contiguous territory produces cotton, wine, flax, silk, and honey.

ALTENA, a town of Prussian Westphalia, cap. circ. same name, on the Senne. Pop. 4000, principally employed in wire-drawing and in the manufacture of needles, pins, thimbles, &c.

ALTENAU, a mining town of Hanover, prov. Grubenhagen, Hartz mountains, about 1500 feet above the level of the sea. Pop. 1200. There are in the vicinity mines of silver, copper, and iron.

ALTENBERG, a town of the kingdom of Saxony, in the Erzgebirge mountains, 22 m. S. Dresden. Pop. 1400. It manufactures lace; the surrounding mountains abound in tin, and are covered with forests.

ALTENBRUCK, a town of Hanover, on the Werne, near where it falls into the estuary of the Elbe, a little above Cuxhaven. Pop. 2400. It has some trade in corn and cattle.

ALTENBURG, a principality in the duchy of Saxe Gotha, divided into two principal parts by the lordship of Gera, and possessing several detached portions in other states. Area, 495 sq. m. Pop. in 1832, 113,677. The W. part, watered by the Saale, is hilly and woody; while the E. part, watered by the Pleisse, is flat and fertile. The inhab., who are descendants of the Wendes, are industrious, and are almost all Lutherans.

ALTENBURG, the cap. of the above principality, 24 m. S.S.E. Leipsic, near the Pleisse. Lat. 50° 50′ N., long. 22° 27′ E. Pop. 12,629. It is well built; has a gymnasium with a considerable library, a foundation for noble ladies, an orphan asylum, and a theatre; with manufactures of wool, tobacco, sealing-wax, gloves, and an extensive trade in wood, corn, and cattle.

ALTENBURG, a town of Hungary, 29 m. S.S.E. Knoxburg, in an island of the Fricha, at the point where it unites with the right arm of the Danube. It has a gymnasium, and an old castle, now used as a corn-magazine. It was burned by the Turks in 1683.

ALTENKIRCHEN, a town of the Prussian states, prov. Rhine, cap. circ., on the Wied, 16 m. N. Coblentz. Pop. 1150. It has some fabrics of linen and cotton, and a forge. The vicinity of this town was, in 1796, the theatre of some obstinate conflicts between the French and Austrians; in one of which, on the 21st September, the brave general Marceau was killed.

> Brief, brave, and glorious was his young career:
> His mourners were two hosts, his friends and foes.—*Byron.*

ALTENSTEIG, a town of Wirtemberg, circ. Black Forest, 5 m. W.N.W. Nagold. Pop. 1700. It is built on the declivity of a steep hill, at the summit of which is an old castle.

ALTER-DO-CHAO, a town of Portugal, prov. Alentejo, on the Avis, 14 m. W.S.W. Portalegre. Pop. 2000. It is surrounded by walls.

ALTKIRCH, a town of France, dep. Haut Rhin, cap. arrond., 34 m. S. Colmar. Pop. 3028. It is situated on a hill, at the bottom of which is the Ill; has some tanneries, and a cattle fair once a month.

ALTOMONTE, a town of Naples, prov. Calabria Citra, 24 m. N.N.W. Cossenza. Pop. 2100. It is situated on an eminence, has good air, with mines of iron and silver, and a brine spring in the vicinity.

ALTON, p. t., Belknap co., N.H., 28 m. N.E. Concord, 509 W. Watered by Merrymeeting river, which enters Merrymeeting bay of lake Winneptseogee, which bounds it on the N.E. It contains seven stores, one grist-mill, twenty-five schools, 798 scholars. Pop. 2002.

ALTON, p. t. and city, Madison co., Ill., 82 m. W. by S. Springfield, 808 W. Situated on the E. bank of Mississippi river, and has an excellent steam-boat landing. It extends 2 m. along the river, and half a m. back, and has five public squares. It is regularly laid out, with streets from 60 to 180 ft. wide, and contains six churches, one each belonging to the Baptists, Presbyterians, Methodists, Protestant Methodists, Episcopalians, German Evangelical, and Unitarians, a bank, a lyceum, and a mechanic's association. Seven or eight steamboats are owned here. It is finely situated for commerce, and has had a rapid growth. It contains four commission-houses, thirty-eight stores, one brewery, one flouring-mill, three saw-mills, three printing-offices, two weekly newspapers and one periodical, eight schools, 253 scholars. Pop. 2340.

ALTON, a m. town and parish of England, co. Hants, hund. Alton, on the Wye, 47 m. S.W. by S. London. It is a neat town, with manufactures of druggets and worsteds. Pop. 2742.

ALTONA, or ALTENA, a considerable city of Denmark, in Holstein, on the Elbe, 2 m. W. Hamburg. Pop. 26,400. It is well built, is a free port, and enjoys various privileges: it having been a favourite object with the Danish government to attract to it some portion of the wealth and commerce of Hamburg. But in this they have had but little success. Altona has, however, a good deal of trade; shipbuilding is also carried on to a considerable extent; and there are manufactures of cotton, silk, leather articles, &c., with sugar-houses, breweries, and distilleries. There is here a superior academy or college, a public library, a mint, an orphan-house, with numerous churches, &c. The inhabitants are mostly Lutherans. Altona was burned by the Swedes in 1713, under circumstances of great barbarity.

ALTORF, or ALTDORF, a town of Switzerland, cap. cant. Uri, delightfully situated in a narrow valley surrounded by lofty mountains, near the S.E. extremity of the lake of Lucerne, at the N. extremity of the pass over mount St. Gothard, lat. 46° 53′ 10″ N., long. 8° 37′ 47″ E. Pop. circa 1700. It suffered severely from a fire in 1799, but has since

been rebuilt on an improved plan. It has a handsome parish church, a town-house, and a Capuchin convent, with a library attached. Altorf is intimately associated with the true or fabulous history of William Tell. He is said to have been born in Burglen, a village close by; and an old tower, in the town of Altorf, covered with paintings in honour of Tell, is said to mark the spot whence he shot the apple off his son's head. (*Ebel, Manuel de Voyageur en Suisse; Inglis's Switzerland*, p. 105, &c.)

ALTRINGHAM, a town of England, co. Chester, 8 m. Manchester. Pop. 2708. It is a neat thriving town, with factories for the spinning of cotton, linen yarn, &c.

ALTSOHL, a free town of Hungary, at the confluence of the Szlatina with the Gran, lat. 48° 34′ 55″ N., long. 19° 7′ 20″ E. Pop. 2000. It is old, and is entirely occupied by Slavonians. On a hill in the neighbourhood are the ruins of a castle, said to have been a favourite residence of Mathias I.

ALTSTETTEN, a town of Switzerland, cant. St. Gall, 9 m. S. from the embouchure of the Rhine, in the lake of Constance. Pop. 1800. It is situated on the declivity of a mountain in a beautiful country, surrounded with corn-fields and vineyards; has a fine church, which serves both for Catholics and Protestants, a public library, a muslin manufactory, and three fairs annually.

ALTURA, a town of Spain, Valencia, 3 m. N.W. Segorbe. Pop. 3000. It has distilleries, potteries, and a paper-mill. The country round produces a great deal of wine.

ALVA, a village and parish of Scotland, co. Stirling, 7 m. N.E. Stirling. Pop. 1300. The Devon iron company has considerable works here.

ALVARADO, a small town of Mexico, near the mouth of the river of the same name, 40 m. S.S.E. Vera Cruz, lat. 18° 34′ 18″ N., long. 63° 39′ 13″ W. The bar at the mouth of the river, about 1½ m. below the town, renders it inaccessible for vessels drawing above ten or twelve feet of water; large ships being in consequence obliged to anchor in the roads, exposed to all the fury of the N. winds, which often blow with much violence. During the period that the castle of St. Juan d'Ulloa continued in possession of the Spaniards, after Vera Cruz had thrown off their yoke, the trade of the latter was principally carried on through Alvarado; but upon the reduction of the castle by the patriots, it speedily reverted to its old channel.

ALVINCZ, a town of Transylvania, on the Maros, opposite Roberick, 7 m. S.W. Karlsburg. Pop. 3300, almost all Magyars and Bulgarians.

ALVITO, a town of Naples, prov. Terra-di-Lavore, 6½ m. S.E. Sora. Pop. 2300. It is built on the declivity of a hill, in a healthy situation; has an hospital, and several *monts-de-piété* for the marriage of young girls.

ALWUR, a large town of Hindostan, prov. Delhi, cap. dominions of the Macherry Raja, 90 m. S.S.W. Delhi, lat. 27° 44′ N., long. 76° 39′ E. It is situated at the base of a steep hill, and is strongly fortified. On the summit of the hill, about 1200 feet high, is a fortress containing several tanks.

ALYTH, a town and parish of Scotland, co. Perth, 12 m. W. Forfar. Pop. 2888. The soil is fertile, and the town, which is finely situated, carries on some branches of the linen manufacture.

ALZEY, a walled town of Hesse Darmstadt, on the Selz, 18 m. S.S.W. Mayence. Pop. 3900. It has manufactures of linen and stockings, and tanneries.

ALZIRA. See ALCIRA.

ALZONNE, a town of France, dep. Aude, at the confluence of the Lampy and the Fresquel, near the canal of Languedoc, 12 m. W.N.W. Carcassonne. Pop. 1644. It has manufactures of fine cloths, caps, &c.

AMAK, a small Danish island, on which a part of Copenhagen is built. It is principally laid out in gardens and pleasure-grounds.

AMALPHI, a city and sea-port of Naples, 9 m. W.S.W. Salerno. Pop. 3500.* This city attained during the early part of the middle ages to great distinction as an independent maritime republic; and was the first Italian state that traded with Egypt and the shores of the Mediterranean. In the zenith of her prosperity, in the 11th century, Amalphi is said to have contained 50,000 citizens; and her wealth, and the skill and intrepidity of her mariners, were then unequalled. But, after being reduced by the Normans, she was taken and sacked by the Pisans, in 1130; and from this period she rapidly declined, and not long after fell into obscurity. A unique copy of Justinian's Pandects, said to have been found by the Pisans among the spoils of this city, was believed, though, as Savigny has shown, without much foundation, to have led to the revival of the study of the civil law; and Amalphi is also famous for having been the birth-place of Flavio Gioja, supposed by some to have been the inventor of the mariner's compass, but who, it is certain, was only its improver. (*Gibbon's Decline and Fall*, cap. 56; *Rampoldi, Corografia dell' Italia.*)

AMAND-LES-EAUX (ST.), a town of France, dep. du Nord, cap. cant., on the Scarpe, 7½ m. N.W. Valenciennes. Pop. 8956. This town is celebrated for its mineral waters, whence its name; it is very ancient, has a communal college, and the ruins of a celebrated abbey, destroyed at the Revolution. It is situated in a rich, well-cultivated country, where the flax is produced (*lin rami*) of which the finest laces are made. These are manufactured in the town, with woollen stockings, cotton coverlets, soap, linseed oil, chiccory, &c. It has also distilleries, tanneries, and a great fair held on the 31st May.

AMAND-MONT-ROND (ST.), a town of France, dep. Cher, cap. arond., at the confluence of the Marmande with the Cher, and at one of the extremities of the canal, joining the Cher and Loire. Pop. 7382. It is well built, has a *tribunal de première instance*, a commercial college, and a theatre. It manufactures wooden clogs and leather; and there are forges, cannon foundries, and porcelain manufactures in the neighbourhood. It is the most commercial town of the dep.; the exports consist principally of the produce of the surrounding country, viz., timber, staves, iron, wine, chesnuts, cattle, leather, hemp, wool, goatskins, &c.

AMAND (ST.), the name of several small villages in different parts of France.

AMANDA, t., Hancock co., O. It has three schools, 158 scholars. Pop. 490.

AMANDA, p. t., Fairfield co., O. Twelve m. E. Circleville, 38 S.S.E. Columbus, 348 W. Pop. 1987.

AMANDA, t., Allan co., O. Watered by Auglaize river, and contains one school, 25 scholars. Pop. 280.

AMANTEA, a sea-port town of Naples, prov. Calabria Citra, cap. cant., 14 m. S.W. Cosenza. Pop. 7000. It is encircled by walls; has an old castle, four parish churches, some convents, and a school for *belles-lettres*. There are hot springs in its vicinity; and its territory has the appearance of a continued olive wood. It is supposed to occupy the site of the ancient *Nipezia*. It was taken by the French in 1806, after an obstinate defence.

AMARANTE, an ancient town of Portugal, prov. Minho, on the Tamega, 35 m. N.E. Oporto. Pop. 5000. It is situated in an agreeable valley, is well built, has a fine bridge, an hospital, an hospicio, two churches, and a Latin school.

AMARUPURA (vulg. *Ummerapura*), a city, and formerly the cap. of the Birman empire, on a peninsula between the Irawadi on the one hand, and a deep and extensive lake on the other, 6 m. N.E. Ava, lat. 21° 55′ N., long. 96° 7′ E. In 1800, the pop. was estimated by Captain Cox at 175,000; but the seat of government having been transferred to Ava in 1819, it has since rapidly declined, and is now an inconsiderable place. It has a fort, which the Birmese look upon as impregnable; but which a well-served battery would breach in a few hours. The circumstance of most of the houses consisting of wood and bamboos, accounts for the rapid decay of the place since 1819. Near the city is a temple, much frequented by devotees, containing the celebrated bronze statue of Guadma, brought from Arracan in 1784. (*Hamilton's E. I. Gazetteer; Crawford's Ava*, p. 274.)

AMASIEH (an. *Amasia*), an ancient city of Asiatic Turkey, cap. sanjiack of same name, in the E. part of Natolia, on the Jekil Ermak, lat. 40° 33′ N., long. 36° 26′ E. The situation is peculiar, being difficult of access, and having a citadel on a sharp-pointed rock, connected with the hills whereon the town stands. Outside the walls are some curious caverns; and in the upper part of the town are to be seen the ruins of a temple, a fountain, and aqueducts, mentioned by Strabo. Most of the houses are of wood, but many are of stone, and all are covered with tiles. Streets narrow and filthy. The mosque of Sultan Bayazid is a fine edifice, with two lofty minarets of hewn stone. Great quantities of silk and wine are produced in the surrounding country, and some branches of the silk manufacture are carried on in the town, which has a considerable trade. There is a great discrepancy in the accounts of the population. According to Fontanier, it has 10,000 houses; whence the population might be estimated at 50,000 or 60,000; but others do not estimate it nearly so high. Strabo, the most celebrated geographer of antiquity, belonged to Amasia, and has left a very minute description of this his native city.

AMASREH, a sea-port town of Asiatic Turkey, Natolia, on the Black sea, lat. 41° 45′ 27″ N., long. 32° 21′ E. It is built on the declivity of a hill, on a peninsula between two ports; but its proper roadstead is on the E. side of the isthmus, at a short distance from land, in 3 or 4 fathoms. Its commerce is inconsiderable. There are in the town the ruins of a temple of Neptune, and some other antiquities.

AMATRICE, a town of Naples, prov. Abruzzo Ultra II., cap. cant., on a pleasant hill, near the source of the Tronto,

* Rampoldi says 11,000; but we have no doubt that this is very far beyond the mark. Most authors set down the population at from 2500 to 3500; and the amount given to it by Rampoldi seems quite inconsistent with the accounts as to the decay of the place.

12 m. N. Aquila. Pop. 5090. It has five parish churches, two *monte-de-pietà*, a school of *belles-lettres*, and a manufacture of counterpanes.

AMAXICHI, a sea-port town, cap. Santa Maura, one of the Ionian islands, near its N.E. extremity, on a bay of the narrow strait separating the island from the opposite coast of Albania, lat. (castle) 38° 50′ 15″ N., long. 20° 43′ E. Pop. 6000. ? The access to the town by sea is defended on the N. by the strong castle of Santa Maura, dist. about 1¼ m., and on the S. by fort Alexander, on the narrowest part of the strait. The town is meanly built. Owing, probably, to the prevalence of earthquakes, most part of the houses are of wood, and only one story high; but those in the principal street are somewhat superior. It is the residence of the governor, and of a Greek bishop. Extensive salt marshes, or rather lagoons, lie between the town and the castle of Santa Maura, the communication with the latter being kept up by a causeway supported on low arches. The harbour, though improved by the construction of an extensive mole, is fit only for small craft. In summer, the town, owing to the neighbouring marshes, is unhealthy.

AMAZON, MARANON, or ORELLANA, the principal river of S. America, and perhaps the largest in the world. It is formed by the united waters of the Tungurugua and Ucayale; it being doubtful which of these should be considered as the main stream, though the precedence has generally been given to the first. The Tungurugua takes its rise from the lake of Llauricocha, in Peru, in 10° 30′ S. lat., within 60 m. of the Pacific ocean, while the Ucayale is formed by the junction of the Apurimac and Paro, the source of the former being near Arequipa, in about the 16th deg. of S. lat. Both rivers follow at first a northerly course, inclining to the W., the Tungurugua till it reaches Jaen, in about 5½° S. lat., and 78° W. long., and the Ucayale till it unites with the other at St. Miguel Yarrupa, in about 4½° S. lat., and 72½° W. long. The course of the river is thence generally from W. to E. till it falls into the Atlantic, almost under the equator, in about 51° W. long. Taking the Apurimac for its source, and following its windings, its course may be stated at above 4700 m. It is studded with innumerable islands, many of which are from 10 to 15 m. in circ., and some much more. Its mouth, which is 180 m. in width, has the large island of Caviana in its centre, and marking its extreme limit. The rise and fall of the tide is distinctly felt at Obidos, 400 m. inland. At its mouth, two days before and after full moon, the phenomenon of the *bore* occurs in a very formidable shape; the water from the ocean rushing into the river, with a prodigious force and noise, in two, three, and sometimes four successive waves, each presenting a perpendicular front, from 10 to 15 ft. in height! No small vessel can encounter it without certain destruction.

Of the rivers which fall into the Amazon, after the junction of its two great branches, from the N., those most important are, the Napo, Putumayo, Yapura, and Rio Negro, the latter having a course of from 1400 to 1500 m. To the S. the principal tributaries are the Yavari, Yutny or Yotan, Yurua, Madeira, Topajos, and Xingu. Of these the Madeira is by far the largest, and would anywhere, except in America, be reckoned a river of the first magnitude. Its course may be estimated at about 1800 m.

The Amazon and its tributaries afford, perhaps, the greatest extent of inland navigation of any river system in the world. Its amount may be moderately estimated at from 40,000 to 50,000 m. The Amazon itself is navigable to the E. part of the Andes, 2000 m. in a direct line from the sea. The navigation to the Pongo de Manseriche, in about 78½° W. long., is not interrupted by a single cataract or rapid. Its channel is deep, and it may be navigated by vessels of almost any burden, up to the junction of its two great arms. During the swell in the rainy season the current is rapid, but at other times it may be steamed, not by steam only, but by the aid of the E. breeze, which blows perennially against the current. At Jaen, in 78° W. long., the level of the stream is only 1240 ft. above that of its æstuary at Caviana, so that its descent is not at an average rate of a foot every 2 m.; and during the latter part of its course it is much less.

At present the vast and fertile country traversed by the Amazon and its affluents is nearly in a state of nature, being mostly covered with immense forests, affording cover to wild beasts and all descriptions of reptiles. During the period of the inundation, a great extent of the low country, on both sides the river, is laid under water. There can, however, be little doubt that, at some future period, all its immense basin, comprising above 2,400,000 sq. m., will be occupied by civilized nations. The Amazon will then be one of the most important and valuable, as well as extensive channels of communication in the world.

A communication exists between the waters of the Amazon and those of the Orinoco. In fact, Humboldt passed by water from the Rio Negro, the principal N. affluent of the former, into the Cassiquiari, an affluent of the latter, and thence into the main stream of the Orinoco.

The mouth of the Amazon was discovered in 1500 by Vincent Yanez Pinçon; but very little was known respecting the river till 1539, when Francis d'Orellana, a Spanish adventurer, having embarked on the Rio Napo, one of its remote tributaries, and, following the current, was carried down the stream to its embouchure. Orellana having reported that armed women were met with on its banks, it thence obtained its popular name of Amazon, though it be still sometimes called Orellana, from its explorer. The origin of the term Maranon is not certainly known. According to Condamine, it is the name of a Spanish officer, who visited the river previously to Orellana; but this is very doubtful, and the more probable opinion seems to be, that it is derived from an Indian nation of that name, which had inhabited some part of its banks. The Amazon was first accurately described by M. de la Condamine, who, having embarked upon it, in 1743, near Jaen, and followed its current to its mouth, gave an interesting account of the expedition, with a map of the river, in his *Voyage de la Rivière des Amazones*, Paris, 1745. See also *Humboldt's Travels*; *Journal of Geographical Society*, ii., p. 650; *Encyc. Britannica*, art. *America*, &c.

AMBAZAC, a town of France, dep. Haute Vienne, cap cant., 12 m. N.N.W. Limoges. Pop. 2736.

AMBEER, a town of Hindostan, the ancient cap. of the Jeypoor territory, 5 m. N. by E. Jeypoor, lat. 26° 57′ N., long. 75° 40′ E. The town, romantically situated on the margin of a lake, is now in ruins. In its vicinity is a fine old fortified palace, and a large castle. The former has a noble hall of audience, and many beautiful apartments, enjoying from their windows, balconies, &c. one of the most striking prospects that can be conceived. (*Heber*, ii., p. 416.)

AMBELAKIA, a town of Turkey in Europe, sanjiack Tricala, or Thessaly, on the W. declivity of mount Ossa, near the Peneus, 15 m. N.N.E. Larissa. This place was distinguished, during the latter part of the last and the first part of the present century, by the industry of its inhabitants, and the skill and success with which they carried on the business of spinning and dyeing cotton yarn. The towns-people, who were wholly Greeks, formed a sort of independent community, and either defended themselves from the exaction of the Turks, or were neglected by the latter. At first individuals carried on business on their own account, on the principle of free competition; but thinking that their profits would be increased by carrying it on in common, they formed themselves into an association on a joint stock principle. For a while this succeeded perfectly well; but, in the end, the parties quarrelled among themselves, and the fruits of their industry were swallowed up in expensive and protracted litigation. At length the staple trade of the place was totally annihilated by the importation of cheaper yarn from England; the produce of our spinning mills having not merely superseded the hand-spun yarn of Ambelakia in foreign markets, but in those of Turkey itself. The town and surrounding country have since become comparatively poor and depopulated. In the acme of its prosperity it might have 7000 inhab. (*Urquhart's Spirit of the East*, ii., p. 14, &c.)

AMBERG, a town of Bavaria, circ. Regen, on the Vils, by which it is intersected, 31 m. N.N.W. Ratisbon. Pop. 8000. It was formerly the capital of the Upper Palatinate; streets wide and clean; and, though the houses be mostly of wood, it is pretty well built. It is encircled by a double wall, flanked with numerous towers. Principal public buildings, the electoral, now royal castle, arsenal, mint, salt-warehouse, town-house, church of St. Martin, &c. It has a lyceum, a gymnasium, a seminary for the education of teachers, some well-endowed hospitals, a convent for noble ladies, a public library, theatre, and house of correction. It is an entrepôt for salt, and has manufactures of firearms, tobacco, earthenware, &c. There are mines of coal and iron, with iron-works, forges, &c., and the principal glass-works in Bavaria are in its vicinity; its territory is also very productive of hops. It is the seat of a tribunal of appeal, a commissariat of police, a president and a chamber of finances.

AMBERIEU, a town of France, dep. Ain., cap. cant. Pop. 2800.

AMBERT, a town of France, dep. Puy de Dome, cap. arrond., on the Dore, 36 m. S.E. Clermont. Pop. 8016. The town is pretty well built, but the streets are narrow and crooked, and the houses, being principally constructed of granite, from the adjoining mountains, have a gloomy, dismal-looking appearance. Ambert, and the arrondissement of which it is the capital, are distinguished by their industry. The town is especially celebrated for its paper for printing and engraving, in the manufacture of which it employed, in 1834, 102 machines (*cuves*), each of which required the assistance of 10 persons, and consumed annually about 23,000 kilog. of rags, and produced 11,000 kilog. of paper. Workmen employed in the paper trade earn about 1 fr. 60 cent. a day, and women from 50 to 55 cent. A combination has

existed among the work-people in this trade since the 15th century, and they are said sometimes to give the law to their masters. There are also in the town very extensive manufactures of ribands, lace, woollen cloths for the marines, called *étamines à pavillon*, serge, linens, pins, &c. The value of the linen annually produced in the arrondissement is reckoned at 900,000 fr.; 2350 work-people are employed in the manufacture of lace, besides those in the riband and other trades. The trade of the town is very considerable. It is the principal market for the famous cheese *dites d'Auvergne*. (*Hugo, France Pittoresque*, tom. ii., p. 8.)

AMBLETEUSE, a small decayed sea-port town of France, dep. *Pas de Calais*, 6 m. N. Boulogne. Pop. 581. It was formerly a sea-port of considerable importance; and both Louis XIV. and Napoleon endeavoured, by improving its harbour, to regain for it some portion of its ancient consequence. But, owing to the accumulation of sand, their efforts have had no permanent influence, and the town is almost deserted. James II. landed here after his abdication of the English throne, in 1689.

AMBOISE (an. *Ambacia*), a town and castle of France, dep. Indre et Loire, cap. cant., on the left bank of the Loire, 15 m. E. Tours. Pop. 4695. The castle occupies the summit of a rock, about 90 ft. in height. The town *singulièrement triste et laide*, lies principally between the bottom of the castle rock and the river; but it has suburbs on an island in the river, and on its right bank. The castle, which is of vast extent, was commenced under Hugh Capet, and finished under Charles VII.; it was a favourite residence of Louis XI., and in it Charles VIII. was born in 1470, and expired in 1498. It is also famous in French history as the birthplace of the conspiracy, *dite d'Amboise*, against the Guises, concerted in 1560. It suffered much during the religious wars, and was partly demolished during the revolutionary phrensy. The remaining portion is now converted into a depôt for the flints for the use of the French army, brought from the quarry of Meusne, near St. Aignan. The views from its towers and battlements are superb.

A manufacture of files, graters, and cemented steel, established at Amboise in 1780, continues to flourish, and employed, in 1835, about 160 workmen. It consumes annually above 200,000 kilog. of fine steel, its products being estimated at 200,000 packets of files, *dites d'Allemagne*, 50,000 dozens do. after the English fashion, 2000 packets do. *dites de Nuremberg*, and 6000 *carreaux*. The manufacture is under the able direction of M. St. Bris. There is also in the town a manufacture of arms, with tanneries, &c. A handsome wooden bridge, with stone piers, erected in 1822, connects the town with its suburb on the opposite side of the river. (*Hugo, France Pittoresque*, ii., p. 104, &c.)

AMBOOR, a town of Hindostan, in the Carnatic, district S. Arcot, 108 m. W.S.W. Madras, lat. 12° 50′ N., long. 78° 46′ E. It is neat, and regularly built; the inhab., who are industrious, prepare a considerable quantity of castor oil for exportation. To the left of the town is a lofty isolated mountain, that was formerly surmounted by an all but impregnable fort; but its upper works have been destroyed since it came into the possession of the British, and the tower is used as a place of confinement for malefactors.

AMBOY., p. t., Oswego co., N.Y., 80 m. E. Oswego, 137 W.N.W. Albany, 386 W. Watered by Scriba and Salmon creeks, and contains two stores, two grist-mills, four saw-mills, eleven schools, 331 scholars. Pop. 1070.

AMBOY, Perth, N.J., see Perth-Amboy.

AMBOY, t., Lucas co., O. It has one grist-mill, seven saw-mills, five schools, 186 scholars. Pop. 452.

AMBOYNA (*Ambon*, Malay), an island of the E. Archipelago, in its third or E. division (*Crawfurd*), belonging to the Dutch. It lies in 3° 40′ S. lat.; between 128° and 129° E. long. S.W. of Ceram, is 22 m. in length, and 10 in breadth; area 424 sq. m., pop. 45,000 (*Cannabich*, 1837). Its shape is irregular, being indented by a long bay (Binnen), which divides it into two very unequal portions, connected by a narrow isthmus. Surface mountainous. It is watered by numerous rivulets, and overgrown everywhere by trees and underwood, interspersed with clove plantations; its soil, a rich red loam, is of a darker colour in the valleys, and sometimes mixed with sand; climate healthy, the average heat of the year 83° Fah., the lowest temperature 72° F. The monsoons occur regularly, but their effects are quite the reverse of those experienced in Borneo, and the W. division of this Archipelago; the E. monsoon bringing rains, and tempests, and the W. dry weather. The Dutch appropriated this island to the culture of the clove, for the production of which it is especially calculated; and to secure to it a monopoly of this valuable product, barbarously compel the destruction of the trees in the other islands subject to their power. The clove (*gomode*, Tidor lang.) thrives best in a dark loamy soil, but not very near the sea, on hills, on sandy or hard clay soil, or on sedgy grounds, and requires much care in its culture. The plant resembles a large pear-tree, from 20 to 40 ft. in height. In the Moluccas it bears at seven or eight years, in Amboyna not till ten or twelve years old; about one third of the trees are infertile, the rest may continue to bear fruit for seventy years. The crops are gathered in Oct. and Nov.; they are very unequal in different years, but the produce of each tree may average from two or three to five pounds; the total annual produce is said formerly to have been 650,000 pounds. (*Hamilton*.) Sago forms the chief nourishment of the inhabitants, and very superior indigo, but inferior coffee, are also grown. Sago trees are seven years in arriving at full growth, and last about thirty; but they are generally cut down when about twenty years of age. When in full vigour, they yield from forty-two to forty-six pounds of sago a year. The wild animals of Amboyna are deer and wild hogs: there are no beasts of prey, but a multitude of birds and serpents. Buffaloes, cows, sheep, goats, and horses, were brought thither by the Portuguese, but cattle are rare. The inhabitants are of four distinct races, viz.: 1. Horaforas, the aborigines, who are in a savage state and live in the forests, whither they were driven by, 2. Malays, who compose the bulk of the population; 3. Chinese, who are the principal merchants; 4. Europeans, mostly Dutch: they are expert fishers, in canoes from 10 to 20 ft. long; in war they use *korokores*, 80 to 100 ft. in length, and capable of containing eighty men. Their houses are of wood, roofed with palm leaves, and are mostly of but one story, on account of the prevalence of earthquakes. The prevailing religion is Mohammedanism, introduced A.D. 1515; but some of the Amboynese are Christians, and bear Portuguese names. The government is dependent on that of Batavia; its seat is at fort Victoria; the public revenues are derived from a monopoly of arrack, custom-house and port duties, taxes on merchandise, and licenses to keep an inn, and kill pigs. The exports consist of cloves, and other natural produce; the imports chiefly opium, and a few European and Indian goods. (*Crawfurd, Indian Archipel.*, iii., p. 495–503; *Hamilton, E. I. Gazetteer*.)

History.—Amboyna was first discovered by the Portuguese in 1515. It was taken by the Dutch in 1607, and by the English in 1615. The latter, who were soon after expelled by the Dutch, retained a factory in the island, till 1622. The destruction of this establishment by the Dutch, and the cruelties inflicted on the unhappy persons found in it, afforded a theme for lengthened negotiations, and for much declamatory invective. At length, under the vigorous administration of Cromwell, the Dutch were compelled to make some compensation to the descendants of those who suffered in the "Amboyna massacre." In 1796, the island was captured by the British, who restored it at the peace of Amiens. They recaptured it 1810, and held it till 1814, when it reverted once more to the Dutch.

AMBOYNA. The principal town in the above island, and the second in importance belonging to the Dutch in the E. Archipelago, on the S.E. side of the bay of Binnen, near fort Victoria, in 3° 40′ S. lat., and 128° 15′ E. long. Pop. 7000. It is regularly built; the streets, though not paved, are broad, and intersected by many rivulets; the houses, excepting the town-house, which has two stories, are all of only one story, constructed of wood and roofed with palm leaves. A long esplanade, reaching as far as the fort, is bounded by a handsome range of houses, and a double row of nutmeg trees. There are two Christian churches, a hospital, a fine garden, and menagerie, and several good bazars and markets. Fort Victoria is an irregular hexagon, surrounded by a ditch, but as it is entirely commanded by two neighbouring heights, its best defence is in the difficulty of anchorage in the contiguous bay. (See *Hamilton, E. I. Gazetteer*, p. 26; *Cannabich Lehrbuch*, p. 843.)

AMBRIERES, a town of France, dep. Mayenne, cap. cant., 7 m. N. Mayenne. Pop. 2434.

AMBROIX (ST.), a town of France, dep. Gard, cap. cant., 11 m. N.N.E. Alais. Pop. 3107. It manufactures coarse silk stockings, and has tanneries, and nail works.

AMELIA (an. *Ameria*), a city of the Papal States, deleg. Spoleto, 23 m. S.W. Spoleto. Pop. 5000. It stands on a small hill, is the seat of a bishopric founded in 1344, and has a cathedral, three churches, and some convents.

Ameria was one of the most considerable and ancient cities of Umbria. The famous comedian, Sextus Roscius, was a native of Ameria, which is frequently referred to by Cicero in his speech in defence of Roscius. It is said to have been founded 1045 years B.C., and became a colony under Augustus. (*Cramer's An. Italy*. i., 273.)

AMELIA, county, Va., situated centrally in the E. part of the state, and contains 300 sq. m. Drained by branches of Appomattox river. It had, in 1840, 6029 neat cattle, 7708 sheep, 12,664 swine, and produced 50,637 bushels of wheat, 244,785 of Indian corn, 1,871,134 pounds of tobacco, 6015 pounds of cotton. It had thirteen stores, three flouring-mills, eighteen grist-mills, one saw-mill, two academies, 50 students, seven schools, 156 scholars. Pop. whites 3074, slaves 7023, free coloured 223; total, 10,320. Capital, Amelia.

AMELIA, p. v., capital of Amelia co., Va., 45 m. S.W. by

W. Richmond, 162 W. It contains a court-house, jail, and other county buildings, and a few dwellings.

AMELIA ISLAND, Nassau co., Flor., lies off the N.E. coast of the territory, between St. Mary's and Nassau rivers, and is 15 m. long and 4 wide. The soil is generally fertile. Fernandina, the former capital of the co., has a good harbour, but is less flourishing than formerly.

AMENIA, p. t., Dutchess co., N. Y., 20 m. E.N.E. Poughkeepsie, 79 S. by E. Albany, 394 W. Watered by tributaries of the Housatanic river, and contains marble and magnetic iron ore. It has eight stores, two fulling-mills, two flouring-mills, four grist-mills, seven saw-mills, one furnace, one academy, 249 students, five schools, 159 scholars. Pop. 2179. It contains the villages of Amelia, Union, and Amenaville, at the former of which are a post-office two churches, two stores, one cotton factory, one woollen factory, one saw-mill, and thirty-five dwellings. The latter contains three churches, one Presbyterian, one Baptist, one Methodist; an academy, three stores, one grist-mill, one saw-mill, forty dwellings, and about 200 inhabitants.

AMERICA, or the New World of the W. hemisphere, one of the great divisions of the globe, surpassing all the others in magnitude, with the exception of Asia, to which, however, it is but little inferior. This vast continent stretches N. and S. a distance of about 9000 m., or from about the 72d degree of N. lat. to cape Horn, in about 56° S. lat. It is very irregularly shaped, being divided by the gulf of Mexico and the Carribean sea into the two enormous peninsulas of N. and S. America, united by the isthmus of Darien, or Panama, not more than 28 m. across. Where broadest, N. America, excluding Greenland, is not less than 3500 m. across, and S. America not less than 3200 m. The estimates that have been formed of the area of America differ widely. Balbi supposes it to amount to 11,146,000 sq. m. of 60 m. to a deg., equal to 14,790,008 sq. Eng. m. of 69·15 to a deg. The following estimate, which is that given in the article *America* in the new edition of the *Encyclopædia Britannica*, does not differ materially from Balbi's; and the ability with which the article referred to is written, renders its statements of the highest authority.

	sq. Eng. m.
North America	7,400,000
South America	6,500,000
Islands	150,000
Greenland and the islands connected with it N. of Hudson's Straits	900,000
Total . .	14,950,000

This vast continent lies between the Atlantic and Pacific oceans, the former separating it from Europe and Africa, and the latter from Asia and Australia. All the distinguishing features of the American continent seem to be formed on the most gigantic scale. The chain of the Andes, which runs from one end of S. America to the other, and is prolonged under different names through the whole extent of N. America, is, in point of length, unequalled by any mountain chain in the Old World; and is far superior, in respect of altitude, to the Alps and every other mountain system with which we are acquainted, the Himmalaya only excepted. The plains, rivers, bays, lakes, cataracts, and forests of America are of unrivalled extent and grandeur. Her mineral riches seems also to be superior to those of every other continent; and she possesses every variety of climate, from the extreme heat of the torrid zone to the eternal winter of the arctic circle. It is singular, however, that while inanimate and vegetable nature are developed on so grand a scale in the New World, the animal kingdom should be comparatively deficient. The native American is probably inferior even to the negro. Of the lower animals, neither the elephant, camel, nor lion is found in America; and it was originally destitute of the horse, the ox, and the sheep, all of which were carried thither by Spanish, British, and other European settlers.

N. America is more indented than any other of the great divisions of the globe, with immense gulfs and arms of the sea. One of the principal of these, in the N.E. part of the continent, consists of what Balbi has not unaptly called the sea of the Esquimaux, from its coasts being everywhere occupied with tribes belonging to that peculiar race. It consists of two great divisions, Davis's straits and Baffin's bay, separating Greenland from the rest of the continent; and Hudson's bay, lying more to the S. and W., but connected with the former by numerous channels, some of which have only been recently discovered. The navigation of these seas and inlets, even at the most favourable seasons, is extremely difficult, from their being constantly encumbered with ice; and it is only during a short period of the year that it can be attempted. The next great inlet of the sea on the American coast is the gulf of St. Lawrence, so called from the great river of that name which falls into its S.W. extremity. Passing over the numerous inlets and noble bays on the coast of the United States, we come to the gulf of Mexico and the Carribean sea. This vast Mediterranean is separated from the Atlantic by the peninsula of Florida, and the Greater and Lesser Antilles, or the West Indian islands. The latter are, as it were, a continuation of Florida; and are, it is probable, the only remaining points of what was once a broad belt of land, which has been broken to pieces and partly submerged in some of those tremendous convulsions to which the earth has been subject. But, however this may be, this great inland sea is divided into two portions by the peninsula of Yucatan and cape St. Antonio, at the W. extremity of the island of Cuba, which approach within a comparatively short distance of each other; that to the N. being called the gulf of Mexico, and that to the S. the Carribean sea, or the sea of the Antilles. The isthmus of Panama is at the extreme S. limit of the latter, in about the 8th deg. of N. lat. It is believed that it would be by no means difficult to cut a canal across this isthmus, and consequently to unite the Atlantic and Pacific oceans.* The gulf of California, separating the peninsula of that name from the main land, is the most important inlet of the sea on the W. coast of N. America.

S. America bears a striking resemblance in the form of its coasts to Africa. It is much more compact than N. America, and is comparatively little indented by arms of the sea. The great rivers, Amazon, La Plata, Para, Orinoco, &c., may, however, be looked upon as a species of inland seas; and are, in some respects, more serviceable than the latter. The W. coast of America, from the proximity of the Andes, has but few gulfs; and is, in great part, all but destitute of harbours. The S. extremity of S. America, or the country of Terra del Fuego, is properly an archipelago, being separated from the continent by the narrow and winding strait of Magellan, or Magalhaens.

Mountains.—Humboldt has shown that all the high elevations of the New World belong to that great chain which, under different denominations, extends from one of its extremities to the other, along its western coast, over a space of no less than 10,000 m.! The American mountains may, however, be divided into *eight* systems, or principal groups, three of which belong to S., and three to N. America; and one each to the West Indian and Arctic archipelagoes.

1st. Of these systems, that of the Andes, or Peruvian system, from the highest mountains being in the country formerly known by the name of Peru, is by far the most gigantic. This vast chain of mountains commences at cape Horn, in about the 56th deg. of S. lat., and following pretty closely the line of the W. coast of the continent, to which it forms as it were a huge bulwark, stretches N. to the bay of Panama, in about the 9th deg. of N. lat. But at Popayan, in about 2½° N. lat., the chain is divided into three great ridges, of which the most westerly takes the direction above mentioned, while that farthest to the E. follows a N.E. direction, terminating a little to the E. of lake Maracaybo. The name *cordillera*, sometimes given to the entire chain, belongs properly only to the highest ridge. In parts the chain consists only of one ridge, and in others of two or three, enclosing Alpine valleys of a vast height and sometimes of great extent. It has, next to the Himmalaya chain, the highest summits known to exist; and its mean elevation may be taken at from 10,000 to 12,000 ft. Chimborazo, near Quito, 21,400 ft. above the level of the sea, was formerly supposed to be the highest summit of the Andes; but the researches of Mr. Pentland have shown that it is far surpassed in altitude by Zorata and Illmani, near lake Titicaca, which respectively rise to the prodigious elevation of

* The subject of a ship canal across the isthmus of Darien or Panama has long engaged the attention of reflecting men, and recently some routes have been explored. One of these is by the river San Juan, which enters into the Caribbean sea, thence through lake Nicaragua, and thence by canal to the Pacific ocean. From the mouth of the river to the lake is 79 miles. Lake Nicaragua is 95 m. long and in its broadest part about 30 m. broad, with an average depth of 15 fathoms of water. The canal from the lake to the Pacific would be 15 2-3 m. In this distance, two deep cuttings and a tunnel, the whole 3 m. in length, would be required. The sum of the ascents from the Pacific to lake Nicaragua would be 1047 feet 5 inches; of the descents, 919 feet 2 inches. The height of the lake above the Pacific, at low water, is 128 feet 3 inches. The river San Juan has rapids, but no falls; and by removing some obstructions, or by dams and locks, could be made navigable for vessels of a large class, or a canal could be constructed along its border. The cost of this great work is estimated at from 20 to 25 millions of dollars. It does appears, that at a cost of less than twice that of the Croton Water-works of the City of New-York, this great work might be constructed; and nothing but the unsettled state of the country through which it would pass, can delay it for many years. (See *Stephens's Incidents of Travel in Central America*, vol. i., p. 410.)

The French are said to have explored a route in New-Grenada, which would require much less labour and expense. M. de Humboldt is said to have made a communication to the Academy of Sciences at Paris, in Dec., 1842, stating that the labour of cutting a canal across the isthmus of Panama is advancing rapidly, that the commission appointed by the government of New-Grenada has finished their examination, and find that the chain of the Cordilleras is broken through by a valley, favourable to the design of uniting the two oceans; and that the excavations besides the rivers, which could be made available, would not exceed 12 1-2 m. in length; and that the total length of the canal would be 49 m., and could be constructed to admit the passage of vessels of 1600 or 1400 tons burden, for less than three million dollars, or less than one third the cost of the Croton Water-works. The labour and expense, fruitlessly employed to discover a north-west passage between the oceans, would long since have completed the work.—*Amer. Ed.*

25,250 ft. (nearly 10,000 ft. higher than Mont Blanc) and 24,000 ft. (*See* ANDES.) 2d. The system of La Parime, or Guyana, embraces the mountains scattered over the immense island formed by the Orinoco, Cassiquiari, Rio Negro, and Amazon. It consists of an irregular group of mountains, separated from each other by plains, savannas, and immense forests. The Sierra de Parime may be regarded as its principal chain. The peak of Duida, 8312 ft. in height, is the culminating point of the chain and of the whole system. 3d. The Brazilian system, embracing the mountains that lie between Amazon, Paraguay, and Rio de la Plata. The Sierra de Espinhazo is its most elevated chain. It traverses, under different denominations, the provinces of Bahia, Minas-Geraës, Rio de Janeiro, San Paulo, and the northern extremity of the province of San Pedro. Its culminating points are Itambe and the Sierra da Piedade, nearly 6000 ft. high, in the province of Minas-Geraës. 4th. In N. America, the principal mountain system is that of the Mexican Alps, and Rocky mountains, which may be regarded as a continuation of the Andes. In Mexico, it is divided into three distinct ridges; within which, between the parallels of 19° and 24° N. lat., are immense plateaus elevated to the height of between 6000 and 9000 ft. The central cordillera of Mexico stretches N. 10° W. from the 25th to the 38th deg. lat., separating the waters of the Rio del Norte, flowing S.E. from those of the Colorado, flowing S.W. The highest peaks in the ridge in Mexico, are the volcanoes of Pocatepetl, 17,060 ft., and Orosaba, 16,365 ft. From about the 38th deg. the ridge, which then begins to be called the Rocky Mountains, stretches N. 28° W., till it terminates near the mouth of the Mackenzie river, on the Arctic sea, in about the 69th deg. of lat. and 128th deg. of W. long. Some peaks in this chain, between 32° and 33°, are said to be nearly 16,000 ft. above the level of the sea; and others between 37° and 39°, have been ascertained to be from 10,000 to 12,000 ft. in height. We have no accurate information respecting the height of the passes of the Rocky mountains, nor of the altitude of their base above the sea; but on their E. side is a very extensive tract, dry, sandy, and almost a desert. 5th. Parallel to the Rocky mountains, and at no great distance from the sea, a chain of mountains runs N. from the peninsula of California, till it is lost in Russian America. This chain, which has been called by Humboldt the Californian Maritime Alps, increases in altitude as it gets farther N. Mount Hood, near the 45th deg., on the S. side of the Columbia or Oregon river, is said to be about 16,000 ft. high; and mount St. Helen's, about a degree farther N. on the N. side of the Columbia, has an elevation of 14,000 ft. Mount Fairweather, in the 59th deg., is also 14,000 ft. high, and mount St. Elias, the loftiest in the chain, attains to an elevation of about 17,000 ft. The last two are volcanoes. Between the Rocky mountains and the Maritime Alps, is an extensive prairie tract, 700 m. in length, by from 100 to 200 m. in breadth. The Rocky mountains and the Maritime Alps are connected by a ridge in about the 42d deg. lat., dividing the waters which now flow N. to the Columbia from those which flow S. to the Colorado. 6th. The mountains E. of the Mississippi do not at all approach the Rocky mountains in magnitude. They are included in what is called the Alleghany or Appalachian system, extending in a N.E. by N. direction from Alabama, on the N. confines of Georgia, to the banks of the St. Lawrence, being about 1200 m. in length, with a mean breadth of 100 m. The White mountains of New-Hampshire, 7300 feet above the level of the sea, are the highest in this range, which is crossed by the tidal waters of the Hudson river. The immense valley of the Mississippi lies between the Rocky and the Alleghany chains. 7th. Balbi proposes to embrace, under the denomination of Arctic system, all the mountains that are already, or that may hereafter be discovered within the Arctic archipelago. The culminating points of that system, in so far as they are at present known, are the Corn du Cerf, in Greenland, the height of which has been much exaggerated, but which is probably above 8000 ft., and the Aeraefi Taekull, in Iceland, 6649 ft. 8th. The system of the Antilles embraces the mountains in the archipelago of that name. Its culminating points are, the Anton-Sepo, in Hayti, nearly 9000 ft. in height; and the Sierra de Cobre, in Cuba, the most elevated summits of which attain about the same height.

Plateaus.—America has a great variety of plateaus, some remarkable for their prodigious elevation, and others for their immense extent. Under the former are included the plateau of Titicaca, divided between Bolivia and Peru, comprising an area of about 18,000 sq. m., with a mean elevation of above 13,000 ft. The populous and well-cultivated plateau of Quito is elevated about 9600 ft.; and the extensive plateau or table-land of Anahuac, in Mexico, from 6000 to 9000 ft. Among the latter, or those principally remarkable for their extent, may be mentioned the central plateau of S. America, embracing the vast province of Matto Grosso, with parts of Goyaz and San Paulo, in Brazil, the whole of Paraguay, Chaco in the confederation of the Rio de la Plata, and a part of the lands of the Chiquitos and Mamos in Bolivia. Its elevation varies from about 750 to 1920 feet.

Volcanoes.—America has a great number of volcanoes, and some of the most elevated volcanic mountains in the world. The departments of the Æquator and of Cauca in Columbia, the states of Nicaragua, San Salvador, and Guatemala in central America, Chili, Russian America, and Iceland in Danish America, contain a great number of volcanoes. The most remarkable volcanic mountains are, Cotopaxi, Sangnay, and Pichincha in the Columbian department of the Æquator; Pasto, Sotara, and Purace, in that of Cauca; Guagua-Pichina, or the volcano of Arequipa, and Sehama in Peru; the volcanoes of Copiapo, Chilan, Antoco, and Peteroa, in Chili; those of Soconusco, Guatemala, or Fuego, Agua, Pacaya, San Salvador, Granada, and Telica, near St. Leon, of Nicaragua, in central America; Popocatepetl, or the volcano of Puebla, Citlatepetl, or the volcano of Orizaba, the volcano of Colima, and that of Xorullo, in the Mexican confederation; St. Elias and Fairweather, in the Californian Alps; the two volcanoes of the peninsula of Alaskka, and those of the Aleutian islands; with Hekla, and others in Iceland.

Plains.—In no other part of the world are the plains so vast. The immense space from the outlet of the Mackenzie river to the Delta of the Mississippi, and between the central chain of the Mexican system and Rocky Mountains, and the Alleghany, forms the largest plain, not of America only, but of the world; it embraces the basins of the Mississippi, the St. Lawrence, Churchill or Nelson, almost the whole basin of the Missouri, nearly the whole basins of the Saskatchawan and Mackenzie river, and the entire basin of the Coppermine river. Four fifths of that portion of this vast plain, which lies beyond the 50th deg. of lat., is a bleak and barren waste overspread with innumerable lakes, and bearing a striking resemblance to N. Asia; but its more southerly portion, or that lying W. of the Alleghany chain, and N. from the gulf of Mexico, differs widely in character from the other, being well wooded and fertile on the E. side, bare but not infertile in the middle, and becoming almost a desert in the extreme W. The second great plain of the New Continent is that of the Amazon: it embraces the whole central part of S. America, comprising more than half Brazil, with south-west Columbia, the eastern part of the republic of Peru, and the northern part of Bolivia; its limits are nearly identical with those of the middle and lower parts of the immense basin of the Amazon and Tocantin. The plain of the Rio de la Plata extends between the Andes and their principal branches, and the mountains of Brazil, to the Atlantic ocean and the straits of Magellan. It embraces the southwest part of Brazil, Paraguay, the country of the Chiquitos, Chaco, with the greater part of the confederation of the Rio de la Plata, the state of Uruguay, and Patagonia. A large portion of it is known by the name of the *Pampas* of Buenos Ayres, or Rio de la Plata. The plain of the Orinoco, embracing the Llanos of New-Granada and Venezuela in Columbia, extends from Cequeta to the mouth of the Orinoco, along the Guaviare, Meta, and lower Orinoco. In some of the flat parts of America large tracts of territory are met with, which, in respect of aridity of soil, and of the sand by which they are covered, may be compared to the deserts of Asia and Africa. The most remarkable and most extensive of these tracts, are the desert of Pernambuco, occupying a great part of the N.E. plateau of Brazil; the desert of Atacama, extending, with some interruptions, along the coast of the Pacific from Tarapaca in Peru, to Copiapo in Chili; and the desert of Nuttal, at the E. foot of the Rocky mountains, between the upper Arkansas and Paduka, forming part of the central plain of N. America.

The Rivers of America are on a much larger scale than those of any other portion of the globe, affording facilities of internal communication of vast importance, and quite unequalled anywhere else. The principal are the Amazon, Mississippi, Plata, St. Lawrence, and Orinoco. The Amazon flows E. through the broadest part of S. America, having its *embouchure* under the equator. Its entire course is estimated at about 4700 m., and it has several tributaries, larger than the Wolga or the Danube. Uninterrupted by either rocks or shallows, it is navigable for vessels of considerable burden to the E. foot of the Andes, a distance, in a direct line, of above 2000 m. from the sea; and though civilization has as yet made little or no progress in the vast and fertile regions through which it flows, there can be no doubt that it is destined to become as it were a great highway for many powerful nations; and to have its banks thickly set with populous towns and emporiums.

The Mississippi, taken in connexion with the Missouri, the largest and most important stream, flows from N. to S., falling into the gulf of Mexico, about 100 m. below New-Orleans. Its course, including windings, exceeds 4200 m.; many of its tributaries, as the Arkansas, Red River, Ohio, &c., are of great magnitude; and it drains one of the largest and finest basins in the world. It is navigable for about

3700 m. in a direct line from its mouth; and though civilization has only begun to strike its roots and scatter its seeds in the wide regions through which it flows, it is already a well frequented channel of communication. But the boldest flights of imagination can hardly figure what the Mississippi will be, when the rich and fruitful countries on its banks, and those of its affluents, are all fully peopled, and making use of its waters to send abroad their surplus products, and to import those of other countries and climates.

The Plata, which runs S. with a slight inclination to the E., is the grand channel of communication to a very large portion of S. America. Its course may be estimated at about 2500 m.; and its basin is inferior only to that of the Amazon or the Mississippi.

The St. Lawrence, with its connected lakes, or rather great inland seas, is the grand outlet of the largest freshwater system in the world. Including the lakes, its course exceeds 2000 m. It is remarkable for the equality of its current, which is nearly uniform throughout the year.

The Orinoco has a course of about 1800 m., and carries to the sea an immense body of water. There is a water communication between one of its affluents, the Cassiquiari, and the Rio Negro, an affluent of the Amazon.

Owing to the circumstance of the Andes, and of their prolongation in N. America, being generally within a comparatively short distance of the W. coast, there is not, in most parts, room in the intervening space for the formation of any very great river. Hence, notwithstanding the prodigious length of the W. coast, it only receives two large rivers, and these not of the first class; the Rio Colorado, falling into the bottom of the gulf of California, and the Columbia or Oregon. Their course may be estimated at about 1100 m. each.

The Mackenzie is the only great river flowing into the Arctic sea. It has a N.N.W. course; it is connected by a series of lakes and tributary streams with lake Superior, and consequently with the St. Lawrence.

Lakes.—No part of the world has so many lakes as N. America, especially that portion between 49° and 67° lat., which might be justly called the lake region. It presents not only the greatest masses of fresh water on the surface of the globe, but so many smaller lakes and morasses, that their enumeration is almost impossible. These lakes form a most important feature in the physical geography of the New World. In the rainy season, several of them overflow their banks; and temporary communications are then established between rivers whose embouchures are frequently at immense distances from each other. Some of these communications are permanent; as, for instance, that of the Mississippi or Churchill with the Mackenzie river. The great lakes of N. America are, lake Superior, Michigan, Huron, St. Clair, Erie, and Ontario. These, which are all connected together, discharge their superfluous waters by the St. Lawrence, and form that vast reservoir of fresh water, sometimes called the sea of Canada. (See the titles for a full description of these lakes.) The next in size and importance are lakes Winnipeg, Athabasco, Great Slave lake, and Great Bear lake, stretching N.N.W. from lake Superior to near the mouth of the Mackenzie river, and forming as it were a continuation of the Canadian lakes. There are some considerable lakes in the Mexican states; and the comparatively small lakes of Tenesco, Xochimilco, &c., in the valley of Mexico, are remarkable for their elevated situation, their vicinity to the capital, and the superb works undertaken to prevent the damage caused by their frequent overflowing. The lake Nicaragua, in central America, is remarkable for its size, the beauty of its scenery, its volcanoes, and from its forming the basis of the works projected for uniting the Atlantic and Pacific oceans. The limited size of the principal lakes of S. America, strikingly contrasts with the dimensions of those of N. America. The lake of Titicaca, the largest and most celebrated of the S. American lakes, is situated near the N.W. frontier of Bolivia, or upper Peru, in an Alpine valley surrounded by ridges of the Andes. It covers an area of above 4000 sq. m., and is elevated 12,795 feet above the level of the sea! Manco Capac made his first appearance on the banks of this lake. The basins of the Rio Colorado, or Mendoza, and Rio Negro, present several very extensive lakes; but these are really rather vast morasses, than lakes properly so called.

Islands.—A multitude of islands belong to America. We shall briefly notice the principal, in the order of the seas in which they are situated. In the Atlantic ocean are, the archipelago of St. Lawrence or of Newfoundland, at the mouth of the gulf of St. Lawrence: its principal islands are Newfoundland, Anticosti, Prince Edward's island, and cape Breton. The great Columbian archipelago, or Antilles, commonly called the West Indies, comprises a great number of islands and secondary groups, lying between the peninsula of Florida and the delta of the Orinoco. Its chief islands are, Cuba, Hayti, or St. Domingo, Jamaica, and Porto-Rico, called the greater Antilles; St. Cruz, Antigua, Guadeloupe, Martinico, St. Lucia, Barbadoes, St. Vincent, Tobago, Trinidad, and several others, called the smaller Antilles. The Lucayos, or Bahama islands, a vast secondary group, are situated to the N. of Cuba. Towards the southern extremity of the New Continent, are the Falkland or Malouine islands, which have no fixed inhabitants; in the southern ocean is the archipelago of Magellan and Terra del Fuego, the most southerly inhabited part of the world. By its position, at the extremity of America, it belongs as much to the ocean, to which we have assigned it, as to either the Atlantic or Pacific ocean.

The Antarctic archipelago, or Antartic lands, under which denomination we include all the islands situated beyond 56° S. lat., next claims attention. The greater part of these islands have been recently discovered; they are all uninhabited, are mostly covered with ice, and are important only to whale and seal fishers. The most remarkable islands and groups are, the island of St. Peter, called by Cook, S. Georgia; the archipelago of Sandwich, the Orkneys, S. Shetland, Trinity island, the small islands of Alexander I. and Peter I.; being at present the most southerly of the known parts of the world. The Pacific ocean has also a multitude of islands, lying in groups, of which we can only notice the following: the archipelago of Madre de Dios, on the W. coast of Patagonia; the Campana and Madre de Dios are the largest of these islands: the archipelago of Chiloe, situated to the S. of Chili, to which it belongs, and of which Chiloe island is the largest: the archipelago of Gallopagos, situated under the equator, about 500 m. W. from the coast of Columbia, but which has no stationary inhabitants: the archipelago of Quadra and Vancouver, comprising a great number of islands, and that of King George III., on the N.W. coast of N. America, with the Aleutian archipelago in Russian America. In Behring's sea, are the group of Pribylof and Nounivok, belonging to Russia. The Arctic ocean presents a vast number of islands, the majority of which, previously to the late voyage of discovery, were regarded as parts of the American continent. Balbi proposes to give to these islands the general denomination of Arctic lands or Arctic archipelago, and to subdivide them as follows: E. or Danish Arctic lands, comprising the great group of Greenland and Iceland, belonging to Denmark, and Jan Mayen's island, without stationary inhabitants; the W. or English Arctic lands, extending to the W. and N. of Baffin's and Hudson's bays, the principal groups of which are, N. Devon, N. Georgia, with the islands of Cornwallis, Melville, &c.; and the archipelago of Baffin—Parry, with the islands Cockburn, Southampton, New-Galloway, &c.

The Climate of America is nearly as celebrated for the predominance of cold as that of Africa for the predominance of heat. With the exception of the limited space along its W. shore, between the Andes in the S., and the maritime Alps in the N., the temperature of the New World, in the same latitude, is everywhere inferior to that of the Old. Countries which, from their geographical position, we should suppose to be mild and temperate, are exposed to long and severe winters, during which they are wholly covered with snow; and in point of fact, the entire continent of N. America above the 50th degree of latitude is all but uninhabitable. Even in the 45th parallel, on the N. side of the Canadian lakes, frost is continuous for more than six months. Occasional frosts occur as low down the Atlantic coast as the confines of Florida, near the 30th deg. of lat., in the parallel of Morocco, Cairo, and Suez. This predominance of cold is no doubt ascribable to a great variety of causes; among the most prominent of which may be placed the extraordinary elevation of the soil. Not only is the continent traversed from one extremity to the other by immense chains of mountains covered with perpetual snow, but in many parts, as in Mexico and Columbia, very extensive plains are found at an elevation of from 6000 to 10,000 feet above the level of the sea! Thus the plain of Quito, immediately under the equator, has an elevation of above 9600 feet, and its mean temperature is said not to exceed 53° Fahr. In some parts, where the plateaus rise rapidly, there is often, within a few leagues, an extraordinary change of temperature. At Vera Cruz and Guayaquil, for example, on the borders of the plains of Mexico and Quito, and nearly on a level with the sea, the heat is often quite oppressive. These different climates have different vegetable productions. "Hence the traveller journeying down the deep descent of one of these magnificent ravines (leading from the plateau of Mexico), through forests of birches, oaks, and pines, finds himself suddenly on the level shores of the Rio Alvarado, surrounded by palms, and has an opportunity of seeing the animal products of the N. and S., of the Alpine regions and tropics, nay of the E. and W. hemispheres, mingled together. Wolves of northern aspect dwelling in the vicinity of monkeys; humming-birds returning periodically from the borders of the frozen zone, with the N. bunting and soft-feathered titmice, to nestle near parrots; and our common European whistling-ducks and teal, swimming in lakes which

swarm with sirens and Brazilian parras and bonbilla."—(*See* Richardson's Zoology of N. America, in the *Sixth Report of the British Association*, p. 135.)

In addition to its vast mountain chains, and the prodigious elevation of many of its plateaus, the lower temperature of America may be partly ascribed to the great indentation of the sea between N. and S. America, and the want of extensive sandy deserts in the tropical regions, easily impregnated with heat. The place of the latter in the African continent is here occupied by vast forests, traversed in all directions by immense rivers. The forests, however, are not confined to the tropical regions; they extend over the greater portion of the continent, powerfully diminishing the influence of the solar rays upon the earth, and greatly increasing its moisture. A strong and abundant vegetation, the result of its greater humidity, is, in fact, the distinguishing characteristic of the New World.

We may add, with respect to N. America, that while but a very small portion of it is within the torrid zone, it reaches far within the Arctic circle, where it also attains to a great breadth. The N.W. wind prevails during winter. This wind, sweeping over a desolate country, overspread with marshes, forests, frozen lakes, and mountains, buried under eternal snows, contracts an intense degree of cold, and in its progress southward, passing over a wilderness, where the ground is shaded by forests from the solar rays, its original character is in no respect changed. It slowly yields to the dominion of the climate, and retains its temperature long after it has penetrated into the regions of heat. Throughout N. America the N. wind is accordingly felt to be keen and piercing. It increases the rigour of the seasons in the more northerly regions, and extends the influence of winter far into those latitudes, which, in the other hemisphere, are blessed with perpetual spring. The countries lying within the tropics are exposed to the inroads of the northern blasts; and the great heats felt at Vera Cruz and Havanna are often suddenly reduced by strata of cold air brought by the N. winds from Hudson's bay. These winds blow from October to March, frequently bursting forth in tremendous hurricanes, and cooling the air to such a degree, that at Havanna the centigrade thermometer falls to 0, or 32° Fah., and at Vera Cruz it falls to 16°, or to 60° Fah. At Zacatecas, within the tropic of Cancer, it frequently froze hard in the winter of 1825; and in the city of Mexico the thermometer has been known, though rarely, from the same cause, to fall below the freezing point. To the prevalence of these N. winds, therefore, combined with the extraordinary elevation of the ground, and the uncultivated state of the country, overspread with vast forests, the greater cold of N. America seems chiefly ascribable. In S. America nearly the same causes operate. The country is even more desolate: the climate is more inclined to moisture, and liable, beyond the 40th parallel, to dreadful tempests; while immense mountain ranges, rising far above the limit of perpetual snow, aid these effects, and greatly increase the rigour of the seasons. To these causes may be added the form of the American continent, which, being greatly contracted in breadth as it approaches the S., is, in consequence, exposed on every side, except towards the N., to the surrounding oceanic winds. To the S. of cape Horn is the great Antarctic ocean, where cold prevails even to a much greater degree than in the N., so that the winds coming from those inhospitable seas bring to the American continent all the unmitigated rigour of the polar regions. The Andes and maritime Alps protect the strip of territory between them and the Pacific ocean from the freezing influence of the N.W. wind; and to this its greater mildness is partly, at least, if not wholly, owing.

Minerals.—The mineral riches of America are probably superior to those of any of the other great divisions of the globe. The discovery of the mines of Mexico and Peru effected an entire revolution in the value of the precious metals; and they have since continued to be the grand sources whence supplies of gold and silver have principally been derived. The produce of the American mines at the commencement of the present century, was estimated by M. Humboldt as follows:

Annual Produce of the Mines of America at the commencement of the Nineteenth Century.

Political divisions.	Gold.		Silver.		Value of both gold and silver in dollars.
	Marcs of Castile.	Kilogs.	Marcs of Castile.	Kilogs.	
Vice-royalty of New Spain .	7,000	1,809	2,335,920	537,512	23,000,000
Vice-royalty of Peru . . .	3,400	782	611,090	140,478	6,240,000
Captain-generalship of Chili	12,212	2,807	29,700	6,827	2,000,000
Vice-royalty of Buenos Ayres	2,200	506	481,530	110,764	4,850,000
Vice-royalty of New Grenada	20,505	4,714	- -	- -	5,900,000
Brazil	29,900	6,873	- -	- -	4,360,000
Total,	75,217	17,291	3,460,240	795,581	43,500,000

This sum of 43,500,000 dollars, at 4*s.* and 3*d.* a dollar, amounts to £9,943,750.

Mr. Jacob, author of the Historical Inquiry into the Consumption of the Precious Metals, estimated the annual average produce of the American mines, from 1809 to 1816, at 47,061,000 dollars. But the revolutionary struggles which began, in 1810, to disturb Peru, Mexico, and the rest of Spanish America, by causing the expulsion of most of the great capitalists, by whom the mines were principally carried on, speedily ceased some of the most productive among them to be entirely abandoned, and occasioned an extraordinary falling off in the supply of the precious metals previously obtained from the New World. Mr. Jacob estimates the average annual produce of the American mines, from 1810 to 1829, at only £4,036,000, being less considerably than half their produce at the beginning of the century; and though this estimate has been suspected of being somewhat undervalued, there are pretty good grounds for thinking that it is not far from accurate. (*Jacob*, ii., 267.) The failure of the companies formed in this country in 1825, for working the American mines, the instability of the revolutionary governments, and the continued anarchy and insecurity that has prevailed down to the present time in Mexico, and in all the old provinces of Spanish America, have hitherto prevented any very material additions being made to the supply of bullion from the American mines, which at this moment (1838) is certainly under £5,000,000.

The causes of this extraordinary decline being thus explained, it is plain that there are no grounds for supposing that it will be perpetual. It is believed, indeed, that some of the richest of the mines known to exist in Mexico have not yet been wrought; and it is more than probable that many mines will yet be discovered. The instability and weakness of the governments, and the consequent indisposition to embark capital in industrious undertakings, are the only obstacles that hinder the American mines from yielding greater supplies at present than at any former period.

Exclusive of the mines, the gold and silver washings of Brazil, and other parts of S. America and of the United States, are considerably productive. Besides gold and silver, most other metals are found in less or greater abundance in America. Chili and Cuba have some of the richest copper mines in the world; lead is found in different parts of the United States, particularly in Illinois, and in Mexico, &c.; iron is most abundant in the United States, and in many other parts of the continent; salt also is very widely diffused; and coal, including anthracite, is found in vast deposits in different parts of the United States, in British America, and in Chili. Europe may now be said to be wholly dependant on Brazil for supplies of diamonds, which seem to be more abundant there than anywhere else.

Vegetation.—Stretching, as America does, from the eternal snows of the Arctic to those of the Antarctic circle, and possessing soils of every elevation and quality, her vegetable products are necessarily of the most diversified description. Owing to the prevalent humidity and coolness of the climate, and the richness of the soil, her forests and pastures are unrivalled for extent, luxuriance, and magnificence. The forests consist generally of very heavy timber, including many species of pines and larches unknown in Europe, with an endless variety of oaks, maples, cypresses, tulip trees, mahogany trees, logwood, Brazil-wood, &c., &c. The Old World is indebted to the New for some of its most useful and widely-diffused vegetable productions. Potatoes, though probably not introduced into Europe for more than a century after the discovery of America, already form a most important part of the food of most European nations; and tobacco, though it also be of American origin, has been diffused from one extremity of the Old World to the other, and is, perhaps, the most universally esteemed of all luxuries. We also owe to America maize, or Indian corn, millet, cocoa, vanilla, pimento, copaiba, cinchona or bark, so important in medicine, jalap, sassafras, nux vomica, &c. The *Cactus cochinilifer*, which furnishes the cochineal, is also peculiar to America. On the other hand, America is indebted to the Old World for a great variety of cereal grasses, trees, and fruits. At the head of the former may be placed wheat, barley, oats, and rice, all of which succeed admirably well in large portions of America. It seems pretty well established that the sugar-cane is indigenous to some of the W. Indian islands; but it is abundantly certain, not merely that the art of making sugar, but that the cane, now most generally cultivated in the islands and in continental America, was brought to them either from the E. Indies or from Madeira. America is also indebted to the Old World for the coffee-plant, now one of her staple products; and for oranges, lemons, peaches, and most descriptions of fruit trees. New-York apples, though now very superior to any produced in this country, are derived from plants carried from England. The vine has been raised in America; but either the soil or climate is not suitable for it, or, which is perhaps most probable, sufficient care has not been bestowed on the manufacture of the wine. The tea-plant has been tried in Brazil; but, owing to the dearness of labour, there is no chance of its

being profitably cultivated there, or anywhere else in America.

The Zoology of America differs in many important respects from that of the Old World. Of about 1350 mammals that have been described and classified, America possesses about 540; but, with few exceptions, she is singularly ill provided with the useful animals. As already stated, neither the horse, ox, sheep, nor hog were found in America on her discovery by Columbus; and the want of them must, no doubt, have been a considerable obstacle to the advancement of the natives in the career of civilization. The elephant and the camel are also unknown in America; but she was not entirely destitute of useful animals. In Peru they had the llama, guanaco, paco, and vicunna, animals that bear a considerable resemblance to each other, if they be not of the same species. The first has a considerable analogy to the camel, though it be neither so large nor strong, and wants the hump. It was, and still is, employed to carry loads, and, being docile and sure-footed, makes its way over the most dangerous paths. Its pace is slow, seldom exceeding 12 or 15 m. a day, and it usually carries about 80 lbs. Its wool, or, rather, hair, which is generally, but not always, white, is spun and made into articles of clothing. The guanacos and Pacos are not so serviceable as beasts of burden as the llamas, and are comparatively little used. The vicunna, the smallest of them all, inhabits the least accessible parts of the Andes; it is chiefly prized on account of its wool, which is of a very superior quality. The flesh of these animals, though dry and coarse, is used as food. They are almost the only animals that the native inhabitants of America had been able to subdue, and to render subservient to their purposes. The bison, or American ox (*Bos Americanus*), the largest native quadruped of the New World, is principally found on the prairie lands of the Rocky mountains in N. America. It is rarely, if ever, seen to the S. of the Mississippi; and it is doubtful whether it was ever found on the Atlantic coast. The *Bos moschatus*, or musk ox, is found only in the most N. parts of America to the W. of Hudson's bay, from 66° to 73° N. lat. Its horns, which cover all the forehead, are often of great weight. The Rocky mountain goat, remarkable for the fineness of its wool, inhabits the Rocky mountains from Mexico to the extremity of the range. Several species of deer are found both in N. and S. America. The rein-deer is the most N. ruminating animal, being found in Greenland and the remotest of the Arctic islands. On the W. coast it descends as low as the Columbia river.

America possesses several peculiar species of the genus *Canis*, or dog. The physiognomy of the American wolf, when contrasted with that of its European namesake, is very distinct. There is a great variety of foxes. The fur of the *Canis lagopus*, or artic fox, and of some other varieties of the same genus, is of considerable value. The best known variety of the American dog is the *Canis familiaris*, found in Newfoundland. This animal is now very common in England, and is deservedly a great favourite. It is strong and active, has long, fine glossy hair, a curved bushy tail, and webbed toes, by means of which it swims admirably well. The colour of the back and sides is generally black, with a white belly and legs, and frequently a white spot at the tip of the tail. It is naturally fitted, by its thick covering of hair, for a cold climate, and is more active and in better health in this country in winter than in summer.

The beaver (*Castor*) is more abundant, perhaps, in the N.W. parts of N. America than in any other parts of the world. But the great demand for, and high price of its fur, has led to a great diminution of its numbers, and to its nearly total extirpation in the more accessible parts of the country. The coypou, known in commerce by the name of nutria, and the chinchilla, are found in S. America. They yield a highly esteemed fur, and immense quantities of their skins are now imported.

America has but few beasts of prey. The most formidable, the *Felis onca*, or jaguar, is found only in S. America. It is larger and stronger than the panther, but is inferior in size and ferocity to the Bengal tiger, with which it is generally compared. The *Felis discolor*, or puma, is found in both S. and N. America: though denominated the American lion, it is neither so large nor fierce as the jaguar. A number of bears, some of them of the largest and most formidable description, are found in Arctic America: two are peculiar to it.

Tropical America has a great variety of apes, but none of them approach so nearly to the human form as the orang outang, or chimpanzee, and none of them have the ferocity of the baboon. Many, however, have prehensile tails, endowed with so great delicacy of touch that they have been compared to the trunk of the elephant. This fits them admirably for travelling from tree to tree.

The vampyre bat, frequent in S. America, is very dangerous. It attacks the larger animals, and even man himself, when asleep; and as its bite is not sufficiently painful to awaken the victim, the bleeding it occasions sometimes proves fatal.

America is infested by an immense number of reptiles. Of these pests the rattle-snake is one of the most common, and also the most dangerous: but there are others little less venomous. The true *boa constrictor* is found of an enormous size in the marshes and swamps of tropical America. Centipeds, sometimes a yard in length, with enormous spiders, scorpions, &c., abound in these regions. According to Humboldt, the white ants and termites are even more destructive here than their congeners in the Old World.

The birds of America are exceedingly numerous. The condor, which inhabits the most inaccessible parts of the Andes, though of less dimensions than was formerly supposed, is the largest and most powerful of all the feathered tribes. There are also a great many eagles, vultures, falcons, and other birds of prey. A species of ostrich, but smaller than the African, inhabits the Pampas; and the woods of both Americas are the resort of vast flocks of wild turkeys, pigeons, &c.

The waters of America are well supplied with fish; and the rivers in the tropical regions produce also enormous lizards and alligators. In the lakes of the Caraccas is found the electric eel.

Nothing, however, is so worthy of remark, in relation to the zoology of America, as the wonderful increase of the horses and cattle carried there from Europe. Had we not been fully aware of all the circumstances in regard to their immigration, it would certainly have been supposed that they were indigenous to America, and that it, in fact, was their native country. They here rove about in immense herds in a state of pristine freedom; and so numerous have they become that the slaughter of oxen, not for the carcass, but merely for the hide, is the principal business of many extensive provinces. (See PAMPAS.) In a single year above 800,000 hides have been exported from Brazil only, exclusive of those exported from Buenos Ayres, Montevideo, and other ports! In consequence, too, of the extraordinary increase of horses, the mode of existence of the natives in several parts has been wholly changed; they have become expert horsemen, and pass a considerable part of their time on horseback, approaching in this respect to the Tartars and Arabs of the ancient world. Sheep have not succeeded so well in America as cattle and horses; and their wool, in most parts, is generally of an inferior description.

Races of Men.—The native inhabitants of America differ in physical form, in language, and perhaps in intellectual character, from every other variety of the human race. Probably, however, the general agreement which exists among themselves is even more remarkable than their disagreement from other races. The *Red* men, as the Americans call themselves, in contradistinction to the European and African races (that is, to the *Whites* and *Blacks*, the only two they have any knowledge of), exhibit surprisingly little difference, although extending over 70° on the N. side, and 54° on the S. side, of the equator. Heat or cold, drought or moisture, elevation or depression of surface, have certainly no effect in the production, even of the small variations occasionally discoverable among them. "The Indians of New Spain," says Humboldt, "bear a close resemblance to those who inhabit Canada, Florida, Peru, and Brazil. Over 1,500,000 sq. leagues, from cape Horn to the St. Lawrence and Behring's straits, we are struck at the first glance with the general resemblance in the features of the inhabitants. We think we perceive them all to be descended from the same stock, notwithstanding the prodigious diversity of their languages. In the portrait drawn by Volney of the Canadian Indians, we recognise the tribes scattered over the savannahs of the Apure and the Carony. The same style of features exists in both Americas." The general physical form is as follows: Skin dark, having more or less of a red tinge, usually called copper-colour, but thought to be more correctly characterised by that of cinnamon: hair of the head black, coarse, lank, shining, long, but not very abundant: hair on other parts of the body very deficient. The beard is seldom altogether wanting, but it is so uniformly scanty, as often to present the appearance of its being so. Forehead long; eyes deep sunk, small, and black. Face broad across the cheeks, which are round and prominent; nose well raised, and round at the apex; mouth large and lips thick; chest high, thighs massy, legs arched, feet large, hands and wrists small. The height is nearly the mean stature of the European race, but the body is usually more squat and thick set. The countenance is hard-favoured, and the look stern, yet with a certain sweetness in the expression of the mouth which is a contrast to the rest of the features. It will appear, from this statement, that the races which the American most nearly resembles, are the Mongul, Malayan, and Indo-Chinese. The features of the face are, however, more amply chiselled than in any of these; the frontal bone is more flattened than in any of them, and the stature is greater than it is, at least, in the Malayan race. Although in

the tropical regions of America there are no black men, as in Africa or Asia, nor in its temperate regions any whites, as in Europe, still varieties do exist in an inferior degree: which may be compared to those which exist among Europeans, and among negroes. The most striking of these are found in the short, squat, and tallow-coloured Esquimaux, about the polar regions of the N., and the tall Patagonians towards the S. extremity of the continent. The first of these differ in no respect, as far as physical form is concerned, from the people of the same name in Asia and Europe. The Patagonians or Puelches, inhabiting the S.E. coast of the S. extremity of America, may be considered, after rejecting the exaggerations of early, and the contradictions of later travellers, as the tallest people in the world. If with us the medium height of the male sex may be estimated at 5 feet 8 inches, that of the Patagonians may be taken at 6 feet. Other races, remarkable for their great stature, also exist among the Americans; as the Caribbees and Cherokees. But there are also races remarkable for their shortness, as the Peruvians, who are between the mean European standard and the Chaymas, whose average height, according to Humboldt, is 5 feet 2 inches, which makes them a full inch shorter than the Malayan race, yet much taller than the Esquimaux. Upon the whole it may be remarked that the American race exhibits a wider difference in stature than any other family of mankind, while this difference, at the same time, would not seem to be productive of any essential variation in physical or intellectual capacity. In point of colour there exists also considerable variety; the brownish-red tinge for the most part prevails; but in some cases its intensity approaches to black, and in others to the fairness of a southern European. The probability is, after all, that the number of distinct races of men in America is at least as great as in other portions of the world, although their smaller numbers, and obscurity of the tribes, make it more difficult to distinguish and class them. In this matter, languages, so useful a guide in Europe and Asia, have not, in America, on account of their multiplicity and intricacy, afforded as yet much assistance. The exceeding, and perhaps insurmountable difficulty of this branch of the inquiry may, indeed, be judged of when it is known that the number of distinct languages spoken by men whose numbers are not supposed to exceed 10,000,000 has been reckoned at no less than 438, and their dialects at 2000! The intellectual powers of the American family must, at first view at least, be considered as ranking it below all the other principal races of mankind. The Americans, when left undisturbed to the exercise of their native energies, had not tamed any of the useful animals, whether for food or labour, the llama and vicunna by one tribe excepted. The Peruvians used gold, found in its native state, and they appear also to have been able to smelt and harden copper—the utmost stretch of their ingenuity; but they knew nothing of the use of iron. The agriculture of the most civilized of the American tribes was of a rudeness and imperfection of which there can hardly be said to have been an example in the Old World. The Quichua, the most improved of their languages, had no words to express abstract or universal ideas, as *space*, *time*, *being*, *matter*, *substance*, &c., or even such as *justice*, *honour*, *gratitude*, *freedom*, &c. They had invented no species of writing, and the contrivances by which they attempted to depict and record their ideas are more rude than anything handed down in the traditions of European and Asiatic nations. In all the respects now mentioned, the Americans evinced their inferiority to the nations of Europe and Asia, and, in all but the invention of a rude sort of hieroglyphics, to even the Negro nations of Africa. Nature had not, indeed, in many respects, been propitious to them: she had denied them nearly all the domestic animals which have conduced materially to the civilization of the inhabitants of the Old World; as the horse, ass, ox, camel, sheep, goat, hog, and most of our domestic poultry. But their want of ingenuity is sufficiently shown by their not availing themselves of such as they possessed; as the rein-deer, goose, duck, turkey, and other poultry, soon domesticated by the European settlers. For their want of ingenuity in not discovering the art of smelting iron, no plea can be shown; and, indeed, it might rationally be supposed that the paucity of useful animals for domestication would rather have had the effect of directing and concentrating their efforts in other quarters. Mere handfuls of Europeans, in comparatively rude ages, subdued the most numerous and warlike tribes of America, and these handfuls have now grown into the majority of the population.

Of the origin of the American race we are totally ignorant. Neither the evidence of physical form nor of arbitrary customs and institutions, which could spring only from a common source, or the testimony of language, connect them with any other race of men. The testimony of language on this subject is particularly clear. For example, incontestible evidence of a connexion exists among the great majority of those insular languages which extend over at least 60° of latitude, and between Madagascar and Easter island, over 200° of longitude; but the moment we quit the last-named island, which is but 45° from the coast of America, all farther trace of a Polynesian language ceases. We are not, indeed, unaware that the comparison of a great number of American with a great number of Asiatic languages has exhibited a small number of resemblances; but these we are disposed to consider as forced, fanciful, or accidental.

The moral character of the native Americans has been depicted under very different colours; but there can, we apprehend, be very little doubt that the bad features in it very decidedly predominate. Their capacity of enduring hardships and privations of all sorts, and even the most excruciating tortures without murmur or complaint, is well known; and is owing as much, perhaps, to physical causes, as to the training they undergo. They cannot be accused of ingratitude, or of a want of hospitality, but they are in the last degree vindictive, cruel, and treacherous. When not engaged in war, or hunting, or drinking, they sink into a state of torpor and apathy from which nothing can rouse them. They have all, or mostly all, an irrepressible rage for spirituous liquors; to obtain which they will sacrifice everything, and which has been too readily ministered to by Europeans. The state in which we find women may generally be taken as pretty indicative of the character of a people; and tried by this test, the American Indians will be found to be almost at the bottom of the scale of civilization. From the one end of the continent to the other, woman, with very few exceptions, is a slave; she has to perform all the laborious occupations of the tribe, and is, in fact, degraded almost to the level of a beast of burden. Polygamy is very generally practised; and it is only in some rare cases that chastity is held in any estimation. Their religion is a rude species of idolatry or fêticism. Cannibalism has undoubtedly prevailed over the whole continent, and is not yet entirely extinct. The Mexicans, the most advanced of the native nations, delighted in blood, and were accustomed, when invaded by the Spaniards, annually to offer up thousands of human victims on the altars of their gods! Even the Peruvians, the least sanguinary of all the Americans, though Sabians, or worshippers of the heavenly bodies, did not scruple, on the deaths of their monarchs, to immolate hundreds of human victims on their tombs!

The natural inferiority of the native Americans, and their incapacity to attain to anything like real civilization, are strikingly evinced by the result of the continued efforts of the Jesuits in Paraguay for their improvement. So long as the Jesuits resided among them, and could direct their efforts, and compel them to be industrious, all went on very well, and the golden age seemed to be restored. But the entire system was forced and factitious. The moment the Jesuits withdrew, the fabric that had cost them so much pains and labour to raise, fell to pieces. Civilization had taken no real root among the Americans; and they relapsed forthwith into the indolence, improvidence, and idolatry, that seem natural to the race.

"From the moment," says an able writer, "that the Europeans landed in the New World, benevolence has been at work to instruct some portions of these tribes in religion and the arts, and flattering accounts have been published from time to time of the success of those humane persons who dedicated their lives to the task. But, after three centuries of incessant exertion, what is the result? Is there one tribe that exhibits the steady industry, the provident habits, the spirit of improvement, and the rational views of religion, which are to be found in any parish of England? We cannot find that there is. Many tribes, living near the whites, have adopted their habits and ideas to a certain extent, but merely under the influence of imitation. While missionaries and teachers are among them, everything wears a favourable aspect; but their civilization is never self-sustained. It is created by the agency of men of higher natural endowments, and, when they are removed, it moulders away, because it has no foundation in their character. Many parties of Indians, remnants of tribes once powerful, have lived peaceably, on reserves of land, enclosed amid the population of the United States for more than a century. No situation can be imagined better fitted to promote their improvement; but in no one instance, so far as we know, have they melted into the mass of the white population, or risen to anything near their level in knowledge and the useful arts. They live in huts in no material degree better than the wigwams of their wandering brethren. They are generally honest, but drunken, indolent, and ignorant, though teachers and missionaries are employed by the government to instruct them. Basket-making is almost the only trade they ply, and in their habits and character they may be aptly compared to the gypsies of Europe, who exist in the midst of civilization, without partaking of its spirit or its benefits. It should be observed that there is not the same reluctance in the whites to mingle their blood with the red men as with

the blacks. Much has been recently said of the progress made by the Cherokees; but we suspect that what is witnessed there is but a flimsy veil of improvement, spread over habits which are essentially savage. We are convinced, in short, that the Indian is truly the man of the woods; and that, like the wild animals he lives upon, he is destined to disappear before the advancing tide of civilization, which falls upon him like a blight, because it supplies new food to nourish his vices, while it demands intellectual and moral faculties in which he is deficient, and renders useless those qualities which predominate in his character. We would not discourage the attempt to meliorate the lot of the Indians; but this will succeed best when it is grounded on a true knowledge of their natural capacities. Some of them are much more susceptible of moral and religious improvement than others; but to instruct and reclaim them effectually, our belief is, that the system of the Jesuits is the only one that holds out a chance of success. They must not merely be taught and preached to, but they must be retained in a state of pupilage, trained to their duties, controlled and directed in all their proceedings by intellects superior to their own; and there are many tribes too ferocious and intractable for even this method of tuition. We do not maintain that the character of the Indian nations is indelible; but to effect any considerable change in it, the lapse of a longer period would be required than the existence of these tribes is likely to extend to. Neither do we think that there is anything in the extinction of these people by natural means which humanity should mourn over. In every state of life man has but a brief span of existence allotted to him. Successive generations fall like the leaves of the forest; and it should be remembered that the extinction of a race of men by natural causes, means merely its non-renewal, or the suspension of those circumstances which enabled it to continue its existence."—(*Encyc. Britannica*, ii., p. 631.)

Population.—Besides the original inhabitants, vast numbers of Europeans, of all nations, have emigrated to America since its discovery by Columbus, tempted originally, for the most part, by the *auri sacra fames*. It was this same passion, taking it in its most literal and degrading sense, that has made them fill the Antilles, and part also of the continent, with millions of negroes brought from Africa, and reduced, with their descendants, to a state of slavery. But at a later period America furnished an asylum for the victims of political and religious persecution in the Old World; and for these many years she has offered an all but inexhaustible field for the profitable employment of its redundant capital, skill, and labour; and thousands upon thousands, who could hardly contrive to exist on this side the Atlantic, have attained, if not to opulence, at least to comfort and independence, in America. Hence she has long been, and still continues to be, the promised land of the poor but industrious man; and a city of refuge to all who happen to be discontented with the policy, or who have given offence to the rulers of the Old World.

The estimates of the population of America at different periods have differed very widely, in consequence of the vague and defective nature of our information with respect to it. Humboldt estimated the population of America, including the Antilles, at about 35,000,000. Balbi estimated it, for 1827, at 39,000,000; but we incline to think that this was below the mark even for the epoch to which it refers; and the population of the United States, British America, and Brazil, but especially the first two, has since increased prodigiously. At present we are well convinced that the population of America is not under, if it be not rather above, 47,000,000.

Political Divisions.—It would be useless to attempt giving any detailed outline of the existing divisions between the different states among which America is at present parcelled out: for the chances are that they will be materially altered in the course of a few months. In fact, ever since the commencement of the revolutionary struggles in 1810 down to the present moment, everything has been, in the greater part of America, in a state of transition. States have been formed, split into portions, and again consolidated. Hitherto, however, none of the new states formed out of the old Spanish provinces, seem to have acquired any considerable portion of stability, or to be in a condition successfully to oppose foreign invasion or domestic insurrection. No doubt a better order of things, and one more calculated to promote the improvement of those naturally fine countries, will be established; but, in the mean time, very little importance need be attached to the subsisting territorial arrangements.

The following account of the different American states, and of their extent and population in 1838, is partly taken from the Weimar Almanac; but we have altered, and we hope improved it in several particulars:

Estimate of the Area and Population of the American States in 1838.

States.	Area in Eng. sq. m.	Total pop. 1838.	Whites and Europ. Creoles.	Indians and Free coloured Races.	Blacks and Indian Slaves
North America:					
Hayti	28,302	935,000	28,000	420,000	495,000
Mexico	?	7,500,000	1,200,000 (1835)	5,800,000	
Central America	208,351	1,900,000	475,000	1,425,000	
United States	2,446,759	(16,580,000	10,535,232 (according to the census of 1830).	391,576	2,009,050)
Texas	?	100,000	?	?	
South America:					
Araucania	28,000	450,000	. . . . .	450,000	
Argentine Republic	1,000,000	1,000,000	?	?	?
Bolivia	318,000	1,200,000	300,000	900,000	
Brazil	2,740,000	6,060,000	843,000	3,130,000	2,086,666
Chili	104,000	602,000	130,000	472,000	
Columbia					
a. Equator	?	560,000	?	?	
b. N. Granada	?	1,686,000	?	?	
c. Venezuela	?	829,000	?	?	
Paraguay	146,555	600,000	60,000	540,000	
N. Peru	954,000	831,000	126,311	729,215	284,773
S. Peru		494,000			
Uruguay	223,978	175,000	20,000	155,000	
Uncivilized States:					
Patagonia	441,309	150,000	. . . . .	150,000	
Mosquito	124,995	300,000	. . . . .	300,000	
European Colonies:					
1. British	565,000	2,300,000	1,480,000 (whites)	820,000	
2. Danish	170	46,000	6,000	3,000	38,000
3. French	125,112	280,000	95,000		184,856
4. Dutch	10,606	85,000	5,800	7,000	72,200
5. Russian	400,350	50,000	870	49,130	
6. Swedish	43	8,000	1,992	589	5,428
7. Spanish	58,226	1,020,000	400,000	80,000	540,000
Independent Indians	2,000,000	1,200,000		1,200,000	
		46,931,000			

* It is believed that injustice is done to the intellectual character of the native Americans by the foregoing remarks. While they are acknowledged to have been rude and uncultivated, they are known, by those well acquainted with them, to display much native acuteness. Before their removal beyond the Mississippi, the Cherokees had made some considerable advances in civilization and mental cultivation. Elias Boudinot, one of their number, who was educated at the Foreign Mission School in Cornwall, Ct., for a number of years edited a respectable newspaper among them, which in point of editorial ability, would not suffer by a comparison with many respectable journals in the United States. Unhappily, he lost his life in the as-

Diseases of America.—The Anglo-American population is subject to the same diseases as the people of England; but suffers more from intermittent and remittent fevers. Yellow fever sometimes prevails epidemically as far north as New-York and Philadelphia. Of 122,591 deaths occurring in New-York in the 31 years 1805–35, 7563 were ascribed to fevers of every type; 327 to intermittents; 1480 to remittent and bilious fevers; 477 to yellow fever; not less than 3368 deaths to dysentery; 1606 to diarrhœa; 5183 to cholera; and 4670 to cholera infantum, a malady more prevalent in America than England. The mean duration of life in the English race has been inconsiderably affected by the climate of America. We have calculated the mortality of the cities of New-York and Philadelphia, and it will be found to differ little from the mortality of English cities of the same extent.

The population of New-York increased from 75,770 to 270,089 in the 30 years from 1805 to 1835; the mean population deduced from seven quinquennial enumerations was 147,168; the total deaths in the 31 years 1805–1835 amounted to 122,501, exclusive of 6925 still born.* The mean annual rate of mortality in New-York was therefore 2·686 per cent., nearly 1 in 37.

The population of the city and suburbs of Philadelphia was 119,325 in 1820, and 167,811 in 1830; the deaths in the 10 years, 1821–30 amounted to 40,506, exclusive of 2692 still-born. The mean annual rate of mortality was 2·663, nearly 1 in 38.†

Deadly epidemics decimate the Havana, Vera Cruz, and other cities in tropical America. The yellow fever begins to prevail epidemically at Vera Cruz in May, when the mean temperature rises to 75·2° of Fahrenheit's thermometer; it attains its maximum force in September and October. The disease is fatal to strangers, particularly to the inhabitants of the temperate and cold climates. In the intendency of Vera Cruz, the yellow fever, which rages in the capital, has never been able to ascend above the farm of Encero, which Humboldt found to be 3044 feet above the level of the sea; and as the Mexican oaks do not flourish below this limit, it shows that the constant average temperature is of a true tropical character.‡ Humboldt also observes, that, while yellow fever rages at La Guayra, it never crosses the Cumbre and the Cerro de Avila.

The condition of the mothers, and the training of the children, exercise an influence upon the health and diseases of the native American tribes which cannot be overlooked. The women, though doomed to severe labour, are spared during the period of pregnancy. They seldom marry till they are about 20. Accouchements take place in private cabins, and the mother, after washing herself in cold water, returns in a few days to her usual employments. Sir W. Penn was assured, and correctly, that the American Indians plunge their infants into cold streams as soon as born, in all seasons of the year. This practice, which destroys the weaklier bodies, and strengthens the survivors, has been generally adopted by the savages of cold and temperate climates. It was common in Greece; and Virgil makes one of the early Italians say, in the Æneid,

> Durum a stirpe genus: natos ad flumina primum,
> Deferimur, saevoque gelu duramus et undis.

The Dorians and Pelasgians exposed their children; and Lycurgus regulated the practice by enacting that none but the infirm and diseased should be abandoned after a public examination. There are no deformed Indians or idiots; they are sacrificed, says an apologists of savages, by the severity of the Indian manners. To facilitate their transport from place to place, the children are tied to a board, where they lie upon their backs for 6, 10, or 18 months. By some tribes the heads are flattened by pressure. The child generally sucks its mother till it is two years old, and sometimes longer. The circulation of the blood is more languid in the Indians than in persons who are in the constant exercise of the habits of civilized life. Out of eight North American Indians, whose pulses Rush examined at the wrists, he did not meet with one in whom the artery beat more than 60 strokes in a minute.

The diseases of the Indians vary with the climate and locality. In the north, however, fevers constitute the most striking diseases. Pleurisies, peripneumonies, and rheumatisms are common. Dysentery is an Indian disease. Great numbers perish of famine, and the innumerable diseases generated by famine. In the temperate zone, ague, remitting and malignant fevers assail them in the endless forests, and in the marshes and effluvial atmosphere of the lakes and rivers. In the tropics, Humboldt says, they are exempt at Vera Cruz from the ravages of yellow fever, which proves so fatal on the coast and in the West Indies to Europeans. But thousands have been carried off in repeated epidemics, by a disease not very different from yellow fever, called *Matlazahuelt*. Small-pox, which is believed to have been introduced among them by the Spaniards, sometimes destroys half the heads of a tribe. Montezuma died of small-pox. It has been a generally received opinion that *lues venerea* was acquired from the inhabitants of Hispaniola (Hayti), and conveyed by the equipage of Columbus to Europe. The son of Columbus relates in his narrative that the islanders had a cutaneous affection, called *cazacarcol*, which resembled a tetter (Tenia): the historian, Ferdinand Oviedo de Valdes affirms that the Spaniards were infected with it by the Indian women, and communicated the disease to the Neapolitans in the expedition of Gonzalvo de Cordova. He ascribes its importation to the second expedition of Columbus. Various cutaneous affections had been described by earlier medical writers, confounded with leprosy, and attributed to impure intercourse; but, in 1493, syphilis appeared, with its striking and appalling symptoms, almost simultaneously all over Europe. Columbus disembarked from his first voyage, March 15, at Palos; and arrived at Seville in April. In the beginning of the summer, the disease was observed at Auvergne, in Lombardy, in the rest of Italy, and in Brunswick.* Could lues venerea have travelled at this telegraphic rate? A learned Spaniard justly remarks, that neither the classical writers, nor the satirists of the 14th century, alluded to the effects of syphilis: in the words of the licentiate of Villaloboa, it was, taken in its entire character, *jamas vista en metro, ni en prosa, ni en ciencia, ni istoria.* It still, however, remains a problem whether the outbreak of the malady merely coincided with the return of Columbus, or was conveyed from America. Rush affirms that the disease called by the English, morbus Gallicus; by the French, mal de Naples; by the Portuguese, Spanish disease; by the Spaniards, Indian disease, was communicated to the northern tribes of America by Europeans.

Violent deaths are common among the Indians. Their occupations expose them to accidents. They are engaged in an almost perpetual warfare; and entire tribes are sometimes exterminated. Their connexion with the European population has made them acquainted with spirituous liquors; and this has proved another prolific source of disorder.

Celsus says, *Medicina nunquam non est;* and this holds among the American Indians. Their medical treatment, for the infirmities to which they are subject, is simple, and often instructive. In fevers, they abstract all kinds of stimulating food; and allow their patients to drink plentifully of cold water. Sweating is a common remedy. The Indian mode of procuring this evacuation is as follows: the patient is confined in a close tent, or wigwam, over a hole in the earth, in which a red hot stone is placed; a quantity of water is thrown upon this stone, which instantly involves the patient in a cloud of vapour and sweat; in this situation he rushes out and plunges himself into a river, from whence he retires to bed. If the remedy has been used with success, he rises from his bed in four and twenty hours perfectly recovered from his indisposition. This bath is used not only to cure fevers, but to remove that uneasiness which arises from fatigue of body; and used for this purpose it is an excellent remedy. They purge and vomit: ipecacuanha is one of the many roots they employ for the latter purpose. They confine bleeding to the parts affected. A piece of rotten wood

gry disputes which grew out of the exciting subject of their removal. A few years before their removal, a delegation of Cherokees visited Washington city, on the subject of their concerns with the United States government. At that time, a member of the Georgia delegation in the U. S. House of Representatives, after speaking disparagingly of the general state of the nation, remarked that there were men in that delegation, by whom he should be proud to be represented on the floor of that house. The friends of the Indians trembled for them, in view of their removal, lest the incipient germs of civilization should be nipped in the bud. But their fears have not been realised. The Indians themselves, and their best friends, would not now wish for their return to their former abode. They are advancing in civilization and general improvement, and promise yet to redeem the Indian character from the reproaches which have been cast upon it, and to be no mean appendage of the United States. The progress from barbarism to refinement is not the work of a year. It is progressing as fast as, under the circumstances, could be expected. Results are produced, such as the Jesuits, with all their labour and perseverance, could not have produced during the life of a Methusaleh; results which are substantial in their character, and which are likely to be permanent.

The opinion of no man is deserving of greater respect on this subject, than that of Timothy Flint, the well-known geographer of the Western United States. In his "Recollections of Ten Years in the Valley of the Mississippi," page 150, he says, "Whatever may be the estimate of the Indian character in other respects, it is with me an undoubting conviction that they are in no respect, as it regards combination of thought or quickness of apprehension, inferior to uneducated white men. This inference I deduce from having instructed Indian children. I deduce it from having seen men and women in all situations, calculated to try and call forth their capacities. When they examine any of our inventions, steam-boats, steam-mills, and cotton-factories, for instance—when they contemplate any of our institutions in operation, by some quick analysis or process of reasoning, they seem immediately to comprehend the principle and the object. No object affords them more delight than a large and orderly school. They seem instinctively to comprehend, at least they explained to me that they felt the advantages which this order of things gave our children over theirs.—*Am. Ed.*

* Med. Review, Jan., 1839.

† Hazard's Register of Philadelphia, July, 1834.

‡ Dr. Craigie, Practice of Physic, p. 223.

* Sprengel, Hist. de la Medicine, tom. ii., p. 499.

is burned upon the skin for the same purposes as the moxa. They attempt to stanch the flow of blood from wounds by plunging in cold water, and endeavoured to restore drowned people by suspending them by the heels. They have a great many specifics of uncertain value. The Indians attend to the sick for a certain season, but abandon them if the disease be protracted. When the northern Indian is unable, from sickness, to continue his journey, he is left behind by his companions, and covered over with deer skins; he is supplied with water, food, fuel, if the place will afford it, and informed of the track which his companions intend to pursue. (*Hearne.*)

Some of the most important drugs in the Materia Medica are derived from America. Guaiacum was introduced, at an early period, as a specific for syphilis in the place of mercury, which it superseded for several years. It is now fallen into disuse. Not so the root of the American sarsaparilla, which is consumed in great quantities, although it is exceedingly expensive. It is found in the hedges and swamps of Virginia. There are several species; the best, according to Humboldt, grows on the borders of a lake, two days' journey from Esmeralda. The columba root, jalap, copaiba, and ipecacuanha are derived from America. We are also indebted to the New World for Peruvian bark. These remedies are invaluable; they contributed, in the 17th century, with the introduction of syphilis, to destroy the blind adoration of Galen, and led to a revolution in medicine.

Discovery of America.—This is the most striking event in modern times, and has, perhaps, made the most important change in the condition of mankind. There is no rational ground for supposing that the ancients had the slightest idea of the existence of the American continent. The form of their vessels, flat-bottomed and impelled by oars, and their ignorance of the compass, allowed them to move only at a short distance from land. Their voyages, therefore, though in some instances extensive, were always along the coast of the great continents; nor is there the faintest record of any one having turned his daring keel into the vast abysses of ocean. Nothing could be less probable than that tempest or accident should drive any of the few vessels which then navigated the exterior seas of Europe to so immense a distance, or, if driven, that they could ever have returned.

But if we listen to some learned moderns, America would appear the general refuge of all who felt themselves straitened in the Old World. The Trojans, Syrians, Carthaginians, Canaanites, but above all the Jews, have been represented as the undoubted ancestors of its present people. These speculations proceed upon a total oblivion of the fact, that man has everywhere many things in common with his fellows. The division into tribes and respect for chiefs, the lamentations over dead relations, the love of ornament, are considered as habits which the Americans must have learned from the Jews. Garcia, observing that most of them honoured their parents, and considered theft and murder as crimes, thinks it clearly proved that they received the ten commandments from Moses. Others were obstinate, unbelieving, and ungrateful; sure signs of their belonging to the stiff-necked posterity of Abraham.* Attempts have been made to trace a similarity between the languages of the Old World and of America, but certainly with most slender success. Barton has collected 55 similar sounds, which Professor Vater has raised to 104, and Malte-Brun to 120; but to produce this, it has been necessary to search through sixty languages in each world. These few, too, if we except the natural infantile sounds Ata, Baba, Papa, &c., are by no means striking; and it seems even singular, that chance should not have produced more coincidences. Attempts have been lately made to identify the style of Mexican architecture with that of ancient Egypt; but we can see no ground for this, unless in the dimensions of the former, and some forms which a regard for beauty or convenience might suggest to both.†

The Welsh have put in a claim to the discovery of America. In 1170, Madoc, a prince of North Wales, sailed in quest of maritime adventure, and, after a long voyage, reached a "faire and large country" filled with wonderful objects: he then returned and took with him ten vassals and a larger party. Thus far seems tolerably attested; but though affording a sufficient foundation for Mr. Southey's poem, the idea of the region arrived at being really America seems scarcely to merit refutation. The intimation, that he left Ireland far to the north, makes it not improbable that he might have reached some part of Spain, no inconsiderable achievement in that age for a Cymeric chieftain.‡

The claim of discovery by the Northmen from Iceland has been much more generally received. The Scandinavian writers have supported it as a point of national honour; and the learned in the rest of Europe have generally acquiesced in their authority. They would not, we think, have done so had they perused the original narratives in Torfæus, and the Heimskringla, or Saga, of King Olaf Tryggeson. Biorn, an Icelander, in sailing across to Greenland, was overtaken by a tempest, and after being tossed about for several days, came in view of an unknown land. After navigating several days along the coast the wind became favourable, and in *four* days he reached his destination in Greenland. Can any one seriously suppose, that in this short passage he could have been driven upon Newfoundland, upwards of a thousand miles out of his way, or if driven, could thus directly and rapidly have retraced his course? Numerous voyages to and from this new country, named Vinland, are then related, with no mention of particular difficulty or danger. One of them is stated, without any surprise, to have been performed in *twenty-four hours*; a manifest impossibility under the Newfoundland supposition. As to the term *Vin*-land, very inappropriate even to Newfoundland, the Northmen probably, who could not be great connoisseurs on this subject, mistook for the grape one of those delicate berries which abound on the Arctic border. We are convinced then that Vinland was merely a southern part of Greenland; for the modern hypothesis, which places the colonies on the western coast, is by no means supported by good early authorities.*

Another alleged discovery of much celebrity stands on the report of the Zeni, Venetian noblemen of distinction. Towards the end of the fourteenth century, they visited and spent a considerable time in Friesland, an insular country in the north of Europe, which Forster has shown to agree not ill with Orkney, Shetland, and the Ferro islands. They there learned, that four fishing-boats being driven more than a thousand miles to the westward, had reached a coast named by them East-out-land, where they found cultivation, large cities, castles, and a Latin library in possession of the king. Thence they sailed to a more southern country, named Drogio, inhabited by a rude people, ignorant of iron, waging furious wars, and devouring each other. Reports were then made of a more civilized people to the south-west, who abounded in gold and silver, and had splendid temples, in which human sacrifices were offered. Forster, Malte-Brun, and for some time geographers in general, considered that these countries were undoubtedly Newfoundland, New-England, and Mexico. Mr. Murray was, we believe, the first to observe that even the distance of 1000 miles by no means corresponded; that the castles, libraries, and populous cities on the savage coast of Newfoundland were the reverse of credible, and that accounts of Mexico were little likely to have reached the Friesland fishermen. He argued, therefore, that, supposing the northern voyage correct, interpolation must have been practised in what related to America. This has been corroborated by the research of Mr. Biddle, who, on comparing different posthumous editions of Ramusio's work, found that the narrative had been altered in accordance with successive and corrected accounts of the new continent. He therefore rejects the whole as a forgery: we rather incline to think that the northern voyage may be genuine, while all that relates to America is undoubtedly interpolated.†

In the maps constructed during the fifteenth century, some curious features appear, which have been referred to a western world. In 1436, one formed at Venice by Andrea Bianco has in the north-west Atlantic, not very remote from Newfoundland, the word Stoka fixa (Stock-fish). But it is to be observed that Iceland and the adjacent seas were then the seat of a great fishery, and the term may have been merely used to express the abundance of its finny tribes. Another remarkable object in this map, as well as in one long prior, and in a subsequent one by Martin Behaim, is a long range of territory west of the Canaries, named Antilia. It seems impossible to trace with certainty the origin of this term, which we strongly suspect to be a corruption of the Atlantis of Plato, and to have no other origin. The inhabitants of those islands are said to have confirmed the impression by asserting that, in certain states of the atmosphere, they saw in mysterious distance a great unknown land; the work either of imagination or of some optical deception.‡ These ideas, however, rested on no solid basis, and the sound judgment of Columbus appears to have been in no degree influenced by them; it was not to Antilia, but to other regions, that he directed his voyage.

Perhaps no individual ever stood so much alone as this navigator, in making a discovery that changed the face of the world. He conceived the design, and struggling against the opposition made by his age, singly achieved it. Yet,

* Garcia, Origen de los Indios; Essai sur la question, Quand et comment l'Amerique a-t-il été peuple? 5 tom. 12mo, 1757; Adair's History of the North American Indians, 4to.

† Vater, Untersuchungen uber den Americas Bevolkerung, p. 47–65, 128–134. Malte-Brun, Geography, v.

‡ Powell's History of Wales, p. 196, &c. Hackluyt, iii., i.

* Torfæus, Hist. Vinland. Antiq., ch. i., ii. v., p. 50. (Maps of Stephanus and Thorlacius), Heimskringla, edit. Peringskiold, i. 328–336.

† Ramusio, Navigazione e Viaggi, ii., 280. Memoirs of Sebastian Cabot, p. 309–322.

‡ Maritime and Inland Discovery (Cab. Cyclop.), i., 237, &c.

like every other great revolution, it was doubtless prepared by previous circumstances. The progress of navigation and commerce, the enthusiasm excited by maritime discovery, its wide range along Africa and towards India, all tended to give this direction to his spirit of lofty and daring adventure. The invention of the compass, and improved celestial observations, rendered it no longer impossible to steer through an unknown ocean. Sound reasoning, aided by some errors, made him hope, by sailing westward, to reach, even at no very great distance, the coasts of Eastern Asia. Ptolemy, whose works were then the chief modern light, had, from errors of graduation, and exaggerated itineraries, carried Serica or China much too far east. Again, Cathay and Mangi, described in such splendid colours by Marco Polo, not being recognised as the same country, were supposed to be still farther east than Serica; as was also, on better grounds, his Xipangu, or Japan. This last, therefore, seemed likely to be at no immense distance from the western coast of Europe.

Columbus, being firmly impressed with this opinion, and being supported by the judgment of learned friends, made the first offer to Genoa, his native country; but the citizens, unused to oceanic expeditions, at once rejected it. He then applied to Portugal with seemingly every chance of better success; and king John accordingly referred it successively to a special commission, and to the council of state. There was then, however, a powerful party opposed to maritime enterprises altogether, as wasting the national resources; while their opponents merely defended a prosecution of the sure and successful career by which they had nearly rounded the southern point of Africa. The proposal was rejected, while John was persuaded to take the mean step of secretly sending a vessel on his own account, which, however, returned without any success. Columbus next repaired to Spain, then under the able sway of Ferdinand and Isabella. Here, however, cosmographical knowledge was much less advanced; the globular form of the earth was doubted by many, and even represented as against the authority of scripture and the fathers. Financial difficulties, caused by the war with the Moors, and the lofty demands of Columbus to have the offices of viceroy and high admiral made hereditary in his family, operated against him: and five years' solicitation was vainly employed. Proposals were then made by his brother Bartholomew to Henry VII. of England, who received them more favourably; but as Columbus was on the point of setting out for this country, Isabella was persuaded to recall him, and, after some farther difficulties, she engaged in the undertaking with the utmost ardour, and even pledged part of her jewels to raise the necessary funds.

The expedition, after all, consisted but of three small vessels, and cost only £4000. Columbus sailed from the port of Palos on the 3d of August, 1492, and went by way of the Canaries. He encountered innumerable obstacles, arising chiefly from the timid and mutinous temper of his seamen, and, after exhausting every resource furnished by his extraordinary address and perseverance, had been obliged to promise to return in a few days, if still unsuccessful. Signs of land, however, became frequent, and on the night of the 11th of October a light was observed at some distance, and the joyful sound of land! land! burst from the ships. But having been often deceived before, they spent the night in a state of the utmost anxiety. As soon, however, as morning dawned, their doubts and fears were dispelled; and the natives of the Old and the New Worlds found themselves, for the first time, in sight of each other! The land on which Columbus made his descent, and which had a pleasant, delightful aspect, was one of the Bahama islands, called by the natives Guanahani, and by the Spaniards San Salvador. Having landed, and taken formal possession of the country for the crown of Spain, Columbus became satisfied, from the poverty of the natives, that this was not the rich country of which he was in search. He therefore immediately set sail, and shaping his course a little more to the S., successively discovered the great islands of Cuba, and Hayti, or Hispaniola. After various transactions with the natives of the latter, he erected a fort, and leaving there a detachment of his men, set out on his return to Spain, arriving, after being obliged to take refuge in the Azores, and in the Tagus, at Palos, on the 15th of March, 1493, having spent seven months and eleven days in his memorable voyage. He brought with him pieces of gold, a party of natives, and specimens of the vegetable and animal productions of this new world. His arrival was hailed with an enthusiasm of wonder and admiration in Spain and in Europe, and he made his entrance into Barcelona almost in regal pomp.

Columbus found no longer any difficulty in equipping a new armament, to which volunteers flocked from every quarter. In September he set sail with seventeen vessels, several of large burden, and having 1500 persons on board. Though he found his colony involved in many troubles, he was not deterred from pushing his enterprises to the westward. Having fallen in with Cuba, he sailed along its southern coast, then steering to the left, lighted upon Jamaica. He was delighted with the rich verdure and picturesque aspect of these fine islands, which he firmly believed to be parts of the Asiatic continent. Having returned to Spain, he set out, in 1498, on a third voyage. Having first proceeded southward to the Cape de Verd islands, and steering thence across the Atlantic, he came in view of the lofty mountains of Trinidad. Rounding the island into the gulf of Paria, he saw the Orinoco rolling by many mouths its mighty stream into the ocean. This discovery highly gratified him, and was, indeed, the first time that any part of the S. American continent had been visited by Europeans. He sailed along the coast as far as Margarita, and thence to Hayti. In 1502 he undertook a fourth voyage, seeking to push westward till he should arrive at regions belonging to India. In this course he struck against the coast of Honduras; where, instead of turning to the right, which would have led him to Mexico, he took the left, or N.W. course, as most promising for his object. He reached the gulf of Darien, but without seemingly gaining any intelligence of the South sea. He then returned to Spain, where, weighed down by hardships, and disgusted by the ingratitude of Ferdinand, he closed, in 1506, his unrivalled career.*

America had, in the interval, been explored from a different quarter. John Caboto, or Cabot, a Venetian, who had settled at Bristol, presented to Henry VII. a plan of western discovery. That monarch, who had nearly earned the glory of Columbus's voyage, gave his full sanction to the undertaking. The adventurer, it appears, was willing to defray the whole expense; but whatever regions might be discovered, he and his family were to rule them as lieutenants, and to enjoy the exclusive trade, paying, however, to the king ⅕th part of the profits. The patent was granted in 1495, but circumstances prevented him from sailing till 1497. Then proceeding due west, he arrived, on the 24th of June, at a land with an island adjacent, which appears to be Labrador and Newfoundland. This was the first discovery of the continent, since it was not till 1498 that Columbus reached the mouth of the Orinoco. Cabot brought home several of the natives, and, though the aspect of the coast was not very inviting, Henry was so much gratified that he next year granted a fresh patent, allowing him to take up any six ships within the realm, equip them at the royal expense, and receive on board any number of English subjects who might be pleased to accompany him. John, from some unknown cause, did not go out in person; but the expedition was led by his son Sebastian, who, though a youth, showed already the talents of a great navigator. According to the very imperfect accounts of his voyage, he had with him 300 men, and, sailing by way of Iceland, reached the coast of Labrador in about lat. 66°. Discouraged by its bleak appearance, he steered to the south, and continued in that direction till lat. 38°. There are reports of his having attempted to establish a colony, but without success.†

Meantime, in another quarter important discoveries were proceeding. Vincent Yanez Pinçon, in crossing the Atlantic from the Cape de Verd islands, was assailed by a tempest, which drove him to the southward of the equator; and, after being bewildered for some time amid unknown seas, he came, in January, 1499, to the view of an unknown coast, which was that of Brazil, near cape St. Augustin. Thence he coasted northward to the mouth of the Amazon, and viewed with astonishment the immense body of water poured by it into the ocean, justly inferring that it must have rolled through a continent of vast extent. Three months after, Alvarez Cabral, despatched to India to follow in the footsteps of Vasco de Gama, came upon a more southern part of the same coast, which he named Santa Cruz, and took possession of it in the name of the king of Portugal.‡

America had thus been reached in three different and distant quarters, on a scale which conveyed a high idea of its greatness, but without at all ascertaining its outline and limits. There was still ample unexplored coast to leave room for the passage to India, which continued to be the grand object in the discoveries that immediately followed. We shall begin with those most important ones, made by way of the gulf of Mexico. Even before the fourth voyage of Columbus, Alonzo de Ojeda, on learning the results of the third, set out from Spain in 1499, and following up the career of his predecessor, explored the coast from Margarita to Cape de Vela. He was accompanied as pilot by Amerigo Vespucci, a skilful navigator, who, returning to Europe, published a narrative of the voyage, representing himself as the first discoverer of the continent. The relation was read with extraordinary interest, and the public adopted the name of America, yielding him an honour undoubtedly due

* Robertson's America, book II. ; Irving's Life of Columbus.

† Hacklyt, iii. ; Memoir of Cabot, ch. 5-10 ; Tytler's Northern Coasts of America.

‡ Maritime and Inland Discovery, ii. 31, 32.

to Columbus. In 1509, Rodrigo de Bastidas explored the coast from Cape Vela to the point reached by Columbus in his fourth voyage, thus connecting a vast extent of continent. Ojeda and Nicuesa obtained grants of different portions; but their colonies, conducted rashly and violently, were almost entirely destroyed. A remnant was assembled at Darien by Vasco Nugnez de Balboa, an officer of great enterprise, who, penetrating across the isthmus, came in view of the great Southern ocean. Vast prospects were thus opened; but the court of Spain ungenerously transferred the chief command to Pedrarias Davila, who, actuated by mean jealousy, persecuted and put to death his predecessor, without himself achieving anything of importance.

The discovery of the northern coast of the gulf was begun by Ponce de Leon. This officer, while in command at Porto Rico, was misled by the illusory report of a fountain, in which whoever bathed was restored from the most decrepit old age to all the bloom and vigour of youth. In pursuit of this chimera, he beat about from coast to coast, plunging into every pool, of course without success. In the course of his search, he came in view of an unknown coast, which he named Florida. Sailing along to a considerable extent, and turning the southern point, he ascertained it to be part of the continent, and the Spaniards long continued thus to name and to claim as their own the whole territory of Canada inclusive, though they were ultimately unable to maintain more than this southern extremity.

The main direction was still towards the west. In 1517, Cordoba from Cuba sailed along the coast of Yucatan, and collected some intelligence of the wealth and civilization of Mexico. He was followed next year by Juan de Grizalva, who, in the same direction, traced the entire coast of Mexico as far as Panuco. The fertile shores, well built towns, and abundance of gold, inspired the most flattering ideas of this coast, which was immediately dignified with the title of New Spain. In 1519, Garay, governor of Jamaica, sent four ships under Pineda, who, beginning at Florida, traversed the whole coast as far as Vera Cruz. The entire survey of the gulf of Mexico was thus completed.*

Velasquez, governor of Cuba, on receiving the flattering accounts brought by Grizalva, determined to lose no time in fitting out an armament for the conquest of New Spain. Jealousy, however, deterred him from employing the original discoverer; and he gave the command to Hernan Cortes, a personal favourite, but who possessed every quality fitting him for such an undertaking. In March, 1519, he landed at Vera Cruz, and, having burned his ships, marched into the interior with about 500 men. With this small force, seconded by his own superior sagacity and daring, Cortes subverted the empire of Mexico, put its sovereign to death, and annexed it to the Spanish crown. Having reached the South sea, he employed Alvarado to march along its coasts, which he did for the space of 400 miles, till he reached Guatimala. Nunez de Guzman afterwards penetrated the northern provinces to New Galicia, now Guadalaxara and Zacuecas. Cortes himself, having equipped a fleet in 1536, discovered the peninsula of California, with its deep gulf, commonly named in that age the Vermilion sea.†

The discovery by Balboa of the South sea remained long without any result, through the weakness or disunion of the officers employed. The most tempting accounts were, however, received of the wealth of Peru, and the abundance of its precious metals. In 1531, Pizarro, a daring adventurer, who had sailed with Ojeda, after one unsuccessful attempt, succeeded in assembling a band of brave and fierce followers, with whom he sailed to attack that great country. By a union of boldness and treachery, he seized the empire and treasure of the Inca; and Peru became an appendage of the Spanish crown. Almagro, the companion and rival of Pizarro, pushed southward into Chili, but he met there with great difficulties, and was recalled by the affairs of Peru. Pedro de Valdivia, however, having the government of that country conferred upon him, marched to the southern border of its fertile territory, as far as 40° S. lat. Vadillo, in 1537, made a march from Darien to Peru, through the fine countries of New Granada and Quito. Expeditions to conquer the latter were undertaken by Benalcazar and Alvarado, who, after contending for its possession, agreed to divide it between them. In 1540, Gonzalez Pizarro, brother to the conqueror, undertook an expedition through the Andes to the west of Quito, in hopes of discovering a country said to abound in fine cinnamon. After numberless hardships, he came to the banks of the great river Amazon. Having followed its course for some distance, he employed Orellana, one of his officers, to descend the stream in a light bark to search for provisions. Orellana, inspired by the spirit of adventure, continued his voyage, and traced the whole of its immense course down to the ocean.

While the above-mentioned events were in progress, discovery proceeded, though in a less brilliant train, along the eastern coast. In 1514, Juan Diaz de Solis, a skilful mariner, was sent to sail round America, and reach the opposite side of the isthmus of Darien. Solis, beginning with St. Augustine, the limit of Pinçon's discovery, surveyed the whole coast of Brazil, and then came to the grand opening of the Rio de la Plata. But, having incautiously ventured on shore with a small party, he was surprised by the natives, and, with several of his party, experienced the dreadful fate which awaits those captured by the cannibal tribes of this continent. The remaining crews, on witnessing this catastrophe, were struck with dismay, and immediately returned home. Three years after, Fernando Magalhaens, or Magellan, a Portuguese, discontented with his treatment in his native country, offered his services to Charles V. The immediate object was to reach the Moluccas from the west, and thus, according to the papal grant, establish a claim to those islands which were then much valued. A fleet of five sail being equipped, he sailed in September, 1519, and, having proceeded along the coast of Brazil, reached port St. Julian, where he wintered. In October, 1520, he entered the strait bearing his name, and, after a few weeks' navigation, saw the great Pacific opening before him. He stretched directly across, and came to the Philippines, where he was killed in a contest with the natives; but his vessel had the honour of being the first that circumnavigated the globe. In 1526, Sebastian Cabot was sent out to the La Plata, where he ascended the Parana and the Paraguay, and, notwithstanding the opposition of the Portuguese, established two or three forts. In 1535, Juan de Mendoza, an opulent Spaniard, founded the city of Buenos Ayres, and in 1537 Juan de Ayolas penetrated across the Andes to Peru. Thus the great outlines of southern America were traced in every direction.*

Discovery in the north did not proceed with the same rapid steps. We have already noticed the important voyages made by the Cabots. This excited the rivalry of the Portuguese, and in 1500 Gaspar de Cortereal, a nobleman of that nation, set sail and surveyed a considerable extent of the coast of Labrador. He carried off about 50 of the natives, to employ them as slaves; but the enmity of the people, thus justly roused, probably led to the fatal result of his next voyage, from which he never returned. His brother Michael, sailing in search of him in the following year, met the same fate, which was shared also by another expedition sent in 1503.

The reign of Henry VIII. was unfavourable to nautical enterprise. The discovery of the Cabots was not followed up, and Sebastian sought the service of Spain. He was sent out, however, in 1517, as pilot to an expedition commanded by Sir Thomas Pert, which, it appears, actually entered Hudson's bay; but the commander then lost courage and returned, to Cabot's great indignation. This discovery attracted little notice, and was soon forgotten.

France now entered on the career of American discovery. In 1524, Francis I. employed Giovanni Verazzano, a Florentine navigator, who sailed along and described the coast from Carolina to Newfoundland. Unhappily, in a subsequent voyage, he fell into the hands of the natives, and suffered a cruel death. Ten years after, Jacques Cartier, a seaman of St. Malo, performed several voyages, in which he entered the gulf of St. Lawrence, and ascended the river as high as Montreal. Attempts were then made to colonise these countries, for some time without success: however, in 1604, De Montz founded the colony of Acadia, and Champlain, in 1608, that of Canada. The latter, engaging in warlike expeditions, penetrated southward to the lake bearing his name, and westward beyond lake Huron.†

The Spaniards, meantime, as already observed, had, under the title of Florida, claimed nearly all north America; nor were they wanting in vigorous efforts to make good their title. In 1520, Lucas Vasquez de Ayllon discovered and attempted to form a settlement on South Carolina; but having begun by entrapping and carrying off a number of the inhabitants, he excited such a fierce enmity, that many of the settlers were killed, and the rest returned to Hispaniola. In 1524, Estevan Gomez sailed as far as the latitude of New-York, whence he brought off a cargo of slaves. A more important expedition was undertaken in 1528 by Narvaez, the rival of Cortes, and sent to supersede him, but who had been vanquished and made prisoner. He now sought to indemnify himself by a kingdom in Florida. He landed with a force of about 600 men, and advanced about 800 miles into the interior, baffling all attempts to oppose his progress. The natives, however, irritated by his violent and domineering conduct, posted themselves in the woods, and harassed him by constant attacks and surprises. The Spaniards, completely exhausted, and in extreme want, were obliged to seek the nearest coast. Unable to reach

* Oviedo; Robertson; Marit. and Inl. Discovery, B. iv., ch. iii., iv.; Bancroft's Hist. United States, ch. ii.

† Cortes Relations, Ramusio III.; Robertson.

* Herrera; Robertson; Marit. and Inl. Dis., B. IV., ch. vi., vii.

† Ramusio, III.; Mem. Cabot., ch. xiii.; Champlain, Voyages.

their ships, they constructed frail barks, which, on coming out to the open sea, were wrecked, and almost the whole number perished. Alvaro Nugnez, the treasurer, being cast ashore, contrived, by conciliating the Indians, acting as a merchant and physician, and even pretending to work miracles, to make his way to Mexico, after a seven years' pilgrimage. The land route was thus traced between that country and Florida.

This catastrophe did not prevent another attempt. Fernando di Soto had been an associate of Pizarro in the conquest of Peru, where he distinguished himself by the capture of Cuzco, and other exploits. He returned to Spain with a high name and a princely fortune; but, instead of sitting down to enjoy these, he resolved to make them instruments for conquering an empire for himself. His reputation attracted many of the most distinguished Spanish youths as volunteers; and in May, 1528, he landed in Florida, with a more powerful armament than those which had conquered Mexico and Peru. The exploits of Soto surpassed, in daring valour and brilliant achievement, those of Cortes and Pizarro, but his fortune was far different. There was here no great empire, no central point to strike at. He struggled on amid a succession of fierce and petty tribes, whom he always vanquished, but who rose around and behind him, and never left to his troops more than the ground which they covered. He was lured on by reports and specimens of the gold formation of North Carolina; but arriving there in a most exhausted state, and finding only ridges of naked hills, he turned back. He afterwards pushed far to the westward, crossed the Mississippi in about lat. 35°, and proceeded northward to near the present site of New Madrid. Finding no report of gold or rich kingdoms, he made a dash at the extreme west, passed the heads of the White river, then descended the Washita and Red river to the Mississippi. Here, overpowered by fatigue and disappointment, he sunk into the grave. The miserable remnant of his men, anxious to conceal his death from the Indians, carried the body at dead of night into the middle of the river, and sunk it beneath the waters: afterward, putting together some rude barks, they made their escape to Mexico.*

The wanderings of Alvaro had attracted the attention of the Spaniards to the regions immediately north of Mexico. A friar, Marco di Nizza, set out with a party to explore them, returned with a romantic account of a city, named Cevola, having 20,000 splendid houses, and its most common utensils of gold, silver, and the richest jewels. Mendoza, the viceroy, hoping to emulate the glory of Cortes, fitted out two large expeditions, one to proceed by land under Vasquez Coronado, the other by sea under Fernando Alarchon. Coronado, after a most arduous march through rugged and desolate mountains, reached the plain of Cevola, and, notwithstanding a most desperate resistance, forced an entry, but found a mere village of 400 houses, with nothing at all splendid; the jewels were only pebbles and rock-crystal. In hopes of achieving something, he marched 300 leagues to the coast, where he found a city of somewhat greater consequence, named Quivira, which cannot now be identified. Alarchon, unable even to join his associate, returned equally disappointed. Cabrillo, a Portuguese seaman, was then employed by Mendoza to explore the coast. He reached as high as 44° N. lat., but brought back a gloomy account of the aspect of the region, and the difficulties of navigating this northern sea.†

The zeal of Spain now slackened; but, in 1579, Drake, in his expedition round the world, traced the north-western coast as high as lat. 48°. There is a narrative by a Spaniard named Juan de Fuca, who boasts that, in 1596, he reached a similar latitude; and his report, long discredited, has been confirmed, in a great measure, by the discovery of a strait closely answering his description, and now bearing his name. In 1596 and 1602 the Conde de Monterey employed Sebastian Viscayno, who did not, however, reach so far as Cabrillo. There is also a narrative by De Fonte, who boasted that, in 1640, he had reached the latitude of 53°, where he found numerous islands separated by narrow straits, which he named the Archipelago of St. Lazare, and within them a large lake named Belle. This account is generally branded as fictitious; yet we cannot but observe, that it strikingly agrees with the numerous chain of islands found by Vancouver in the same latitude, while lake Belle may be the interior sea between them and the main.‡

The power of Spain having declined, she was unable to maintain the vast pretensions she had advanced in relation to Florida. Britain, now become a much more formidable maritime power, established colonies in Virginia and New-England in defiance of Spain. In doing so, although there was not room for great discoveries, she acquired a far more accurate knowledge of this long range of coast. The expectation was still entertained that some of its openings might lead into the South sea, and this was even viewed by the Virginia company as one of their leading objects. But the laborious survey of Chesapeake bay, by Smith, in 1608, nearly put an end to these hopes.

The British, however, made indefatigable efforts to discover a passage to India by the north. Sir Martin Frobisher, in 1576, found means to equip two slender barks of 25 tons for this arduous attempt. Passing the southern extremity of Greenland, he reached the coast north of Hudson's strait; but, after sailing about for some time without perceiving any opening, and the season being advanced, he returned. One of the party brought home a shining black stone, which some ignorant persons pronounced an ore of gold. The utmost enthusiasm was thus kindled, and a larger expedition was easily fitted out next year. Frobisher then discovered the straits bearing his name, leading into Hudson's bay; but he was arrested in them by the ice; he carried home, however, a store of the black stone. The hopes of the nation were higher than ever, and the queen sent him back with fifteen ships, a strong fort in frame-work, and 100 men to form a colony. In approaching the place, however, he was attacked by so furious a tempest, with islands of ice driving against the vessels, that he had the utmost difficulty in saving and bringing them home. These disasters, and the discovery that the appearances of gold were illusory, caused a suspension of this series of enterprise.

In 1585, a number of leading merchants fitted out two vessels under John Davis. Steering farther N. than Frobisher, he crossed from Greenland the straits bearing his name, and came upon the American land in about 66° N. He sailed somewhat farther N., and surveyed different parts of the coast, but was obliged by the lateness of the season to return. His report, however, being favourable, he was sent out again next year. Though much retarded by the encounter of a huge field of ice, he reached his former station, and steered thence S.E. till he came to Labrador, having passed numerous islands, as appeared to him, but probably the coasts bordering on the sounds and inlets leading into Hudson's bay. Being assailed by tempests, he returned to England, still giving such favourable hopes that, though many of the adventurers held back, Mr. Sanderson, his zealous patron, procured for him a smaller armament. He pushed to the yet unattained point of 72° 12′ N., on West Greenland; thence he steered 40 leagues across, but was arrested by the fixed field of ice in the middle of the bay. He vainly attempted to round it, and was pushed southward to his former station on the American coast. He penetrated 60 leagues up Cumberland strait; then being obliged to return, he observed, without entering, the entrance of Hudson's bay. He returned home as sanguine as ever, but the perseverance of the merchants was exhausted.*

The Muscovy and Levant companies, in 1602, sent out John Weymouth; but the mutinous spirit of his crew prevented his achieving anything. They employed, in 1606, John Knight, who was surprised and killed in Labrador by the natives. In 1607, Sir Dudley Digges, Sir John Wentenholme, and other gentlemen fitted out Henry Hudson, a celebrated navigator, who had already made three arctic voyages. Though furnished only with one ship of 55 tons, he penetrated, after many difficulties, into the bay, or rather inland sea, which bears his name. He surveyed a considerable extent of its eastern shore; but as November had arrived, was obliged to winter there. Much hardship being endured till spring, a mutiny arose among his crew, who exposed Hudson and his friends to perish on this inhospitable shore, and, with thinned numbers, made their way to Ireland.

Notwithstanding these melancholy circumstances, a great opening had thus been traced, and, in 1612, the company sent out Sir Thomas Button, accompanied by Bylot, one of Hudson's companions. Sir Thomas having entered the bay, steered directly across through such an extent of open sea, as made him hope that he was now in the Pacific, when he suddenly saw himself arrested by a long line of coast, to which he gave the name of Hope checked. He wintered in Nelson's river, sailed up Roe's Welcome, surveyed various points on Southampton island, and returned to England. After a fruitless attempt by Gibbons, Bylot and Baffin were sent, in 1615; but they were arrested by the eastern coast of Southampton island. In 1616, they went to try the more patent route of Davis's straits. They made then the complete circuit of that great inland sea, which has since been named Baffin's bay; but returned with the conviction that it was enclosed by land on every side, and afforded no hope of a passage. The search in this direction was discontinued; but, in 1631, Fox was sent out by the king, and James by the Bristol merchants, to try again the route of Hudson's bay. Fox, after vainly attempting a western route, sailed

* Alvaro Naufragios in Barcia Historiaderos, tom. ii.; Vega, Florida; Bancroft, i., 41, &c.

† Ramusio, vol. iii., p. 297, &c. Venegas Calefornia.

‡ Torquemada, Monarquia Indiana, book v. Murray, Discov. N. Amer., vol. ii., p. 87, &c.

* Hacklyt, iii., 54-114.

up the channel bearing his name, the most direct route to the strait of the Fury and Hecla, but stopped much short of that point. James stood to the southward, and being entangled in the eastern coasts of the gulf, was obliged to winter there, when his crew suffered the utmost extremity of cold.*

The north-western coast of America, notwithstanding the Spanish discoveries, remained still almost unknown. But after Russia had overrun Siberia, and reached the shores of the eastern ocean, her active rulers felt an interest respecting the opposite continent. It was even doubted whether it was separated from that of Asia; but this, in 1728, was nearly ascertained by Behring, who reached the eastern extremity of the latter continent, on the straits which bear his name. He saw the land thence stretching N.W., but did not discover any part of America. A few years after, Krapishef, a Kossac, from Kamtschatka, descried, and sailed along it for two days. In 1741, Behring and Tchirikoff were sent thither to make a careful survey. They were separated: the former reached the coast, and landed about the latitude of 58°. He could not accomplish his object of surveying it to 65°, and being obliged to winter on one of the Aleutian islands, suffered severe hardships, to which he fell a sacrifice. Tchirikoff came in view of it in about lat. 55°; but being unable to land, and having lost two boats in attempting to communicate with the natives, he returned to Kamtschatka. On this voyage the Russians found their claims to the American coast N. of 55°; and their traders soon established along it a chain of settlements with a view to collecting furs and skins of the sea-otter.†

Capt. Cook employed his last voyage in examining the north-west boundaries of America, and in attempting to effect a north-west passage. He traced the coast from 50° northwards, till he came to cape Prince of Wales, the western limit of the continent: then steered north-east till, in about 70°, he was arrested by an unbroken chain of ice islands. He returned, naming the adjacent promontory Icy cape; and King and Clerke next season in vain attempted to penetrate farther. The information obtained in this voyage induced many English ships to resort to this coast with a view to the capture of the sea-otter, for whose rich skin there is a regular demand in the China market. Dixon and Meares, in this pursuit, explored Nootka and the adjacent coasts. The Spaniards attempted to oppose this trade, and even captured the Argonaut, a British vessel; but were obliged to withdraw their opposition. They now sent several expeditions, particularly one under Ayala and Maurelle; but these could make no discovery which had not been anticipated. In 1791–2, Vancouver was employed in making a careful survey of these coasts, in the hope of finding a passage into the Atlantic, through one of their numerous bays; but this he proved to be impracticable. Broughton, under his direction, ascended the Columbia for about 90 miles. Capt. Gray, employed by the United States, had before been at its mouth, and given it its name; but he is said never to have entered the actual channel of the river.

Meantime some straggling attempts after the passage were made from the Atlantic. In 1668, the Hudson's bay company was formed, and undertook to make exertions for this object. There is, however, no record of any till 1721, when Knight, governor of one of their forts, prevailed on them to supply him with the materials for a voyage. Unfortunately, being obliged to winter on Marble island, he and his whole crew fell a sacrifice to sickness and famine. In 1741, Mr. Dobbs, a gentleman of influence, and imbued with the most ardent zeal on this subject, prevailed on the Admiralty to send out Capt. Middleton with the Furnace bomb-ketch. That officer, in 1742, sailed to the head of Sir Thomas Roe's Welcome, where he found on one side Repulse bay, on the other a frozen strait between Southampton island and the mainland. Having also looked up Wager inlet, he pronounced a passage in this direction impossible. Dobbs and others loudly accused him of carelessness and even treachery, and kindled such a spirit that £10,000 was raised by subscription, and parliament voted a bounty of £20,000 to the subscribers in the event of their success. Two vessels were sent out under Captains Morr and Smith, who however merely examined the Wager inlet, ascertaining that there was no passage, and then returned.

Maritime expeditions were now suspended, but some important discoveries were made by land. Ever since Baffin's last voyage, the impression had prevailed that North America stretched indefinitely towards the pole. But in 1769, Mr. Hearne, sent by the Hudson's bay company, descended Coppermine river, and found it to terminate in a sea at about 65° N. lat. In 1789, Sir Alexander Mackenzie, an agent of the North-west Fur Company, descended, much farther westward, the great river bearing his name, and came to what he termed a lake, but which, from its having tides and containing whales, was very decidedly judged to be also a sea. There was thus found great room to suppose that, in a latitude between 60° and 70°, America was bounded by a great Arctic ocean: while from these observations combined with those of Cook, the estimate of its breadth was greatly enlarged.

These considerations produced little influence, till, after the peace of 1815, when the energies called forth during the late war sought a different direction. Sir John Barrow proved that the impression against the existence of a passage, derived from former failures, rested on very slight grounds. Under his auspices, Capt. Ross was sent out in 1818, with the Isabella and Alexander, to make a more full trial in Baffin's bay. He sailed entirely round it, but returned decidedly reporting that navigator's opinion to be correct, and that it afforded no western passage. Lieut. Parry of the Alexander, however, and other officers, were of opinion that the spacious opening of Lancaster sound had been quitted without due examination, and afforded a favourable promise. He was therefore sent out next year, and though he did not reach the sound till August, found all his expectations fulfilled. The ships, during the first day after entering the sound, had an unobstructed run of upwards of a hundred miles. After sailing a little farther, he was arrested by ice, and obliged to turn southward along the eastern shore of Prince Regent's inlet. Being arrested there, he returned northwards, and was gratified to find the passage to the west become quite clear. He run along it to beyond 110° W. long. thus entitling the crew to a royal bounty of £5000. He was then obliged to make arrangements for spending the winter, during which, notwithstanding the most rigorous cold, the health and spirits of the crew were surprisingly preserved. He was defeated in his attempt next year to penetrate farther west, and obliged to return.

Capt. Parry was again sent out the following year; but it was now resolved to try the channel by the northern head of Hudson's bay, which Middleton was considered as having by no means completely explored. He found no reason to doubt the accuracy of that navigator; but by pushing up the Fox channel, he arrived at a strait, named after his vessels the Fury and Hecla, which was ascertained to afford a passage into the Polar sea. It was so blocked up with ice, however, that his utmost efforts, during two successive seasons, could not force a passage. Having returned to England, he was sent out a third time, in 1824, to endeavour to penetrate through Prince Regent's inlet into the open sea, of which he had now fully ascertained the existence. The season, however, being peculiarly rigorous, it was not till next summer that he reached the western coast; and the Fury, being then squeezed between two masses of ice, sustained so severe an injury, that it became necessary to abandon her, and give up all attempts to proceed farther.

Other means were at the same time resorted to for exploring the northern boundary of America. Lieut. Franklin and Dr. Richardson undertook to proceed to the mouth of the Coppermine river, and thence attempt to trace the whole coast, from the strait of the Fury and Hecla to the Icy cape of Cook. They sailed from England in May, 1820; were obliged to winter on the Athabasca lake, and in July, 1821, embarked on the Arctic ocean. They turned to the eastward, but were forced to take a very circuitous course through deep sounds and inlets, particularly the great one named Coronation gulf. Hence, on reaching point Turnagain, in 109° 23′ W. long., though the sea continued open, they found it necessary to return, from the exhausted state of the equipment. The party, being obliged to travel by land over a range of naked territory broken by lakes and rivers, endured the utmost extremes of human misery, and several perished before they could reach fort Enterprise on the Coppermine. They returned, however, with unbroken spirits and determination, and government liberally furnished the means of renewing their efforts. At the same time, Capt. Beechey was sent by way of the Pacific ocean to follow in the steps of Cook, and meet them from the westward. Franklin's new expedition set sail in 1825, wintered on Great Bear lake, and early next year were at the mouth of the Mackenzie, whence they now proposed to begin their survey. From this point Capt. Franklin proceeded W.; Dr. Richardson E. The former explored a considerable extent of coast bordered by ranges of the Rocky mountains; but, after passing Foggy island, in long. 147° W., the obstacles became so serious as made it necessary to turn back. Meantime, however, Capt. Beechey had passed Behring's straits; and, though the ship could not be navigated beyond the Icy cape of Cook, Mr. Elson, in a boat, reached 156° 21′ W. long., where a cape stretched into lat. 71° 23′ N. The expeditions were thus within nine short degrees of long. from each other; of which, had they been aware, they would at every cost have pushed through. Dr. Richardson succeeded in exploring the whole coast between the Mackenzie and the Coppermine, connecting his discoveries with those of the former voyage, and leaving unknown only two compar-

* Purchas, iii., 806, 716. Narratives of Fox and James Barrow's Arctic Voyage.

† Muller, Coxe, Bussage.

tively small portions between Franklin's extreme points and those reached by Beechey on one side, and Parry on the other.

Capt. Ross, regretting the mistake by which he had failed to discover the entrance into the Polar sea, anxiously sought the means of retrieving this error. These were furnished by a public-spirited friend, Sir Felix Booth, and the resources of steam navigation were called forth. They were not of much avail; but Capt. Ross, through many difficulties, made his way into Prince Regent's inlet, and reached considerably farther than Parry on its eastern limit. He thrice wintered there, and explored a great extent of the adjacent coasts. He found himself on what appeared a peninsula, named Boothia, reaching to 74° N. lat., and connected with the continent by a narrow isthmus. A considerable extent of the American coast to the westward was also explored, but without reaching Franklin's Turnagain. Commander Ross is considered as having ascertained the site of the magnetic pole on the western coast of Boothia. Capt. Ross, in attempting to reach home, was obliged to spend another winter near the northern point of the peninsula. His arrival, in 1833, occasioned a joyful surprise, as the most melancholy forebodings had prevailed as to his fate.

During the alarm felt at his long absence, an expedition to discover and release him was fitted out, partly by government and partly by private subscription. It was intrusted to Capt. Back, a companion of Franklin, with the hope that he might also make some farther discoveries. Having left England in February, 1833, he wintered at the eastern end of Great Slave lake, and next summer descended a river named the Thlew-ee-chop. It terminated in a spacious bay, at the end of which the coasts appeared to stretch, one S.E., the other due W. From cape Ogle, where this last direction began, was seen on the E. an apparently boundless expanse of sea. By the observations then made it appeared probable that Boothia did not form part of the American continent, but was connected with a more southerly peninsula which, along with it, formed one great island.

In 1838, the public were surprised by the intelligence that one of the blanks still left in American geography had been filled up. The Hudson's bay company, now certainly an active and liberal body, determined to explore what was yet unknown in their own territory. Under the intelligent direction of Mr. Simpson, the resident governor, Messrs. Dease and Simpson, in the summer of 1837, went over the intermediate space between the points reached by Franklin and Beechey. It was found to run in a nearly direct line, presenting no remarkable feature except the efflux of two large rivers. The same gentlemen were employed, in 1838, to explore from cape Turnagain to the strait of the Fury and Hecla: a more difficult task.

The first important steps in the discovery of the interior of N. America were made by the French from Canada, under the government of Count Frontenac. Under his auspices, Ioylet and Father Marquette, in two Indian bark canoes, undertook to explore the vast regions on the Mississippi. Lake Michigan then formed the extreme boundary of European knowledge. From it, ascending the Fox river and descending the Ouisconsin, they reached the central stream, and were astonished at its grandeur, and the majestic forests on its banks. In proceeding downwards, the first people they met were the Illinois, who received them hospitably. Afterwards they were struck by the influx of the mighty stream, deeply tinged with mud, of the Missouri (named by them Peketanani). Under the name of Ouabiskgou, they describe the united stream of the Wabash and Ohio. They came next to the Akamseas (at the mouth of the Arkansas), but perceiving now that the river must terminate, not, as had been supposed, in the gulf of California, but in that of Mexico, they were afraid of the Spaniards, and returned.

When the two travellers arrived at Quebec, there happened to be in that city an enterprising young Frenchman, of some birth and fortune, named Sieur de la Salle, who conceived an enthusiastic desire to prosecute this career of discovery. Through influence at court, he procured ample means. After some time spent in erecting forts upon the lakes, he reached the Mississippi by a new route, ascending the Miami and descending the Illinois. On reaching the Arkansas, he hesitated not to prosecute his voyage, and passed along the territory of the Taencas, Natches, and Quinipissas. Soon after, by the vast breadth to which the waters expanded, their brackish taste, and the shells on the shore, he discovered, with exultation, that he was at the mouth of the Mississippi. He hastened back by the same route to Canada, and thence to France, where he was received with the highest distinction, created governor of the region he had traversed, and sent out with four ships and 280 men. He went by the W. Indies; but, unfortunately, he could not distinguish the entrance of the river, and, while searching for it, a mutiny arose among his men, in which he was killed.

About this time Hennepin also attempted to reach the source of the Mississippi; but, after passing the falls of St. Anthony, he was taken prisoner by the Indians, detained long in captivity, and thought himself happy in making his escape. Some time after, Baron Lahontan reported his having ascended a great tributary, which he calls Long, but which appears to be the St. Peter's. He met some members of a distant tribe, who described a chain of high mountains lying to the westward, beyond which was a great salt lake, a term which the Indians often apply to the sea. These correct statements seem to absolve the baron's reports from the suspicion of fiction, which has been sometimes attached to them.

The English colonies on the Atlantic had made a great advance in population and wealth, before they attempted to penetrate across the Alleghany. An opinion had, indeed, long prevailed, that this range formed an insurmountable barrier. In 1714, however, Spottiswoode, governor of Virginia, sent a party, who made their way into the western territory. It was still some time before the colonists made any attempts to settle there, and when they did, they were vigorously opposed by the French, who, in virtue of the settlement of Canada and the discovery of the Mississippi, claimed the whole region. They drove out a company who attempted an establishment on the Ohio, and erected, on the present site of Pittsburg, fort Duquesne, which struck a general alarm through the provinces. The conquest of Canada, and the peace of Paris, in 1763, removed this opposition. Still the settlement was made, not by any combined or official movement, but by Boone, and other daring adventurers, who maintained a series of bloody struggles with the natives, by whom the English were kept in perpetual alarm. It was not till some years after the war of independence that Kentucky was received into the union, and that the great tide of emigration began, which has covered the valley of the Mississippi with so many populous and flourishing states.*

The Americans having, in 1804, purchased Louisiana from Napoleon, claimed under that vague title the whole region to and beyond the Mississippi, and commenced operations for exploring that vast territory. An expedition was arranged by Mr. Jefferson, then president, and was led by Captains Lewis and Clarke, the former of whom was his private secretary. On the 16th of May, 1804, they began their voyage on the Missouri. They passed its great tributary the Osage, inhabited by a numerous people of that name; then the Kansas, more than half its own breadth; lastly, the large and rapid stream of the Platte. Having ascended 1600 miles, and reached the foot of the Rocky mountains, they found the season too far advanced for crossing that great chain. They therefore built a fort named Mandan, where they spent the winter. Early in April, they were again in movement, and in nineteen days came to the influx of the Yellowstone, almost equal to the main stream. They next reached two great branches or forks, without knowing very well which to take, but chose the southern and largest, and were assured of being right when they saw the great falls of which they had been apprised, and which formed a most magnificent spectacle. They ascended, till they could bestride this mighty river, and found the spring head whence it welled, about 3000 miles above its confluence with the Mississippi.

Having now reached the crest of the great rocky chain, the travellers descended rapidly, though not without difficulties, from the ruggedness of the road and the want of provisions. They at length, however, embarked on the southern branch of the Columbia, which they named Lewis, and, after passing its falls, saw it spread into a wide channel, and ultimately open into a bay, where they exultingly heard the sound of breakers from the Pacific. They wintered at the mouth of the river, and hastened back by the same route in the following spring. They were not, however, the first who had crossed the entire breadth of the continent. This had been effected in 1792 by Sir Alexander M'Kenzie, in a more northerly quarter; and in 1803 the agents of the Montreal company had crossed the mountains, and formed trading posts on the northern branches of the Columbia.†

* Flint, Indian Wars of the West, Cincin., 1833.

† See Journal of D. W. Harmon (Andover, 1820).—[This is not correct, as Mr. Harmon's Journal states so much fact. "The British fur traders made their first establishment beyond the Rocky mountains in 1806. An expedition for this purpose had been contemplated by them in the preceding year, in consequence of information respecting the views of the American government, obtained while Lewis and Clarke were spending the winter of 1804-5 at the Mandan town on the Mississippi, but it was not carried into effect until the spring of 1806, when Mr. Simon Fraser, a partner of the North-west company, established a trading post on *Frazer's* lake, near the 54th parallel, in the country since called New Caledonia." The statements in this paragraph are derived principally from D. W. Harmon's Journal of his voyages and travels in the northern parts of America, published in Andover, Mass., in 1820. At p. 281 he says, "That part of the country west of the Rocky mountains, with which I am acquainted, has, ever since the North-west company first made an establishment there, which was in 1806, gone by the name of New-Caledonia," &c. In many parts of his work he speaks of Mr. Simon Fraser as having led the first party of traders beyond the Rocky

The American government sent, in 1805, another expedition under Major Pike, to trace the yet unknown head of the Mississippi. It was found in a direction almost due north, not rising from any great natural range, but in a flat, marshy region, and passing through a number of little lakes, the chief of which, named Leech and Red Cedar, contend for the honour of giving birth to this leading American water. Its length, too, proved to be at the mutual junction little less than half the Missouri, which therefore ought properly to rank as the main stream. Pike, on his return, was sent to explore the course and origin of the Arkansas and Red rivers. The former he found very broad, flowing through a country richly stocked with game, and having its source in the Rocky mountains. He first conveyed an idea of the loftiness of that chain, which he compared, though with exaggeration, to the Cordilleras. He attempted then to descend the Red river, but entered by mistake on the Rio del Norte, and proceeding into the Mexican territory was made prisoner by the Spaniards, but well treated and soon released. About the same time, Mr. Dunbar and Dr. Hunter, from Natchez, sailed to a considerable height up the Red river and its tributary the Washita, surveying the fertile country on their banks.

After a long suspension, the American government, in 1819, recommenced this career. Major Long and Dr. James were sent to explore more precisely the western territory, southward of the Missouri. They discovered with regret that a great sandy desert extends for a breadth of about 400 miles eastward from the Rocky mountains. That chain was carefully examined, and its highest peak found not much to exceed 12,000 feet. Seeking to descend the Red river, by a fresh fatality they mistook for it the Canadian, the longest tributary of the Arkansas, by whose channel they regained the Mississippi. Meantime General Cass was employed in a more careful examination of this last river, tracing in his way the southern shore of lake Superior. Major Long, on his return, ascended St. Peter's river, already visited by Larbontan and Carver. He found, rising from contermINous sources, the northern Red river, which flows into the British territory, and ends in lake Winnipeg. These successive expeditions conveyed to the United States government a pretty correct idea of the interior of their vast territory, including those parts of the continent which had hitherto been most imperfectly known.

AMERICUS, p. v., capital of Sumpter co., Ga., 104 m. S.S.W. Milledgeville, 760 W. Situated 16 W. Flint river, and contains a court-house, an academy, seven stores, and about ninety dwellings.

AMERKOTE, a town and fort. of India, territory of Sinde, in the desert, 85 m. E. Hyderabad, lat. 25° 20′ N., long. 69° 49′ E. The emperor Acbar was born here in 1541.

AMERSFORT, a town of the Netherlands, prov. Utrecht, on the Eem, which becomes navigable at this point, 12 m. E.N.E. Utrecht. Pop. in 1830, 11,782. It is well built and well fortified; has a court of original jurisdiction, a college, a commission of agriculture, with manufactures of fustians, dimities, bombazeens, &c. It is the mart for the corn and tobacco cultivated in the contiguous territory, and has a considerable transit trade in produce from Germany, embarked here in flat-bottomed boats from Amsterdam. The distinguished statesman and grand pensionary, Barneveldt, sacrificed, in 1617, to the fanaticism of the people and the hatred of Prince Maurice, was a native of Amersfort.

AMERSHAM, a bor. and pa. of England, co. Buckingham, near the Colne, 26 m. W.N.W. London. Pop. of parish, 2816. The town consists of one long street crossed by a shorter one, having the church at the point of intersection. The living is a rectory, and one of the best in the country. There is a free-school, to which are attached three exhibitions at Corpus Christi college, Oxford, with alms-houses, and three charities. A good deal of black lace is manufactured, and the market is well attended. Previously to the Reform Act, by which it was disfranchised, this borough sent two members to the H. of C., the right of voting being in the inhabitants paying *scot and lot*; but these being all tenants of the lord of the manor, it was, in fact, a nomination borough.

AMES, p. v., Canajoharie t., Montgomery co., N.Y., 56 m. N.W. Albany, 395 W. It contains two churches, an academy, one store, one grist-mill, twenty-five dwellings, and about 175 inhabitants.

AMES, t., Athens co., O., 84 m. S.E. Columbus, 327 W. It contains one store, three saw-mills, nine schools, 218 scholars. Pop. 1431.

AMESBURY, or AMBRESBURY, a m. town and par. of England, co. Wilts. The town is situated on the Avon, 7½ m. N. Salisbury. Though inconsiderable, it is noted for the ruins of an abbey, the vicinity of Stonehenge, and for having been the birth-place of Addison. The parish comprises 6060 acres, with a pop. of 944.

AMESBURY, p. t., Essex co., Mass., 44 m. N.E. Boston, 475 W. Bounded S. by Merrimac river. The outlet of a large pond, covering 1000 acres, and Powow river, afford water power. It contains five churches, one Congregationalist, two Baptist, one Friends', and one Episcopal, fifteen stores, ten fulling-mills, two woollen-factories, four grist-mills, two saw-mills, one academy, 40 students, fifteen schools, 646 scholars. Pop. 2471.

AMHARA, a division of Abyssinia, which see.

AMHERST, a sea-port town of the Brit. prov. of Martaban, India beyond the Ganges, and the chief British military and commercial station in the provinces E. the Than-lweng river, on a point of land in the N.E. angle of the gulf of Martaban, facing the mouth of the Than-lweng and the isle of Balu to the N. Lat. 16° 4′ 48″ N., long. 97° 35′ 24″ E. Pop. in 1827, 1600; now (1838) probably 5000. It was founded in 1826, after the restoration of the town of Martaban to the Birmese, in the view of serving as a military post and a commercial establishment, and as an asylum for such refugees as might choose to emigrate from the Birmese dominions. The apex of the promontory, which is the highest spot in the town, is occupied by the church, governor's house, court of justice, fortifications, and other public buildings; on the higher ground around it are the European and Chinese quarters; and the lowest are by choice inhabited by the natives. The military cantonments are about 1½ m. distant, in a dry, level, and elevated spot. The harbour is spacious and secure, with 3 fath. water at low neap tides; rise and fall above 19 ft., with a flow of 6 m. an hour, and perfectly still for two hours both before and after high water. Ships may lie within 100 yards of the shore. Mangrove and a kind of oak are abundant here, and there are teak forests at no great distance. Good water is found everywhere six feet below the surface. (*Hamilton, E. I. Gazetteer*, p. 47.)

AMHERST, p. t., Hancock co., Me., 113 m. N.E. Augusta, 695 W. It contains one saw-mill, two schools, 54 scholars. Pop. 196.

AMHERST, p. t., capital of Hillsborough co., N.H., 30 m. S. Concord, 459 W. Souhegan river affords good water power. Incorporated in 1760, and contains six stores, one grist-mill, seven saw-mills, eleven schools, 512 scholars. Pop. 1565.

AMHERST, p. t., Hampshire co., Mass., 82 m. W. Boston, 7 E. by N. Northampton, 385 W. Two branches of Connecticut river afford good water power. It contains three Congregational churches, a bank, fourteen stores, two woollen-factories, two grist-mills, two saw-mills, one academy. 87 students, eight schools, 566 scholars. Pop. 2550. Amherst college, located here, was founded in 1821, incorporated in 1825, has a president and ten professors or other instructers, 157 students, and 15,000 vols. in its libraries. The philosophical apparatus is very complete, and it has a valuable cabinet of natural history, including mineralogy. It has four fine collegiate buildings, pleasantly located, and it has rapidly risen to great respectability. The necessary expenses are from $113 to $137 annually. Indigent students are gratuitously supplied with furnished rooms.

AMHERST, t., Erie co., N.Y., 10 m. N.E. Buffalo, 283 W. Albany. Watered by Tonawanda and Ellicott's creeks. It contains ten stores, three flouring-mills, seven grist-mills, one furnace, two potteries, one brewery, one distillery. Pop. 2451.

AMHERST, p. t., Lorrain co., O., 8 m. W. Elyria, 121 N.N.E. Columbus, 382 W. It has one store, one grist-mill, six saw-mills, seven schools, 272 scholars. Pop. 1184.

AMHERST, county, Va., situated in the central part of the state, and contains 418 sq. m. It had, in 1840, 8352 neat cattle, 6235 sheep, 16,913 swine. It produced 112,677 bushels of wheat, 11,051 of rye, 381,146 of Indian corn, 2,106,149 pounds of tobacco, and contained eighteen stores, ten flouring-mills, forty grist-mills, sixteen saw-mills, twenty-four distilleries, seventeen academies, 406 students, eleven schools, 266 scholars. Pop. whites, 6426; slaves, 5577; free coloured, 373; total, 12,576. Capital, Amherst.

AMHERST, p. v., capital of Amherst co., Va., 15 m. N.N.E. Lynchburg, 115 W. Richmond, 176 W. It contains a court-house, jail, and county offices, all of brick, two stores, fifteen dwellings, and about 130 inhabitants.

AMHERSTBURGH, a town of Upper Canada, on De-

mountains in 1806." See a memoir, historical and political, of the north-west coast of North America, and the adjacent territories, by Robert Greenhow, translator and librarian to the department of state, Washington, submitted to the United States senate, Feb. 10th, 1840, a most able document, which deserves to be read by every scholar for the general information which it contains, and by every citizen of the United States who wishes to understand the grounds of the claim of his country to the Oregon territory. The writer of this note was intimately acquainted with Mr. Harmon, having prepared his work for the press by writing it wholly over, and he knows that Mr. H., while stating the above facts, had not the least suspicion that they could ever have the important bearing they are now seen to have on the claim to the Oregon territory. He resided during eight and a half years near Fraser's lake, Stuart's lake, and the vicinity, but neither he nor M'Kenzie ever approached to the branches of the Columbia river. Mr. Harmon's book was reviewed by the London Quarterly Review in January, 1822.—Am. Ed.]

troit river, 3 m. above its embouchure in lake Erie, and 14 m. below Detroit. It was founded during the administration of Lord Amherst, and was named after his lordship.

AMIENS (an. *Samarobriva*), a city of France, cap. dep. Somme, on the river of that name, 72 m. N. Paris. Lat. 49° 53′ 41″ N., long. 2° 18′ 11″ E. Pop. 32,391. Amiens has a citadel constructed by Henry IV. It is well built; streets for the most part straight and clean; and it has some fine squares and promenades. The old Gothic cathedral, in excellent preservation, is one of the finest in Europe. It is 366 feet in length, and 132 in height. Among the other public buildings may be specified, the Royal College, theatre, Hôtel de Ville, corn-market, courts of justice, barracks, seminary of St. Acheul, château d'Eu, &c. It is the seat of a bishop, has a *cour royale*, a court of assizes, a commercial tribunal, a custom-house, a public library containing above 40,000 vols., an academy, an academy of sciences and belles-lettres, a free school of design, a botanical garden, &c.: manufactures very considerable. They consist principally of kerseymeres, cassimeres, merinos, serges, &c., made partly of home, and partly of German and Spanish wool. The linen trade is also considerable; but it is now surpassed by that of cotton. There are annually produced about 60,000 pieces of cotton velvet, the aggregate value of which is estimated at about 8,000,000 fr.; and about 400 looms are occupied in the production of velvets, *dites d' Utrecht*. There are also several mills for the spinning of cotton and flax, with dye and bleach-works; manufactures of machinery, beet-root sugar, and chemical products; tanneries, soap-works, paper-mills, &c. The *patés de Canard* made here are highly esteemed. Flat-bottomed vessels, drawing from forty to fifty tons, come up the river to the town, which is the centre of a very considerable trade, as well in its own productions as in those of the surrounding country. Amiens is very ancient, being supposed to have existed anterior to the invasion of Belgium by the Romans. It is known in diplomatic history from the circumstance of a definitive treaty of peace between England and the French Republic having been signed in it on the 25th March, 1802. It is the birth-place of Peter the Hermit, the apostle of the first crusade; of Ducange, author of the *Glossarium ad Scriptores mediæ et infimæ Latinitatis*, a work of wonderful research and labour; and of Delambre, the late learned author of the most accurate, though not the most eloquent history of astronomy. (*Hugo, France Pittoresque*, art. *Somme*, &c.)

AMITE, river, La., rises in Miss., and flowing S., unites with the Ibberville at Galveston, to which place it is navigable for vessels requiring five feet of water. It thence flows E. until it enters lake Maurepas, after a whole course of about 100 m.

Amite, county, Miss., situated in the S.W. part of the state, and contains 800 sq. m. Watered by the Amite river and its branches. It contained in 1840, 13,904 neat cattle, 5212 sheep, 29,428 swine, and produced 311,270 bushels of Indian corn, 18,205 of oats, 90,212 of potatoes, 167,497 pounds of rice, 5,066,605 of cotton, and contained twelve stores, thirty-four grist-mills, nine saw-mills, and had two printing-offices, one weekly newspaper, six academies, 149 students, eleven schools, 199 scholars. Pop. whites 3741, slaves 5741, free coloured 29; total, 9511. Capital, Liberty.

AMITY, p. t., Aroostook co., Me., 210 m. N.E. Augusta, 805 W. It contains one grist-mill, one saw-mill, two schools, 77 scholars. Pop. 169.

Amity, t., Alleghany co., N.Y., 6 m. S. Angelica, 255 W.S.W. Albany. Watered by Genesee river, and contains two stores, two grist-mills, six saw-mills, one fulling-mill, ten schools, 503 scholars. Pop. 1354.

Amity, t., Erie co., Pa., 18 m. S.E. Erie. Watered by French creek, and contains one grist-mill, four saw-mills, one fulling-mill, four schools, 175 scholars. Pop. 560.

Amity, t., Berks co., Pa. Manatawny and Manokesy creeks afford water power. It has two churches, one Presbyterian, and one common to Lutherans and Presbyterians, four stores, six grist-mills, five saw-mills, one fulling-mill. Pop. 1664.

AMJIRA, a town in Malwa.

AMLWCH, a sea-port town of N. Wales, N. shore of the island of Anglesea, which has risen from the state of an inconsiderable fishing village, in consequence of the discovery of the famous copper mines in the adjoining Pary's mountain, in 1768, to be a town with about 6000 inhab. It has a pretty good port, excavated from the solid rock. During the flourishing period of the mines, they produced above 3000 tons a year of pure metal; but they have been gradually declining for these several years past, and do not now produce above 700 tons a year. It is not, therefore, probable that Amlwch, which depended almost entirely upon the mines, is destined to make much farther progress. It is united with Beaumaris, Holyhead, and Llangefni, in returning a m. to the H. of C. Pop. of parish, 6285.

AMMAN (the *Rabbah* of the Scriptures, and *Philadelphia* of the Greeks), a city of Syria E. of the Jordan, deserted and in ruins; lat. 32° 8′ N., long. 36° 8′ E.; 25 m. N.E. Dead sea, and 30 m. E. Richa (an. *Jericho*).

The remains of Amman are very extensive, but none of them seem to be older than the æra of the Greek power in Syria. They consist of theatres, temples, and colonnades, of great beauty and high finish, some of them being in very perfect preservation. A great number of private houses still remain, but there is not a single inhabitant.

This is one of the most ancient cities mentioned in Jewish history. It was the capital of the Ammonites, a people undisturbed by the Israelitish settlement in Palestine, and with whom the Jews lived in a state of suspicious truce till the æra of Jephethah, about 1161 B.C. Thenceforward the two nations were almost in constant hostility, generally to the disadvantage of the Ammonites; and in 1035 B.C., David took their capital. But notwithstanding this untoward event, and the unsuccessful war they waged against Jehoshaphat (B.C. 896) and Jotham (B.C. 760), they continued to be a powerful people, and about 600 years B.C. supplied Nebuchadnezzar with a strong auxiliary force to assist in the destruction of their old enemies. Amman was subsequently included in the Assyrian and Persian empires; and after the battle of Issus (B.C. 333), it passed, with the rest of Syria and Palestine, into the hands of the Greeks. In 218 B.C. Palestine was the scene of war between Antiochus the Great and Ptolemy Philopater, the former of whom utterly destroyed Amman. Having been rebuilt by Ptolemy Philadelphus, it received from him its Greek appellation of Philadelphia. It became a Roman town in the last century B.C., and remained such till the conquest of Palestine by the Saracens, A.D. 636. Under the Christian emperors of the East, Amman appears to have been a bishop's see, but it was declining before its capture by the Arabs; and Abul-Feda, in the early part of the 14th century, describes it as already deserted.

The ruins of Amman stand on the banks of a brook, which, issuing from a large pond at the S.W. corner of the town, flows (partly underground) over a flinty bed into the Zerka (an. *Jabbock*), an affluent of the Jordan. The water of this stream is excellent, a circumstance which renders the spot a desirable halting-place for caravans, the drivers of which use the ancient temples and buildings as shelter for their beasts, literally fulfilling the denunciation of Ezekiel, "I will make Rabbah of the Ammonites a stable for camels and a couching-place for flocks." (*Numbers to Chronicles, passim; Polybius*, lib. v., cap. 5 and 6; *Robinson*, ii., 172–175.)

AMMERSCHWIHR, a town of France, dep. Haut Rhin, 4 m. N.W. Colmar. Pop. 2136.

AMMONOOSUC, *Lower*, river, N.H., rises in the White mountains, and flowing W., enters Connecticut river at Bath. It is about 50 m. long.

Ammonoosuc, *Upper*, river, N.H., after a course of 50 m., enters Connecticut river in Northumberland.

AMOL, a city of Persia, prov. Mazunderan, on the Herauz, about 12 m. above where it falls into the southern part of the Caspian sea, lat. 36° 30′ N., long. 52° 23′ 55″ E. Pop. differs at different seasons; but in winter, when greatest, is estimated by Mr. Frazer at from 35,000 to 40,000. The principal object worth notice is a mausoleum erected by Shah Abbas over the remains of a former distinguished sovereign of Saree and Amol, who died in 1378. This magnificent structure has, however, been injured by an earthquake, and is rapidly decaying. There is a bridge of twelve arches over the Herauz, and there are in the vicinity of the town many mounds and other remains of Persian antiquities. The bazars are extensive, and well supplied with certain articles; but it has little trade or industry. Mr. Frazer could not find tea either here or at Balfroosh, and the inhabitants had never heard of coffee. *Chillaw* and *mas*, that is, plain boiled rice and sour curds, is the common food of the people, some of whom season it with a little salt fish. (*Frazer's Southern Banks of the Caspian Sea*, &c., p. 101.)

AMOOR, or AMUR, a large river of E. Asia, which has its sources in Mongolia. It is formed by the junction of two great rivers, the Onon or Chilka, which rises nearly under the 110th deg. of E. long., and the 50th deg. of N. lat., and the Kerlon or Argoun, which rises nearly under the same meridian, but about 2½ deg. more to the S. The latter river traverses the great lake of Koulon, and, issuing from it, and pursuing a N.E. course, forms, for a considerable distance, the line of demarcation between the Russian and Chinese empires. The Kerlon and Onon unite near the fort of Rukhanova, in about the 120th deg. E. long. The combined river having taken the name of Amoor, flows E. and S.E., till, at its most S. point, it is joined by its large tributary, the Songari, flowing N.E.: the Amoor, having suddenly taken the same direction, preserves it during the remainder of its course, till it falls into the arm of the sea opposite the N. end of the island of Saghallen, or Tchoka, in about the 53d deg. of lat., and the 140th deg. of long. The entire course of the river, to the source of either of its principal branches,

may be estimated, inclusive of its windings, at about 2200 m.; but the distance in a direct line from its sources to its embouchure does not exceed 1400 m. In the lower part of its course it flows through a comparatively rich, well-cultivated country; but the country round its sources, and the upper part of its course W. of the Kingan Yalo mountains, being contiguous to the great desert of Shamo or Gobi, has the same characteristics. The Russian fort of Nertschinsk stands on the Nertscha, near where it falls into the Chilka. (*Ritter's Erdkunde Von Asien; Arrowsmith's Map of Asia; Cochrane's Travels.*)

AMORBACH, a town of Bavaria, 24 m. S. Aschaffenburg, with a castle, formerly a very rich abbey.

AMORGO (an. *Amorgos*), an island of the Grecian Archipelago, about 36 m. in circumference, lying S.E. from Naxia, in about 36° 50′ N. lat., and under the 26th deg. of E. long. Pop. estimated at between 2000 and 3000. It is in part mountainous and rocky; but in antiquity it was noted for its fertility, and it is said by Tournefort to be well cultivated, and to produce more corn and wine than the inhabitants can consume. It contains a town of the same name. Port St. Anna, on the N. shore of the island, is an excellent harbour, with good anchoring-ground in from 18 to 20 fathoms. Simonides, famous in antiquity for his iambics, was a native of Amorgos. (*Tournefort, Voyage au Levant*, i., p. 239.)

AMORGO POULO, an uninhabited islet, 6 m. W. Amorgo.

AMOSKEAG, p. v. and *Falls*, Hillsborough county, N.H., 17 m. S. by E. Concord, 464 W. The Merrimac river here falls 48 feet 3 inches in half a mile, by three separate pitches, and affords great water power. The village is situated on the W. side of the river, in Goffstown, and has considerable manufactures. A canal, one mile long, with nine locks, overcomes a fall of 45 feet in the river, and cost $50,000.

AMOUR (St.), a town of France, dep. Jura, cap. cant. 9 m. S.W. Lons-le-Saulnier. Pop. 2631. It has a forge, a nail-work, a considerable marble-work, tanneries, &c.

AMOY, a sea-port town of China, prov. Fokien, with a commodious and secure harbour, lat. 24° 10′ N., long. 118° 10′ E. Though situated in one of the least fertile districts of the empire, the merchants of Amoy carry on a very extensive intercourse with Formosa, whence they import provisions, with the other Chinese ports to the N. and S., and with Siam, Java, Singapore, the Soo-loo islands, &c. This port was open to Europeans till 1734, when all trade with them was suppressed. It was visited by the Ship Amherst, in 1832; but the authorities prevented that commercial intercourse from taking place to which the people seemed to be extremely well disposed. (See *Report of the Voyage of the Ship Amherst.*)

AMPFING, a village of Bavaria, 6 m. W. by N. Muhldorf. A great battle was fought in the vicinity of this village, on the 28th September, 1322, between Louis, duke of Bavaria, emperor of Germany, and Frederic, archduke of Austria, when the latter was entirely defeated and made prisoner. (Pfeffel, anno 1322.) It was from this point also that Moreau commenced his famous retreat in 1800.

AMPLEPUIS, a town of France, dep. Rhone, 19 m. W.S.W. Villefranche. Pop. 4881. It has manufactures of linen and cotton, particularly the latter.

AMPTHILL, a m. town and p. of England, co. Bedford, h. Redbornstoke, 45½ m. N.W. London. Pop. 1688. It is neatly built, has a charity school for thirteen poor children, and an hospital for ten poor men and women. Ampthill Park, a magnificent mansion, the property of Lord Holland, is situated a little to the W. of the town.

AMPURIAS, a town and castle of Spain, N.E. part of Catalonia, on the Llobregat, near the sea, 24 m. N.E. Gerona. Pop. 2200.

AMRAN, a walled city of Arabia, in the Dsjebel, or mountain land of Yemen, being the chief town of a district of the same name, lat. 15° 32′ N., long. 43° 38′ E., 25 m. N.W. Sanaa, and 104 N.E. Hodeida. Pop. unknown, but may probably amount to from 1500 to 2000. It stands near a mountain, in a fertile country, in the centre of the coffee lands, the dep. to which it gives name being a part of Haschid-u-Bekel, one of the most noted divisions of Yemen for the growth of coffee. Amran is not, however, politically united with the state of Haschid-u-Bekel, but is under the government of the Iman of Yemen Proper. (*Niebuhr, Des de l'Ar.*, par. ii., p. 127–230.)

AMRETSIR or UMRITSIR (*Pool of Immortality*), a town of India, the holy city of the Seikh nation, 44 m. E. Lahore. lat. 31° 33′ N., long. 74° 48′ E. Pop. not stated. It is an open town, about 8 m. in circ.; streets narrow; houses lofty, and built of burned bricks, but the apartments are small. Manufactures inconsiderable: but being situated on the high road between Cabool and Delhi, and Cachmere and the Deccan, it enjoys an extensive trade, and is the residence of several rich merchants and bankers. It is defended by a fort built by the present Seikh ruler, Runjeet Singh, who has also united it to the Ravee by a canal 34 m. in length.*

The town derives its entire celebrity from its being the principal seat of the Seikh religion. Amretsir, or the Pool of Immortality, is a basin 135 paces square, built of brick, in the midst of which is a temple, covered with "burnished gold" (*Burnes*), dedicated to the warrior saint, Gooroo Govind Singh, the principal founder of the religion and power of the Seikhs. Within this temple is preserved, under a silken canopy, the *Grinth Sahib*, or sacred book of the Seikhs, being a code of laws and ordinances, principally compiled by the above saint. The temple is attended by a numerous body of priests, who are supported by the voluntary offerings of the devotees, by whom it is frequented. Immersion in the sacred pool is believed by the Seikhs, and many tribes of Hindoos, to purify from all sin. (*Hamilton's East India Gazetteer; Burnes*, &c.)

AMSTERDAM, or AMSTELDAMME (dam of the Amstel), a famous marit. and commercial city of Holland, cap. prov. N. Holland, and of a district and cant. of the same name, on the S. bank of the Y, an inlet or arm of the Zuyder Zee, where it is joined by the Amstel, lat. 52° 22′ 17″ N., long. 4° 53′ 15″ E. Being situated in a marsh, its buildings are all founded on piles driven from 40 to 50 feet into a soil consisting of alluvial deposits, peat, clay, and sand. The canals by which it is everywhere intersected, and along which all heavy burdens are conveyed, are said to divide it into 90 islands, and are crossed by about 290 bridges, partly wood and partly stone. Its form is that of a crescent or half moon, the horns on either side projecting into the Y, and inclosing the port. On the land side it is surrounded by walls having 26 bastions and a wide ditch; but its ramparts have been planted with trees, and converted into public walks and boulevards; the only defence of the town consisting in the facility with which the surrounding country might be laid under water. It is from 8 to 9 m. in cir. and covers a space of about 900 acres. The Amstel, which runs through the city, divides it into two nearly equal portions; that to the E. of the river being termed the old, and that to the W. the new city. In the centre and oldest portion of the city, on both sides the Amstel, is a cluster of irregular streets and canals; but the streets and canals round this central nucleus are mostly regular, and parallel to each other. Three of these streets, the Heeren, Keysers, and Princen Gracht, are not easily to be matched in any other city of Europe for their length, width, and the grandeur and elegance of their buildings. They are each about 2 m. long, about 220 feet broad; and following the direction of the outer wall of the city, which is that of a polygonal crescent, have all the lines perfectly straight between the angular points. The houses are large and well built; a canal, crossed by numerous stone bridges and bordered with trees, runs down the middle of each of these streets, the spaces of both sides being well paved and lighted, as is indeed the case with all the other streets. The principal shops are in the Kalvers Straat, the Nieuwendyk, and the Warmoes Straat. The quarter occupied by the Jews is the dirtiest part of the town. Many artisans and others belonging to the poorer classes inhabit cellars under the houses of the more opulent; and a great many reside constantly on the water, in comfortable apartments built on the upper decks of their trading vessels, more particularly those employed in inland navigation. The houses, which are all of brick, are generally 4 or 5 stories high, and have their gables to the street. Many of them are constructed in an elegant style; and some of them are splendidly fitted up.

Of the public buildings, the palace, formerly the stadthouse (town-house), is the most magnificent. It stands in an open space or square called the Damm. This fine structure, regarded by the Dutch as the eighth wonder of the world, is erected on a foundation of 13,659 piles; it is 282 feet in length, 235 in depth, and 116 high, exclusive of the cupola, which is 41 feet higher, and from the top of which there is an excellent view of this singular city. With the exception of the ground floor, which is of brick, it is built of freestone. The ball-room, represented as one of the finest in Europe, is said to be 120 feet long, 55 in width, and 90 in height. The foundations of the stadt-house were laid in 1648, and it was finished in the short space of 7 years. Among the other public buildings are, the exchange, founded in 1608, and capable of accommodating 4,500 persons; the *hôtel de ville*, formerly the admiralty; the museum, containing an excellent collection of about 500 pictures, including several master-pieces, principally of the Dutch and Flemish schools; the arsenal, built on the island of Kattenburg; the buildings of the society of *Felix Meritis*, having a superb concert hall, &c. Of the churches, that most worthy of attention, the New Church, was begun in 1408. It contains some fine monuments, particularly one in honour of

* This is Hamilton's statement. Captain Burnes says it was made by one of the emperors of Hindostan, and that it is 80 m. in length. (*Travels to Bokhara*, &c., vol. i., p. 150, 12mo ed.)

the brave admiral De Ruyter. The painted glass windows of the Old Church, dedicated to St. Nicholas, are among the finest in Europe. There are in all about 50 places of worship, among which are several synagogues, the Jews being supposed to amount to about 15,000. The principal bridge over the Amstel, near where it enters the city, is 610 feet in length by 64 in breadth, with 11 arches, through which large ships pass. The barracks, built by the French, three weigh-houses, and two ancient towers, called herring towers, deserve to be noticed. In 1822 the warehouses originally built for the East India Company, being heavily laden with corn, their foundations gave way, and they sunk half way down in the earth.

Among the literary institutions is the Athenæum, or college, with 10 or 12 professors, a good library, an anatomical theatre, and a botanical garden. In 1836 it had 33 students of law, 25 of theology, 25 of medicine, &c. There are here also a school of navigation; a royal academy of the fine arts, founded in 1817, with six professors; the Amsterdam Institute, or Society of *Felix Meritis;* a society of Public Utility, founded on an extensive scale, in 1787, &c. Schools of the best description, for the gratuitous education of the poor, are found in every part of the town; and instruction may be said to be universally diffused. There are three theatres. The workhouses, hospitals, infirmaries, the house of correction or rasp-house, the orphan-house, the establishment for widows, the lunatic asylum, with the numerous other charitable establishments, may be cited as models of good order, cleanliness, and economy. The hospital for the old and indigent of both sexes, on the quay of the Amstel, is admirably contrived for the comfort and convenience of its inmates. The building is 260 feet long, by 230 deep, and three stories high. It has galleries and a garden where its occupiers enjoy the fresh air. There is here, and in other Dutch towns, a class of provident institutions or asylums, which admit aged persons of both sexes on payment of a comparitively small sum. Masters and mistresses frequently reward old and faithful servants, by paying for their admission into one of these excellent institutions.

The mouths of the canals opening into the Y and of the Amstel are provided with strong floodgates; and on the side of the town nearest the sea a new dyke has recently been constructed to guard against inundations. The harbour is spacious and secure; the largest ships coming close to the quays and warehouses. It has recently been much improved by the formation of docks and basins. At the point where the Y joins the Zuyder Zee there is a bar, called the Pampus, which cannot be crossed by large ships unless previously lightened. To obviate the inconveniences arising from this circumstance, and the dangers and delays occasioned by the shallowness and difficulty of navigating the Zuyder Zee, a ship canal has been constructed from Amsterdam to the Helder. This noble work is about 50½ m. in length; and being 20 feet 9 inches deep, admits large ships. Its level is that of the highest tides, the only locks it requires being one at each end; but it has two sluices in the intermediate space. It was begun in 1819, and finished in 1825, at an expense of about 1,600,000*l.* The dues are moderate; and it has been of the greatest service to Amsterdam, by giving it, as it were, a deep-water harbour on the most accessible part of the Dutch coast.

The manufactures of Amsterdam, besides various branches of those of wool, linen, cotton, and silk, comprise sail-cloth, refineries of sugar, borax, sal-ammoniac, sulphur, &c.; with distilleries and breweries, tanneries, tobacco manufactories, iron founderies, rope-walks, smaltz-works, gas-works, soap-works, oil-mills, &c. Ship-building is extensively carried on. The art of cutting diamonds and other stones for the lapidaries has here attained to great perfection: there are at present (1838) five principal, besides several smaller establishments devoted to this business, being mostly carried on by Jews. Jewellery, gold lace, &c. are also largely produced. But Amsterdam is far more distinguished as a trading than as a manufacturing city. Throughout the 17th century, and the first half of the 18th, she was what London is at present, the metropolis of the commercial world. Gradually, however, partly in consequence of the oppressiveness of the public burdens, but more, perhaps, of the growth of commerce and navigation in England and other countries, she lost the greater part of the carrying trade, which she had nearly engrossed, at the same time that her fisheries and foreign trade progressively fell off. During the subjugation of Holland by France, her colonies fell into the hands of England, her ships disappeared from the sea, and the trade of Amsterdam was almost annihilated. But notwithstanding these untoward events, and the exactions to which she was repeatedly subjected, she preserved her industry and a vast amount of capital; and no sooner had peace been restored and Holland had recovered a portion of her colonies, than the commerce of Amsterdam began rapidly to increase; and though still far short of its ancient importance, it is now of very considerable extent and value.

The imports principally consist of sugar, coffee, spices, tobacco, cotton, tea, indigo, cochineal, wine and brandy, wool, grain of all sorts, timber, pitch and tar, hemp and flax, iron, hides, linen, cotton and woollen stuffs, hardware, rock-salt, tin plates, seal, dried fish, &c. The exports consist partly of the produce of Holland, partly of the produce of her possessions in the East and West Indies and other tropical countries, and partly of commodities brought to Amsterdam as to a convenient *entrepôt* from different parts of Europe. Of the first class are cheese and butter (very important articles); madder; clover, rape, hemp and flax seeds; rape and linseed oils, Dutch linen, &c. Geneva is principally exported from Schiedam and Rotterdam; oak bark principally from the latter. Of the second class are spices; Mocha and Java coffee; sugar of Java, Brazil, and Cuba; cochineal, indigo, cotton, tea, tobacco, and all sorts of eastern and colonial products. And of the third class, all kinds of grain; linens from Germany; timber and all sorts of Baltic produce; Spanish, German, and English wools; French, Rhenish, and Hungarian wines, brandy, &c. The trade of Amsterdam may, indeed, be said to comprise every article that enters into the commerce of Europe. The total value of the imports and exports are respectively estimated at about £3,500,000 or £4,000,000. From 220 to 230 large ships belong to Amsterdam, employed in the trade to the E. and W. Indies, the Baltic, &c. There is little coasting trade; the communication with most other Dutch towns being principally kept up by canals. The total number of ships of all sorts entering the port amounts, at an average, to about 2200 a year.

The merchants of Amsterdam were formerly most extensive dealers in bills of exchange, and in all sorts of funded property and government securities; but London is now, in this respect, far superior to her old rival: the latter, however, still enjoys a large share of the exchange business of the Continent, and many of her capitalists are large holders of foreign securities.

The old bank of Amsterdam, founded in 1609, and so celebrated among the monied institutions of the 18th century, ceased to exist in 1796, on the invasion of Holland by the French. The present bank of the Netherlands was established in 1814. Insurance business is extensively carried on.

The city is supposed to contain above 26,000 houses. In 1785 the pop. is said to have amounted to 235,000. It had declined in 1814, the epoch of its greatest depression, to 180,000; and at present it amounts to about 207,000. Notwithstanding the city is surrounded on all sides with water, and that the greatest care and attention are required to prevent its being submerged, it labours under a total want of spring water. The water in the river and canals being filthy, brackish, and totally unfit for use, the inhabitants are partly supplied by rain water carefully collected in tanks, and partly by water brought in a peculiar description of barges from the Vecht, 6 or 7 m. distant. It is curious that despite this want of good potable water, the humidity of the atmosphere, and the effluvia generated in warm weather from the water of the canals, the town is free from epidemic disorders, and the inhabitants healthy and robust. Most probably this is owing in a considerable degree to the comfortable mode of living of the bulk of the people; the prevalence of cleanliness, in which the Dutch are superior to all other nations; and the absence of extreme poverty and destitution.

The toleration that prevails at Amsterdam, does equal honour to the people and the government. There is here every variety of sects; but they are distinguished by nothing so much as by their abstinence from theological discussions, and by their apparent respect for the opinions of others. "It must not, however, be inferred that the toleration existing here and in the rest of Holland—a toleration perfect in *fact* as well as in law—has its origin in any degree of apathy with respect to religion, or in any irreligious tendencies on the part of the people; such a conclusion would be utterly erroneous. Generally speaking, the Hollanders, whatever may be their particular religious profession, are firm believers, and devoted to the practice of piety. This virtue pervades all classes of society in Amsterdam." Hence, notwithstanding the defects of its climate and situation, Amsterdam is a most desirable place to many persons. For ages it has been a "city of refuge" to the oppressed and persecuted of all nations; and therein lies one of the main causes of its wealth and prosperity.

The city police is well regulated, and robbery and house-breaking are of rare occurrence. A drunk person, or one in rags, is a very unusual sight. No loose women are permitted to infest the streets; which are, also, quite free from beggars. The disgusting dens of profligacy, known by the name of *spiel* houses or *musicos*, still exist; but they are frequented by few, except the dregs of the populace.

In every part of Holland, but nowhere more than at Amsterdam, do we find proofs of the astonishing power of ingenuity, industry, and perseverance. This great city is not

merely built in a marsh, but is constantly exposed to the risk of being overwhelmed by the influence of high tides and storms. But this danger has been effectually provided against; and the waters by which the city is all but surrounded, and which penetrate every one of its streets, are under complete control, and made to contribute to the comfort and accommodation of the inhabitants. The works necessary for the public safety and protection require, however, to be watched over with unceasing vigilance; and a large annual expenditure is incurred in keeping them in good repair, and in dredging and clearing the port and canals.

It is a curious fact, that notwithstanding the superabundance of water, there is not, owing to the flatness of the soil, a single water-mill in Holland. There are, however, immense numbers of wind-mills, employed frequently to pump up water from the low grounds, as well as to grind corn, crush seeds, &c. There is a large wind-mill on every one of the bastions by which Amsterdam is surrounded.

Amsterdam has been sometimes called the Venice of the North; and in respect of situation, number of canals, and the magnificence of the public and private edifices, it certainly bears a very striking resemblance to the Venice of the South. But each of these great cities has, notwithstanding, a perfectly original and distinctive character.

In the 12th century, Amsterdam was only a small fishing village; in 1482, it was fortified. At the outset of the revolutionary struggle with Spain, the Duke of Alva having expelled the Protestants from the city, and committed the government to zealous Catholics, it supported for a lengthened period the cause of the Spaniards; and it was not till 1578 that it joined the confederation. From this epoch it began rapidly to increase. The most complete toleration being granted to all sects, it became an asylum for those driven by persecution from the other towns of the Low Countries and elsewhere. The closing up of the Scheldt, in 1648, transferred the greater part of the trade of Antwerp to Amsterdam, and raised the latter to the highest pitch of prosperity. (*Dict. Géographique*, art. *Amsterdam*; *Balbi*, 2d ed.; *Barrow's Family Tour through S. Holland, &c.*, p. 92–133; *Murray's Handbook for N. Europe*; *M'Culloch's Commercial Dictionary*; *Chamber's Edinburgh Journal for* 1838, &c.)

Amsterdam, p. t., Montgomery co., N.Y., 32 m. W. Albany, 400 W. Bounded S. by Mohawk river. The village is situated on the N. side of the river, and contains four churches, one Presbyterian, one Baptist, one Methodist, and one Universalist; a bank, an academy, with 130 students, a female seminary, fourteen stores, two grist-mills, two furnaces, a carpet factory, a scythe and other manufactories, a printing-office, 250 dwellings, and about 1700 inhabitants. There are in the town, including the village, fifteen stores, two flouring-mills, four grist-mills, ten saw-mills, one fulling-mill, one distillery, one brewery, seven schools, 267 scholars. Pop. 5333.

AMSTERDAM ISLAND, a small but remarkable island in the S. Indian ocean, lat. 37° 47′ S., long. 76° 54′ E., being 4½ m. in length, by 2½ in breadth, and 700 feet high. It is obviously of volcanic formation. A large portion is occupied by what has undoubtedly been a magnificent crater; but the sea having made an irruption into one of its sides, it is now converted into a circular harbour, the only accessible one in the island. The surface is everywhere light and spongy, and in parts burning hot. There are several hot springs, having temperatures varying from 80° Fah. to the boiling point; with the exception of a single chalybeate spring, having a temperature of 112°, all the springs in the island are brackish. Some of the hot springs are so near the water's edge, that it is no exaggeration to affirm that fish taken with the one hand may be boiled with the other! The surrounding seas swarm with various species of fish, particularly with crayfish. No trees or other fruit-bearing plant, nor quadrupeds, nor land-birds, are found on this island; but it is resorted to by vast numbers of sea-birds. Seals and sea lions abound on its shores and in the adjoining sea, which makes it be occasionally visited by ships engaged in the seal fishery. It was discovered by a Dutch navigator, Van Vlaming, in 1696, and was visited by Mr. Barrow in 1793. (See *the Voyage of the latter to Cochin China; and the Philosophical Transactions*, vol. xx.)

Amsterdam, New, a town and harbour of S. America, English Guiana, near the m. of the Berbice river. Pop. 1600. Being founded by the Dutch, it is built in their fashion, and intersected by numerous canals. The private houses are mostly of wood, covered with bamboo leaves, but the government offices are of brick, and handsomely built. The entrance to the river, in lat. 6° 20′ N., long. 57° 11′ W., is defended by three forts. There is only seven feet water on the bar at low ebb. The canals being filled and emptied by the flow and ebb of the tide, all impurities are swept off, and the health of the town is preserved notwithstanding the heat of the climate. (*American Coast Pilot.*)

AMTZELL, a village of Wirtemberg, circ. Danube. Pop. 2120.

AMWELL, t., Hunterdon co., N.J., 16 m. N. Trenton. Watered by the S. branch of Raritan river and its tributaries. It contains two Presbyterian churches, sixteen stores, nine grist-mills, six saw-mills, one oil-mill, one woollen factory, six distilleries, one brewery, eleven schools, 331 scholars. Pop. 3071.

Amwell, t., Washington co., Pa., 10 m. S. Washington b. Bituminous coal is abundant. It has two stores, two saw-mills, four distilleries, ten schools, 300 scholars. Pop. 1536.

ANACAPRI, a town in the N.W. corner of the island of Capri, in the gulf of Naples, on the N. side of mount Solaro, nearly 2000 feet above the level of the sea. Pop. 1800. The ascent to it is very steep, and is effected by a stair of 552 steps, called *la scalinata*. It has a church, a convent, and a castle in the neighbourhood: there are also two ancient towers, and the remains of some edifices, ascribed to Tiberius. The prospect from the castle is extensive, and singularly rich and beautiful, commanding the Tyrrhenian sea, the gulf of Naples, Vesuvius, &c. The inhabitants are said to be much attached to the situation; and some, it is affirmed, have never descended *la scalinata*.

ANAGNI, a town of the Papal States, 38 m. E. by S. Rome. Pop. 5500. It stands on a hill, and has a very fine prospect; but its interior is mean and miserable. It is the seat of a bishoprick, founded in 487.

ANAM or AN-NAM (Empire of), a country of Asia, occupying the E. portion of the great E. peninsula of S. Asia, or India beyond the Ganges, comprising Cochin China and Tonquin (to which only the name of An-nam properly belongs), with the E. and S. part of Cambodja, and many small islands in the Chinese sea. It lies between 8° 45′ and 23° 22′ N. lat., and 105° to 109° E. long.; having N. the Chinese provinces of Quang-tong, Quang-si, and Yun-nan; W. Laos and Siam, and in the rest of its extent, the ocean. It is 965 m. in length, varying in width from 415 m. to 60 m. Area, probably about 98,000 sq. m. (*Crawfurd.*) Pop. variously estimated at from 5 to 15 or 20 millions! The lowest estimate, which is that of Mr. Crawfurd, is probably the most accurate.

The country is subdivided as follows:

1. *Cochin China* (called Dang-traoing, or Central country).

Provinces.	*Chief cities.*
Bas-theen, Nha-trang, Phe-Yen, Qui-nhon, Quang-ai, Quang-nan, Hue,	Hue, the capital (pop. 60,000, *Crawfurd*), Turon, Fai-fo.

2. *Tonquin.* (Dong-kiuh, External country.)

Ke-cho, Ting-long, Wai-tak, Sang-sai, King-pak, Sing-Kwang, Hing-wha, Ko-ping, Leong-san, Ching-wha, La-nam 1st, La-nam 2d, Hai-yong, Aw-kwong, Man-sing-chao.	Ke-cho (Cachao), 150,000 inhabitants. *Hanoi*, 20,000 inhabitants.

3. *Cambodja* (called Ko-men by the natives).

Ya-teng, Ping-fong, Fo-nan, Win-Cheng, Ho-sin, Teng-chong.	Sai-gon, 180,000.

(*Crawfurd, Journal of an Embassy, &c.*, 4to, Lond. 1828, p. 458, 459, 464; *Chapman's Voyage, &c., in the Asiatic Journal*, vol. xix. (1825), p. 122; *Balbi*; *Adrien, Abrégé de Geographie*, 3d edit. 8vo., Paris, 1837–8, p. 768, 769.)

Mountains.—The principal chain, an offset from the Himalaya range, runs through the central and southern parts of the country, forming the W. boundary of Cochin China, and the E. one of Laos and Cambodja, and terminates at Cape St. James, in lat. 10° 16′ N. Between this range and the sea, Cochin China consists of a succession of others, gradually decreasing in height as they approach the shore, and inclosing a great number of fertile valleys. These mountains have not been measured by Europeans. The summits of the principal chain are acuminated, sterile, and most probably granitic; but their steep sides are clothed with extensive forests, and the inferior ranges are often cultivated nearly to their tops. (*White's Voyage to Cochin China*, p. 72; *Finlayson's Mission to Siam and Hué*, p. 325.)

Plains.—Tonquin and Cambodja are both immense alluvial basins of great fertility, and traversed by large rivers: in addition to these, there are a few small flats around the mouths of the rivers in the central provinces. The plain from the mouth of the Oubequemme to cape St. James is but little above the level of the sea, and subject to inundation at every spring tide.

Rivers.—The Menam-kong, or river of Cambodja, is one of the largest in Asia; it rises in the Chinese province of Yun-nan, is joined by some large streams from Tibet, and, running nearly due S. through the centre of Laos and Cambodja, forms, for some distance, the W. boundary of the Anamese dominions, and discharges itself in lat. 9° 35′ and 10° 15′ by two principal mouths (the farthest N. being called the Japanese river, the S. one the Oubequemme), and by many smaller ones. The Sang-koi (*Balbi*) or river of Tonquin, has a shorter course; it rises in the mountains of Yun-nan, runs mostly S. E. through Tonquin, passing by Ke-cho, and falls into the gulf of Tonquin by two principal mouths, between 20° and 21° N. lat. Both these rivers, as well as that of Sai-gon (which is ¾ of a mile in width near that

city), have deltas at their mouths: they are navigable generally for large ships; but, owing to sand banks at both its mouths, it is reported that the Tonquin river is available to none above 200 tons burthen, though Crawfurd doubts this statement as respects the N. mouth. (*Crawfurd, Journal*, &c., p. 459–462.) There are several other considerable rivers in Tonquin; as the Li-Sing-Kiang: along the Cochin Chinese coast they are all much smaller, and with a shorter course; the river of Hué (on which the capital is situated) is one of the most considerable, has a fine estuary, and is navigable by vessels of 200 tons burthen. (*White, Voyage*, p. 185–231.)

Lakes—Harbours.—Europeans have described no lakes of any magnitude; but the shores of Cochin China abound with some of the finest harbours in the world. From cape St. James to the bay of Turon, there are no less than nine of these, safe and accessible with every wind: that of Turon, in the opinion of Mr. Crawfurd and others (though not in that of M. de Bougainville), is not surpassed by any in the East.

Coast and Shores.—The coast here is generally bold, and presents many promontories, like that of cape St. James, which is 300 feet in height; the precipices occasionally alternating with a narrow sandy beach. The anchorages are everywhere good; but at no great distance from the shores, sand-banks and rocky islands are often very prevalent.

Geology and Minerals.—The primitive rocks, of which the principal mountain chain is almost wholly composed, are granite and syenite: the lower hills contain quartz, marble, and mountain limestone. In the S. provinces, the granite is seamed in every direction; on the rounded sides of the hills it alternates with syenite, and both rocks are penetrated by veins of iron ore: near Hué, all the hills are granitic, and their peaks in the highest degree sharp, rugged, and uncovered. There is a great diversity of upper soils in the valleys; some being dry, friable, and sandy; others of a stiff clay. The soils of the central provinces are however mostly sandy: those of Tonquin and Cambodja are, as already stated, alluvial. Around their shores there are extensive and fertile mud-flats.

Tonquin is the only part of the empire rich in metals; it produces large quantities of gold, silver, copper, and iron: with the latter it supplies all the country except the most S. part. Its mines are worked by Chinese, and about 100 piculs (or 17,800 lbs. Troy) of silver are produced yearly. Cochin China has no metallic wealth: silver only is said to be found at Cape Avarelle; Cambodja is poor in metals. It produces iron, but in inadequate quantity for its own use, and it is therefore imported from the neighbouring countries to the W. of it: the central provinces yield salt. (See *Crawfurd*, p. 472; *Finlayson*, p. 294, 330–351; *Asiatic Journal*, vol. xix., p. 194.)

Climate—Is generally fine and healthy, the heat being tempered in the maritime districts by the sea breezes; in the winter it is even cool in Cochin China, but in Tonquin the heats of summer are excessive, and the cold of winter proportionally severe. At Hué, M. Chaigneau, who resided there for some time, reports that the greatest heat of summer was 103°, and of the cold of winter 57° F. During the wet season of August, Mr. Crawfurd found that the thermometer in the shade ranged in one day from 79° to 82° F. at Saï-gon. In the S. the seasons follow the same order as in Malabar, Bengal, and Siam; viz., the rains prevail with the S.W. monsoon from May or the beginning of June, to September: the same takes place in Tonquin. But in Cochin China, between 11° and 18° N. lat., the rains set in with the N.E. monsoon, and last from October till March; the high mountain range protecting this country from wet weather by intercepting the clouds at the converse season of the year. The general height of the barometer at Hué is 29.85′. Immense inundations last sometimes for three or four days at a time: Tonquin is subject to heavy fogs and violent hurricanes. (See *Crawfurd*, p. 470; *Chapman's Voyage, in the Asiatic Journal*, vol. iv., p. 125.)

Vegetable Products.—The forests of Cochin China produce a variety of scented woods, as sandal, rose, eagle-wood, &c. The true cinnamon (*Laurus cinnamomum*) is indigenous to this country, and valued by the Chinese more than that produced in any other: it is found wild chiefly in dry and sandy soils. The banks of the Saï-gon, and the other large rivers, are thickly covered with jungle; among which are teak, iron-wood (*Syderoxylon*), a kind of Callophyllum, as straight as a Norway fir and well adapted for ships' masts, mangrove, &c. In the forests of Cochin China, cedars, walnut, pelitry, cocoa, areca, betel, bamboo, rattan, ebonies, and most of the products of British India. Cambodja yields gamboge, the finest cardamoms, aniseed, areca, indigo, &c.; the central provinces, pepper, and two sorts of sugar cane; Tonquin, many kinds of varnish trees, areca palm, &c. Cotton, rice, and the mulberry tree are almost universal. Among the fruit are oranges of a blood-red pulp and delicious flavour, bananas, figs, pomegranates, pine-apples, guavas, mangoes, shaddocks, lemons, limes, plantain, yam, &c. Ginger, and spices of various sorts, are also indigenous. An inferior sort of tea, with a leaf twice or thrice as large as that of Bohea, grows wild in the hilly parts of Quang-si, and is sold at from 6 to 20 quans (200 to 1000 cents.) the picul (133⅓ lbs.). (*Crawfurd, Journ.*, p. 474–476; *Barrow, Voyage*, &c., p. 341–346; *Asiatic Journ.*, xix., p. 123, 194; *White, Voyage*, p. 150, 209, 210.)

The cocoa-nut tree, next to the bamboo, is the most useful of any. The trunk is used for house and ship building; the husk produces cordage and cables superior to any other; the leaves are used for roofing, and for making paper, and wicker work; the oil for lamps and painting; the shell for cups, &c.; and the nut furnishes both food and drink.

Scenery.—The interior of Cambodja has been little explored by Europeans, but its surface is believed to be covered, in great part, with extensive forests. The banks of the river Saï-gon are covered with mangrove trees, and no cultivation appears until within from 20 to 30 m. of that city. *Bin-thuon*, the most S. province of Cochin China, extends to about 12° N. lat., and is most remarkable for its aloes. *N'ha-trang*, which succeeds it, is an elevated and ill-cultivated region, but produces silk. *Phu-yen*, which reaches as far as lat. 14°, is the richest and the most highly cultivated and peopled province of all: it is full of fruitful valleys and gently undulating hills, on which rice is grown in terraces, almost to their summits, and bounded W. by lofty mountains, crowned with towers and pagodas, or having their pinnacles enveloped in fleecy clouds. *Qui-nhon* is a province of great extent, and well cultivated: *Quang-ai* and *Quang-nan*, extending from 14½° N. to nearly 17°, are almost exclusively the countries of the sugar cane and the tea tree. The banks of the river of Hué, though beautiful, are more indebted to art than to nature; they abound in ornamental gardens, laid out among groves of cocoa, areca, banana, and bamboo, and rows of hibiscus. At Turon, and in most of the N. of Cochin China, there is a degree of sterility not met with in the S.; but the whole country is apparently inferior in fertility to that of Siam. Tonquin has been very imperfectly examined by Europeans, but is the most populous province; therefore, most probably, of superior fertility and cultivation. (*Crawfurd, Journ.*, p. 460, 461; *Finlayson*, p. 299, 349; *White, Voyage*, p. 74; *Arrowsmith's London Atlas.*)

Animals.—The elephant, rhinoceros, tiger, leopard, buffalo, bear, horse, deer, goat, &c., are natives of Anam. There are no jackals nor foxes; nor hares, but a profusion of other kinds of game. Great numbers of monkeys and baboons are found in the woods: one large and powerful species seems to be peculiar to Cochin China. The dog and cat, which are also natives, are domesticated: elephants are used in war. Peacocks, parrots, and a variety of birds of the richest plumage, inhabit the forests; curlews, plovers, &c., the shores; and aquatic birds of all descriptions, the rivers. Alligators inhabit the larger rivers; the *cobra-de-capello*, and several other large and venomous serpents, infest the country. The seas abound with an inexhaustible supply of fish, and afford subsistence to a large portion of the population; among the species are the flying-fish, scorpion-fish (remarkably and beautifully variegated), mango-fish of Bengal, &c., with soles, mullets, and many others familiar to us; shrimps and crawfish are very fine; and molluscæ, in large quantities, are taken for food. Mosquitoes and other insects abound in great quantities. (*Crawfurd, Journ.*, p. 478, 479; *Barrow, Voyage*, p. 312; *Finlayson*, p. 411; *White, Voyage*, p. 63–191, 257–311; *M. de Bougainville, Journal de la Navigation autour la Globe*, 2 vols. 4to, Paris, 1837, vol. i., p. 263.)

The People consist of several races: 1, the *Cochin Chinese, Tonquinese*, who are similar in person, and most of their habits and customs, to the Chinese; 2, the *Cambodjans*, in physical qualities, manners, &c., more resembling the Siamese; 3, the *Moi race*, inhabiting the mountainous country between Cochin China and Cambodja; believed by some to have been the aborigines, said to be black like the Caffres, and in a savage state. Besides the native races, there are 25,000 Chinese, who work the mines and trade in metals in Tonquin, and many others who are settled in the commercial towns, but mostly in the N. provinces; the other strangers are chiefly Malays, about 5000 in the S. parts of Cambodja, and Portuguese. (See *Crawfurd*, p. 464–470; *Asiatic Jour.*, iv., 340.)

Physical Qualities.—According to Mr. Finlayson, the majority of the inhabitants are of Malay origin.* He observes, "that the men average 5 feet 2¾ inches in height, which is below the ordinary standard of the Malays and Siamese; they are less bulky and clumsy than the latter, but of a somewhat squat figure. Their upper extremities are long, their lower ones short and stout; they are not fat; their muscular system is large and well developed. Head and

* Mr. Finlayson was a *surgeon*, who accompanied Mr. Crawford in his embassy in 1822, and, as an anatomist, his opinion is deserving of the greatest attention.

face both nearly round; the longitudinal and transverse diameters of each being nearly equal; forehead short and broad, cheek-bones wide, but not particularly salient, chin large and broad; but the *coronoid process* of the lower jaw has not the fulness apparent in the Malays and Siamese, and the affinity in this respect to the Tartar race is still less. Eyes rounder and smaller than those of the Chinese and Siamese, more lively and intensely black; lips moderately thick; hair on the scalp copious, black, and coarse; beard grisly and thin, and no hair on the cheeks. The colour of the skin is olive, and very often, especially in the females (who are sometimes really handsome), the complexion is no darker than that of the inhabitants of the S. of Europe." (See *Finlayson*, p. 298, 374–378.) They are intelligent—without much originality or invention; but exhibiting a very great aptitude for imitation. Of their disposition, such conflicting statements have been made by those who have experienced either a handsome or unhandsome reception from them, that it is difficult to come to any conclusion. They are sprightly, animated, good-humoured, and altogether destitute of the solemn reserve of the Chinese; always laughing and chattering, volatile, capricious and changeable, vain, and endued with considerable national pride. Crawfurd and Finlayson say that they are mild, docile, and inoffensive; (no travellers have accused them of ferocity;) affable, kind, and attentive to strangers; and the lower orders not rapacious, although a despotic, illiberal, and avaricious government has unquestionably made all within the influence of the court the most arrant thieves. In their manners and behaviour, the Anamese are polite and graceful; but punctilious and ceremonious. (*Ibid.*, p. 296–299, 374, 383, 384; *Crawfurd*, p. 481, 488, 489; *White*, *Voyage*, p. 299; *Barrow*, *Voyage*, p. 297.)

Occupations, &c.—Agriculture—Rice.—Rice, which is here the "staff of life," forms the main article of culture. There are six different sorts grown; two on the uplands, used for confectionary, and yielding only one crop annually; the other sorts yield from two to five crops a year; but generally two, one in April, and another in October; or three, where the inundations have been profuse. Maize, cotton, yams, sweet potatoes, pulse, and fruit, are the other articles of general culture.

Sugar.—The sugar-cane is cultivated by the Cochin Chinese only, and a very inferior, dark, clayey produce obtained. Most of the cinnamon that is exported is cultivated; tobacco, capsicum, pepper of a very good quality in the central provinces, are other chief objects of tillage: no coffee is grown, except in a few gardens near Hué.

Silk.—Raw silk is produced in large quantities in Tonquin and Cochin China. The ground is but indifferently tilled; near Sai-gon, it is in many small patches of about half an acre, the rice grounds being bounded by ditches. Agricultural labour is almost wholly performed by women; they guide the plough, which is drawn by a buffalo, plant the rice, build and repair the cottages, &c., and are entrusted with all the household concerns. Their pay, as well as that of labourers of the other sex, is one *mas* a day with food, or two *mas* without it. (*Barrow*, p. 301, 315, 316; *White*, *Voyage*, p. 193–202; *Crawfurd*, p. 474–476, 522; *Finlayson*, p. 324–326.)

Cattle Breeding.—The buffalo is domesticated, and is useful in agriculture; the ox is of a small reddish-brown kind, but not used as food, beef not being commonly eaten: a small species of goat is kept; but sheep are very rare and extremely inferior. The hog is a very favourite animal; the breed is the Chinese, and remarkably fine: at Hué, hogs are always stall-fed, and seldom suffered to roam at large. The horse, of an inferior breed, is used only for riding, being unfit for cavalry service: there are neither asses nor mules.

Poultry.—Poultry, in large numbers, are kept everywhere: those at Sai-gon are said to be among the finest in India; geese are not so common as ducks or fowls; the game-cocks are trained for fighting. (See *Crawfurd*, p. 478, 479; *Barrow*, p. 310; *White*, p. 250–256.)

Food, &c.—The diet of the people is to European ideas often gross and disgusting in a high degree. Rice, legumes, and fish, form the chief part of their food; but dogs and alligators' flesh, rats, mice, worms, frogs, and other reptiles, maggots, entrails, and putrid meats, are among their favourite dishes. Pork, boiled ducks and fowls, boiled and stewed yams, and sweet potatoes, sugar-cane, fruit, and much confectionary, compose great part of the rest, and tea, and rice-whiskey (of which a great deal is drunk), compose their usual beverages; fish-pickle is their favourite condiment, into which nearly every morsel they eat is plunged; elephants' flesh is eaten only by the sovereign and nobility. Milk is not used at all, and eggs are not valued until they are rotten, or nearly hatched. They take two meals a day; one at nine or ten o'clock in the morning, the other at sunset. These they take in the open air, generally in front of their houses, and eat with chop-sticks tipped with ivory or metal, porcupine quills, and a pottery spoon.

Habits.—The tobacco that is grown is all used in the country; all the men smoke, and, as well as the women, chew betel and areca, which either they or their attendants (if rich) always carry with them in boxes or large purses for the express purpose. In their persons they are extremely dirty, notwithstanding their frequent ablution: their under garments are never washed nor changed until they drop to pieces; their nails are never cut; their length being an indication of rank.

Diseases.—The country they inhabit is healthy enough; but their habits engender leprosy, scurvy, erysipelas, and scrofula; the diseases owing to the climate are mostly of a febrile and intermittent character. (See *Barrow*, p. 287–316; *White*, p. 206–227, 295; *Finlayson*, p. 300; *Crawfurd*, p. 487, 488; *White*, p. 38, 84–86, 300; *Bougainville*, vol. 1., p. 261, 262.)

Arts and Manufactures—House-building.—The inferior dwellings consist of mud walls, thatched or covered with bamboo leaves; the better sort of houses are of wood or brick, and tiled, but the bricks are only baked in the sun, and glazed windows are unknown. The huts of the peasantry near Sai-gon consist of wattled floors, raised about 3 or 4 feet above the ground, and contain two or three compartments, one of which is a common room; in the others the family sleep on mats on a kind of raised platform, ranged around the walls. A superior residence, visited by Mr. White, was 30 feet in length by 25 broad, consisting of one story, the sides of wood and bamboo frame-work. The roof of bamboo leaves projected 10 feet, and screens of matting were attached to the eaves. Under this verandah was the general parlour; inside the walls a corridor ran all round the building, inclosing a stack of dormitories in the centre; at one extremity of the house was a large kitchen, furnished with a huge wooden pestle and mortar for grinding rice, several small fire-places of rough stones, and a small platform where meals were taken. The ordinary furniture of a cottage consists of a coloured matting for the floor, an earthen stove, an iron rice-pot, and some very rude porcelain and other earthenware articles. (See *Barrow*, p. 310–316; *White*, p. 177–233; *Finlayson*, p. 300–350.)

Ship-building.—The art in which, above all others, the Cochin Chinese excel is that of ship-building. Their vessels, the construction of which, were it not for their rude materials, would not disgrace Europe, are built of from five to one hundred tons burthen, but mostly between sixteen and thirty tons; sharp at either end, and the deck ⅓ longer than the keel. Their bottoms mostly consist of wicker-work, covered on the outside by a coating, ½ inch thick, of *gaigal*, a close and durable mixture of pitch, oil, lime, &c. The sides and deck are bound together with cross-bulk heads, and as the larger vessels usually belong to a joint-stock company of merchants, there are as many separate holds as owners. The fishing boats and others, 50 feet in length, are made of five long planks extending from stem to stern, their edges mortised, tightened with wooden pins, and bound together by twisted bamboo fibres: at each end they are raised much higher, and painted, gilded, and ornamented with figures of dragons and serpents. They often carry a covered cabin, built like a house upon the deck; from one to three sails of matting, which in the N. provinces are often square and more like those of Europe; a wooden anchor with one fluke, shrouds and cables of rattan, and cordage of *coir*. During the unfavourable monsoon, the boats are taken to pieces, and the larger vessels drawn up on shore to some distance. The mode of rowing is by pushing, and not pulling, the oars against the water (*White*, p. 209): when there are many rowers, they push in regular succession, beginning with the one at the stern. The government rowers, who are selected from the army, are paid but 1 quan per month; the boats that ply for hire are chiefly conducted by women; but the very unfair and ungallant custom prevails, that the men pay no fare, they being all supposed on government service. They have no wheeled carriages; but people of distinction are carried in a palanquin, formed of a cotton net hammock, with a mattress and pillows inside, covered by a large varnished canopy, in form like a tortoise-shell; the whole slung upon a long pole, and carried on the shoulders of two, four, or six men. (See *White*, p. 213–233, 319; *Barrow*, p. 317; *Finlayson*, p. 314–409.)

In most manufactures the Anamese are very far behind, and are superseded by the Chinese, from whom they derive most of their useful articles. Sword-handles, with very good filigree work, boxes of lacquered ware, inlaid with pearl or gold, purses, matting, baskets, coarse silk, and very durable cotton stuffs, bells, cannon, iron nails, scissors of a rude kind, varnish, &c., they can make; but they cannot temper iron or steel, print calico, or make a matchlock, and depend for all their arms on European nations. (*Crawfurd*, p. 482; *Finlayson*, *Mission*; *White*, p. 261; *Barrow*, p. 317.)

Trade.—The Chinese are the butchers, tailors, confectioners, bankers, money-changers, and pedlars of the empire,

and are met with in all the towns with an elastic pole across their shoulder, and at either end a basket containing their wares. In the bazars, gilt paper, fans, porcelain, drugs, and other China produce, tools, necessaries of life, and the other articles yielded by the country, are sold. Provisions are cheap. Mr. White found that at Sai-gon, pork was 3 cents per lb.; beef, 4 c. (Americ.); fowls, 50 cents per dozen; a fine deer, 1¼ dollar; rice, a dollar a picul (133 lbs. Eng.); shaddocks and lemons, 50 c. per hundred; oranges, 30 c. per hundred. Tea of Hué is sold in boats on the rivers, as well as varnish, which, with other combustible matters, is not allowed to be kept on shore, and the varnish merchants live constantly in their covered houses, built on bamboo rafts. The foreign trade is comparatively trifling, and almost wholly with the Chinese; very little with the Siamese or Europeans. (*Finlayson*, p. 371; *White*, p. 212–227, 259–261; *Crawfurd*, p. 510.)

Exports.—From 20,000 to 60,000 piculs of sugar; 250,000 to 300,000 lbs. of true cinnamon not freed from its epidermis, at 50 to 60 quans per picul; 3000 piculs of aniseed from Cambodja; raw silk at 3½ to 5 quans the catty (2⅓ lbs.), 200 piculs from Fai-fo, 60 p. from Hué, and 1000 p. from Cachao annually; cottons superior to those of Bengal; areca, spices, cardamoms from Cambodja, hogs' lard, scented woods, rice, edible birds' nests, and molluscæ, and the precious metals, are exported to China; gamboge, red dying wood from Tonquin, ivory, pearl, horns, hides, gum-lac, gold-dust, and other metals in smaller quantities to other parts of the world. When Barrow wrote, sugar at Turon fetched 3 dollars, pepper of Cochin China, 6 to 8 dollars, and rice half a dollar the picul of 133⅓ lbs. British manufactures then sold usually at 20 to 30 per cent. profit, and were paid in silver ingots. Ke-cho was formerly the centre of the eastern trade, and at the end of the 17th century the English and Dutch had factories there, whence they exported largely.

Imports.—The imports are chiefly manufactured silks, porcelain, drugs, a great quantity of gilt paper, and fine teas for the upper classes, with household, &c., utensils from China; spices, sandal-wood, and tin, from Malay; opium (which is however prohibited) from India, 150 chests annually, two thirds of which are consumed in Tonquin; cottons from Canton and Sincapore (but none of a variety of colours in the same piece, nor chintzes); British woollens, chiefly scarlet, some yellow or green, and all coarse; a few serges, and camlets, iron and arms from Europe; but altogether amounting to very little. The China trade is chiefly in Ke-cho, Sai-gon, Hué, and Fai-fo, but the whole scarcely amounts to 20,000 tons annually, being little more than half the Chinese trade with the single city of Bangkok in Siam.

Canals.—The transport of goods between Ke-cho and Hué is facilitated by a canal, 180 miles in length, 20 yards in breadth, and almost straight; said to be constructed by the reigning monarch in 1812: near Hué it is used for irrigation as well as conveyance. (*Crawfurd*, p. 473–477; *Asiatic Journal*, xix. (1825), p. 124–126; *Barrow*, p. 340; *Finlayson*, p. 404; *White*, p. 510.)

Weights, &c.—The picul is about 133⅓ lbs. Eng., and divides into 100 catties, each equal to 1⅓ lb. Eng. A bag of rice weighs 50 catties.

Money.—The current coin is the sepeck, cast at Ke-cho, of a compound brittle metal, called *tu-tenague*, the base of which is zinc. It is about the size of a shilling, and pierced with a square hole; by which they are strung in numbers together, and as they are the only coin used, they form a very bulky and inconvenient medium. Accounts are thus reckoned: 60 sepecs = 1 mas (5 cents), 10 mas = 1 quan (50 cents), the two latter units are imaginary. A Spanish dollar is valued at 1½ quan; an ingot of silver, at from 27 to 28 quans; there are also gold ingots of the same and of double value, but the currency is subject to very capricious and roguish changes. (See *White*, *Voyage*, p. 257–259; *Crawfurd*; *Chapman's Voyage in Asiatic Journal*, iii., (1817), 543.)

Public Revenues are derived from—1, a capitation tax of 1 and 1-10th quan, paid by every male above 19 years of age; 2, a land-tax; 3, the crown lands, which are farmed by different tillages; 4, various contributions, imposts on foreign trade, &c. These imposts are small, and there is none on exported sugar: those in the service of the government are exempted from them. The king has monopolies of gold-dust, ivory, and rhinoceros' horns. (See *Crawfurd*, p. 490; *White*, p. 250–257.)

Government is an hereditary military despotism, in which, however, primogeniture is more attended to than legitimacy. The sovereign has the title of emperor. The central administration under him is conducted by six mandarins, ministers who have charge of the archives, religion, justice, war, finance, and woods and forests. Besides these, the viceroys of Tonquin and Cambodja, and the *Mandarin of Elephants*, who is prime minister, and minister of foreign affairs, have seats in the supreme council. Each province is divided into three departments, called *Ho-yen*; each dep. into three or four districts, called *Tsu*. The provincial governments are under a viceroy of the 1st class of mandarins (or military class), who has two civil mandarins under him; each *ku-yen* is governed by two, and each *tsu* by one civil mandarin: the villages are governed by officers elected by the peasantry, who are answerable for the taxes of their constituents.

Ranks, &c.—All rank is official, and, although in part hereditary, descends a step in each succeeding generation. Each functionary has power to inflict punishment on all inferior to him in rank, and unlimited obedience to this power is displayed among all classes. (See *Crawfurd*, p. 490; *Finlayson*, p. 361; *White*, p. 264–279; *Asiatic Journal*, xix., p. 126.)

Army.—The royal guard consists of 30,000 men and 800 elephants, besides the provincial troops, the number of which varies. All males are liable to serve, and one out of three is generally a soldier. There is continually a levy of those between seventeen and twenty; and those who are obliged to serve, cannot leave the army till age or infirmity compel them. They are in active service for three successive years, and then have leave of absence for the three next, which they spend with their families, employing themselves in the tillage of a small allotment of land granted by government to each. The standing army was formerly 150,000 men; but when Crawfurd visited the country, it was only between 40,000 and 50,000 men. Finlayson says, "they are robust, smart-looking troops, clothed in British scarlet woollens, sometimes turned up with blue or yellow, and wear a conical helmet of basket-work, lacquered and gilt: their other arms are swords, muskets with bayonets, shields, and long spears, decorated with a tuft of red horse hair. Their cartouche boxes, and other accoutrements, bear a similarity to those of Europe, the defensive arts of which, discipline, &c., were introduced by the French during the last century, who once supplied them with 10,000 stand of arms. Much progress was made in military affairs by the Cochin Chinese, and the late king cast a number of cannon. Hué, Sai-gon, and some other cities, are strongly fortified. (*Crawfurd*, p. 491, 492, &c.; *Finlayson*, p. 343, 344; *White*, p. 269.)

Navy—consists of about 200 gun-boats, carrying from sixteen to twenty-two guns, 100 large galleys of from fifty to seventy oars, with several small swivel pieces, and a twelve or twenty-four pounder at the prow, and 500 smaller galleys somewhat similarly armed. The seamen are classed in regiments the same as land troops, six of which are on duty at the capital, and one at each of the other principal forts. (*Crawfurd*, p. 492.)

Religion—of the mass of the people is a species of Buddhism; the upper orders follow the religion of Confucius. Christianity was introduced in 1624 by the Portuguese Jesuits; and there are about 425,000 Christians in the empire (*Crawfurd*), viz.: 300,000 in Tonquin, 100,000 in Cochin China, and about 25,000 in Cambodja; but they are the most abject of the population, and possess no political weight whatever. The religion of the Anamese does not affect their morals or mode of life. Its ceremonies seem to consist in offering first fruits, scented woods, &c., to idols, in burning great quantities of gilt paper at certain times, sticking inscriptions on posts, trees, and houses, and carrying about phylacteries and other sacred objects. The Cochin Chinese are very superstitious, and endeavour to appease the evil spirit more than they venerate the beneficent one. They have pagodas, and a *pantheon*; but their idols and temples are most commonly an image of the Chinese god Fo, inclosed in a small house of wicker-work, hung up in a tree, or elevated on four long posts, and approached by a ladder. Their priests are few, and but little respected by a people who treat many of their gods with contempt. In Chiampa (*Triampa*), the S. part of Cochin China, Indian and not Chinese gods are the objects of worship. (*Barrow*, p. 328–331; *Crawfurd*, p. 467–469, 499; *Finlayson*, p. 369; *White*, p. 50, 212, 275–277.)

Morals.—Mr. White observes, that theft is universal, and murders not uncommon. All travellers agree in the want of chastity among unmarried females; their open prostitution neither degrades them in public opinion, nor prevents their becoming married, after which, however, a strict watch is kept over them. (*White*, p. 281, 282; *Finlayson*, p. 300.)

Jurisprudence.—The police of the villages and the laws are administered by the village chiefs already spoken of; in the towns, one of the principal inhabitants of each street is chosen by the rest as *head of the street*, and is answerable for the good behaviour of all the rest over whom he is an arbitrator. In capital cases, judgment rests with the governors of the *ku-yen*, or there may be appeal from them to those of the province, and ultimately to the royal council; where all the evidence is scrupulously re-adduced. The judges write and seal their individual opinions separately, and the emperor himself determines on the case. No dis-

tinction is made between natives and foreigners; the latter being under the protection of the minister of strangers. The several chiefs give audience, and receive petitions every day; but presents to each are necessary to obtain a hearing. (See *Crawfurd*, p. 498; *White*, p. 289.)

Punishments.—The bamboo is constantly at work, and the *cangque*, or yoke, for other minor crimes, which is composed of two pieces of wood 10 feet long, fastened across by two others, and worn somewhat tightly round the neck. All capital crimes, as murder, robbery, sometimes corruption (excepting adultery), are punished by decapitation: the criminals are brought into the bazar, or public place, and placed in rows, each opposite a placard, declaring the nature of his crime; then, with one blow of a two-handed sabre, their heads are successively struck off. Parties convicted of adultery are tied together and thrown into the sea. (See *White*, p. 44, 281; *Crawfurd*, p. 498.)

Customs, &c.—Polygamy is allowed; the first wife is the chief, the others being mostly of inferior rank; the children of all are, however, equally legitimate. The richer classes marry at 15, the poorer at 20 or 30 years of age, or when they can afford to buy a woman from her friends; but women cannot be married against their own consent. Marriage is but a verbal contract, ratified by exchanging presents before witnesses, and dissolved as readily by merely breaking a pair of chop-sticks, or porcupine quills, before a third party. The remains of the dead are often laid out with much pomp under a pavilion covered with silks, and surrounded with tables of the choicest fruits, areca, &c., and a band of music, for 15 days. White garments are worn, and much gilt paper is burned at these times. No native nor foreigner, if married there, is allowed to quit the country. (*Crawfurd*, p. 469–520; *White*, p. 282–300; *Asiatic Journal*, iv., p. 15.)

Amusements, Public Taste, &c.—The Anamese are very fond of dramatic representations, which are performed in pavilions for several days together with little intermission, and to which no entrance-money is required, the actors depending on voluntary contributions. The plays consist of historical operatic pieces, or of a light and comic dialogue, interspersed with cheerful airs, each concluding with a common chorus. Their dancing and music is in exact time, the latter not destitute of melody, nor unlike some Scotch airs. The instruments in use are gongs, drums, violins, flutes, guitars, and trumpets sufficiently harsh and grating; but the applause is always in proportion to the noise made. They have some notion of sculpture, the best specimens of which are seen on tombs. They are fond of shuttlecock and football, cock and quail fighting, the tricks of jugglers, &c.; and the upper ranks of elephant, tiger, or buffalo hunting, and fire-works, cards, dice, &c., without, however, being addicted to gambling. (See *Barrow*, p. 295–300; *White*, p. 301, 302, 320.)

Dress—Is the same as that of the Chinese before the Tartar conquest, consisting of loose trousers, tied round the waist with a sash; several loose frocks of different lengths, the upper one the shortest, and having long loose sleeves, a small close collar, and five buttons and loops; a broad basket-work hat, or a turban of crape; slippers by which the feet are not cramped like those of the Chinese; hair long, and turned up in a knot on the top of the head. The dress of both sexes is alike, only in that of the women the frocks are longer, and they wear bracelets and armlets of pearl or ivory, earrings, and other ornaments. Dress is an object of great attention with all classes. (*Crawfurd*, p. 415; *Barrow*, p. 301–309; *White*, p. 268; *Finlayson*, p. 378.

Language.—The language of the Cochin Chinese, like their dress, &c., has been derived from that of China: it is monosyllabic, destitute of inflexions, its written character like the former, although it possesses several elements, as the B, D, and R, which the Chinese are unable to pronounce. The Cambodians speak a different language, and the people of Tsiampa another distinct from both. Literature is confined to Chinese books, chiefly on medicine, and the works of Confucius. (*Crawfurd*, p. 464, 467, 484; *Barrow*, p. 326.)

History.—In 234 B.C., this country was conquered by the Chinese, who held it till A.D. 263. In 1406 it was re-conquered by the Chinese, who abandoned it again in 1428. In 1471, Cochin China was completely subjected by Tonquin; but in 1553, threw off the yoke, and, until 1748, was governed by both a nominal and real sovereign, the latter of whom was a military commander and regent. The nominal sovereigns then obtained the mastery, and ruled in the midst of anarchy till 1774, when, in the reign of Caung-shung, the revolution of Nhac (*Yinyac*) and his brothers overturned their power. Bishop Adran, a French missionary, the tutor of the late king's son, obtained for him the alliance of Louis XVI., and, with the aid of a few of his countrymen, was the main cause of the restoration of his pupil Gia-long to the throne of his ancestors, on which he was firmly seated in 1802. Adran reformed the jurisprudence, commenced public works, surveyed the coasts, promoted trade, established naval arsenals, and new disciplined the king's army: but dying soon after, many of his wholesome reforms sank into disuse. Gia-long died in 1819, and was succeeded by an illegitimate son, who was invested, in 1831, by the court of Peking with the empire of Tonquin and Cochin China. (*Crawfurd*, p. 505–510; *White*, p. 84–94.)

ANAMICKEE, county, Mich., situated in the N.E. part of the peninsula, and contains 576 sq. m. Bounded E. by lake Huron, from which Thunder bay sets up. Watered by Thunder bay river and its branches. It has been recently formed and is unorganized.

ANAPA, a sea-port town and fortress of European Russia, Circassia, on the N.E. coast of the Black sea, 47 m. S.E. Yenikale, lat. 44° 54′ 52″, long. 37° 16′ 21″ E. Pop. ex. of military, 3000. The fortress, constructed by the Turks in 1784, was taken by the Russians in 1791, and in 1807, and finally in 1828, since which it has been definitively ceded to them. The houses are mostly mere cabins, built of wood and mud. The inhabitants consist of Circassians, Turks, Tartars, Greeks, Jews, Armenians, Russians, &c. The port, or rather road, is nearly open, with bad holding ground, and so shallow as to admit only ships of small burden. Anapa is at present principally important as a military post; but were tranquillity restored in Circassia, it would most likely become the seat of a considerable commerce. The exports are grain, tallow, and butter, hides, peltries, wax, &c. (*Klaproth, Tableau du Caucase*, p. 160; *Spencer's Circassia*, i., 256.)

ANASTASIA, island, Flor., extends from the little bar of Matanzas to St. Augustine, and is 21 m. long and 2 broad. It contains a few hundred acres of good land, on a part of which is a fine orange grove. A light-house occupies the place of the old Spanish tower on its N. end, and is in 29° 50′ N. lat., 4° 29′ W. long. from W. It furnishes an abundance of fine building stone.

ANCENIS, a town of France, dep. Loire Inférieure, on the Loire, 21 m. E.N.E. Nantes. Pop. 3667. It is well built, has a handsome college, an hospital, and barracks. There are coal and iron mines in the neighbourhood; and it has a good deal of trade in wine, vinegar, brandy, timber, &c. Its port serves as an entrepôt and station for the vessels navigating the Loire. The town is commanded by a Gothic castle placed on a steep hill.

ANCERVILLE, a town of France, dep. Meuse, 11 m. S.S W. Bar-le-Duc. Pop. 2211.

ANCHOLME (Isle of), see Lincolnshire.

ANCIAONS, a town of Portugal, prov. Tras-os-Montes, 12 m. W. Torre de Moncorvo. Pop. 1900. It is encircled by walls, and has a castle and mineral springs.

ANCONA, a marit. city of Italy, the third in the Papal states, cap. leg. same name, on the Adriatic, 17½ m. S.E. Sinigaglia, 15 m. N.N.W. Loreto, and 188 m. N.E. Rome, lat. 43° 37′ 42″ N., long. 13° 30′ 35″ E. Pop. 24,000, of whom many are Jews, Greeks, and Mohammedans. It is the seat of a civil tribunal, of a tribunal of original jurisdiction, and of a bishopric; is built amphitheatre-wise, on a sloping ground, declining to the sea, between two hills, on one of which stands its cathedral, on the other its citadel; streets narrow, dirty, and irregular; but many houses spacious and elegant; quay, fine; port formed by a mole 2000 feet in length, 100 do. in breadth, and 65 above the sea, having at its extremity a lighthouse, with a handsome revolving light. The mole being hooked at the extremity, vessels may lie immediately within the harbour in from 7 to 8 fathoms; but it shoals rapidly, and vessels drawing more than 15 or 16 feet water should anchor within a short distance of the entry. There is good anchorage-ground about ¼ m. without the mole, in 10 and 12 fathoms. On the mole stands a noble ancient triumphal arch, in honour of the Emperor Trajan, who improved and embellished the town and port; it is formed of large blocks of white marble; and it has also another arch in honour of Pope Benedict XIV. The cathedral, situated on a bold promontory on the site of an ancient temple of Venus, has a curious porch, supported by two lions of Egyptian granite; a very ancient altar, and many fine marble pillars. There are ten other churches, containing many good paintings; fifteen convents, a college, and two hospitals. The palace of the delegate, the exchange, the town-house, and the fortifications, particularly the citadel, are also worthy of notice.

Its manufactures, chiefly in the hands of the Jews, consist principally of wax, tallow, silk hats, and paper. The harbour is well adapted for building and repairing ships, and is frequented by those of all nations. It was made a free port by Clement XII., and has a more considerable trade than any other town on the W. coast of the Adriatic, Venice excepted. Outside the harbour is a fine lazaretto, on an artificial island, communicating with the town by a bridge. The market-place is spacious, and the town is well furnished with cheap and good provisions. The women are said to be remarkable for their beauty. Thomson (*Two Journeys in Italy, &c.*) observes, "It was an amusing

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scene to pace along the wharfs, to listen to the strain of the tiny mandoline or the deeper tones of the guitar, joined to the patriotic song of some poor Greek, or the more refined Italian ditty; while a medley group were sometimes seen collected in a Greek mystica, or an Italian felucca, dancing, whirling, and stamping to the music of some half dozen voices, or the tinkling of the Spanish guitar."

Ancona is said, by Strabo, to have been founded by a colony of Syracusans in the time of Dionysius. The Romans established themselves in it, B.C. 268. Being justly regarded as a naval station of great importance, Trajan expended large sums upon it, and built the mole. A.D. 592, it was occupied by the Lombards; in 839 it was sacked by the Mussulmans: and it afterwards formed an independent republic till 1532, when Bernardino Barba, under pretext of defending it against the Turks (having built the citadel which entirely commands the town), placed it in the hands of the pope. In 1799 it was taken by the French, and in 1809 formed the chief city of the dep. of the Metauro. In 1814, it was restored to the Papal see. In Feb., 1832, a detachment of French troops landed unexpectedly, and took possession of the citadel, which the French government announced its resolution to retain so long as any Austrian troops remained within the Papal territories; the latter, however, having been withdrawn, the French evacuated the town in the course of 1839. (*Rampoldi Corografia dell' Italia*, vol. i., p. 80; *Forsyth's Italy*, 1816; *Thompson's Two Journeys in Italy, &c.* Lond., 1835, p. 239 to 253.

ANCRAM, p. t., Columbia co., N. Y., 45 m. S.S.E. Albany, 340 W. Drained by Ancram creek, which affords water power. It contains extensive iron works, and a lead mine, at present not extensively wrought. The iron ore is chiefly brought from the margin of Salisbury, Ct., and it is of a superior quality. The town contains three stores, one grist-mill, one saw-mill, one furnace, ten schools, 474 scholars. Pop. 1770.

ANCY-LE-FRANC, a town of France, dep. Yonne, cap. cant. on the canal of Burgundy, 10 m. S.E. Tonnerre. Pop. 1413. It is neat and well built, but is chiefly remarkable for the magnificent castle in its vicinity, built after the designs of Primaticcio, belonging to the descendants of Louvois, minister of Louis XIV. It is surrounded by a beautiful park, and has fine gardens. (*Hugo*, art. *Yonne.*)

ANDAD KHAN, a town of Independent Tartary, Khanat of Khokan, on the Sihoun (*Jaxartes*), 55 m. E. Khokan, lat. 41° 20′ N., long. 71° 27′ E. It is surrounded by gardens, and is a place of considerable size and antiquity.

ANDALUSIA (so called, either from the Vandals who settled here in the fifth century, or from an Arabic word, signifying *Land of the West*, the most S. division of Spain, comprising the four Moorish kingdoms of Seville, Cordova, Jaen, and Granada, between 36° 0′ and 38° 38′ N. lat., and 1° 37′ and 7° 24′ W. long., having N. Estremadura and La Mancha; E. Murcia; W. Portugal; and S. the Atlantic ocean, the straits of Gibraltar, and the Mediterranean: length, E. to W., about 350 m.; greatest breadth nearly 200 m.; area, 27,153 sq. m. Pop. about 2,400,000. It is at present divided into eight provinces, viz., Seville, Cadiz, Cordova, Granada, Jaen, Malaga, Almeria, and Huelva. Its chief cities are Seville, Cadiz, Cordova, Jaen, Almeria, Granada, Malaga, Huelva, and Gibraltar. Two ranges of mountains traverse it from E. to W.: the most S. of these ranges is the loftiest, and has several points covered with perpetual snow; the highest, Mulahacen, being 11,678 feet above the level of the sea. The Sierra Morena belongs to the N. chain, and forms part of the N. boundary of the district. Between these two ranges flows the Guadalquivir, by far the largest of the Andalusian rivers, and swelled by numerous streams from the lateral valleys opening into its basin. There are numerous small lakes. On the coast, the climate is hot and oppressive; but N. of the Sierra Nevada, the temperature is more equable, and cooler, although it never freezes. The primitive rocks of the high S. mountains are chiefly mica-slate, gneiss, and clay-slate, covered in some parts by black transition limestone, containing sulphuret of lead. Serpentine marble, and alabaster, are found in Granada; and there are numerous mines, that either produce, or have produced, gold, silver, copper, antimony, mercury, iron, lead, vitriol, coal, and sulphur; but, with the exception of the lead mines of Adra, near Malaga, they are at present mostly in a neglected state. The vegetation partakes of the European and African characters: mastic, olive, myrtle, palms, bananas, &c., abound in the central parts of the country, but on the S. shores those common to Europe almost wholly disappear, and the sugar-cane and cotton are cultivated. Wheat, barley, fruits of all sorts, and wines, are abundantly produced; the chief wines are those of Xeres (sherry), Pajarete, Malaga, Montilla, &c.: silk is also an article of considerable culture. There are many rich pasture-lands; and the cattle and horses, especially the latter, are renowned as among the best in Spain. The wolf and boar are the only formidable wild animals; there is plenty of game, an abundance of fish, and none of the most venomous reptiles: the cochineal insect is successfully cultivated near Cadiz. Most part of the country is parcelled out into vast estates, belonging to grandees, the church, and corporations. Agriculture is in a very backward state. The greater part of the country is appropriated to pasture, the traveller often journeying many miles without seeing a single house, or any symptoms of cultivation; and, notwithstanding the fertility of the soil, there is annually a considerable importation of corn from the opposite coast of Africa, Sicily, and the Black sea. The occupiers of the land mostly live together in towns and villages; their rents are usually paid on the *métayer* principle, and they are at once ignorant and poor; the inhabitants of the mountainous and less fertile districts are, as might be expected, the most industrious. The chief manufactures are those of woollens, silk, and leather; and but for oppressive customs laws, there would be a considerable trade both with other parts of Spain and foreign countries. Cadiz is the chief port.

The Andalusians are a mixed race, descended from Africans, Carthaginians, Romans, Goths, Vandals, and Moors. They retain much resemblance, both in person and manners, to the latter; although light hair, eyes and complexions, are by no means unfrequent. When they have any motive to exertion, they are not deficient in industry, and are intelligent and imaginative. Andalusia has produced many good poets and distinguished men in all ages: Trajan, the Senecas, and Silius Italicus were natives of this prov with Murillo, the painter, and some of the best lyric authors of modern Spain. (*Minano; Townsend's Spain*, ii., 238; *Malte-Brun, &c.;* and *see* SPAIN.)

ANDAMAN ISLANDS, a lengthened narrow group of islands, none of which are of any very considerable magnitude, in the E. part of the bay of Bengal, stretching N. and S. between 10° 30′ and 13° 40′ N. lat., under about 92° 30′ E. long. They are within the full sweep of the S.W. monsoon, and are washed for eight months a year by incessant rains. They produce many large trees, that might furnish timber and planks for the construction of ships, and for the finest cabinet work. The quadrupeds are but few, consisting principally of a diminutive breed of swine and rats. Among the birds is the swallow, that produces the edible nests so highly esteemed in China. Fish are generally plentiful, but occasionally scarce. The inhabitants, who are not supposed to exceed 2500 or 3000 in number, seem to be a peculiar race in the lowest state of barbarism. They seldom exceed 5 feet in height, have protuberant bellies, limbs disproportionally slender, skin a deep sooty black, hair woolly, nose flat, lips thick, eyes small and red, their countenances exhibiting the extreme of wretchedness—a mixture of famine and ferocity. They go quite naked, and are insensible to shame from exposure. They have made no effort to cultivate the ground, and are found only on the sea-coast, depending principally for subsistence on fishing. Their implements are of the rudest texture; but they use them with great dexterity, particularly in spearing and capturing fish. They have no utensil that will resist fire, and dress their food by throwing it on the live embers, and devouring it half broiled. Their habitations display little more ingenuity than the dens of wild beasts. Being much incommoded by insects, their first occupation in the morning is to plaster their bodies all over with mud, which, hardening in the sun, forms an impenetrable armour. They paint their woolly heads with red ochre and water, and, when completely dressed, have a most hideous appearance. They have an intense hatred of strangers, with whom they cannot be persuaded to hold any intercourse. They are supposed to worship the sun and moon: and during storms and tempests, endeavour to avert the wrath of the dæmon by whom they suppose them to be produced. Their language is peculiar, and is not known to have the slightest affinity to any spoken in India, or in any of the Indian islands. They have been said to be *anthropophagists*, but this is doubtful. Some have supposed them to be a race of degenerate negroes; but this is a matter as to which it is impossible to arrive at any definite conclusion.

A British settlement was established at Port Cornwallis, on the largest of the islands, near the N.E. extremity of the group, in 1793. The harbour is excellent; and the settlement was designed for the reception of convicts from Bengal, and for the security of shipping during the monsoons; but the situation turned out so very unhealthy, as to occasion its abandonment in 1796. Since then they have been but seldom visited, except in 1824 and 1825, when some of the ships, on their way to Rangoon, touched at the islands. On one of these occasions, the natives attacked a party watering, with the utmost fury; and were not repulsed without great loss on their side, and after they had killed one soldier, and wounded three others. (The above particulars have been selected from the excellent account of these islands, given by *Symes, Embassy to Ava*, p. 127–138, 4to ed.; see also *Hamilton's Gazetteer.*)

ANDELYS (LES), two towns of France, within a very short distance of each other, dep. Eure, cap. arrond., one on the Seine, and the other a little inland, 10 or 11 miles E. Louviers. Pop. 5065. The greater Andely is ill built, with narrow crooked streets; but it has a fine collegiate church. The lesser Andely has to boast of the magnificent ruins of the Château Gaillard. There are manufactures of fine cloth, kerseymeres, raseens, cotton yarns, and paper, with tanneries, &c. Nicholas Poussin, the famous painter, was born in the hamlet of Villers, near the greater Andely, in 1594; and a monument has been erected to his memory in that town.

ANDENNES, a town of Belgium, prov. Namur on the Meuse, 13 m. E.N.E. Namur. Pop. 4903. There are manufactures of earthenware and porcelain, and of pipes formed of the clay found in the neighbourhood.

ANDERLECHT, a neat well-built town of Belgium, near Brussels, of which it is, in fact, a suburb. (See BRUSSELS.)

ANDERNACH (the *Antunacum* of the Romans), a town of the Prussian prov. of Lower Rhine, on the left bank of the Rhine, 16 m. N.W. Coblentz. Pop. 3000. It is situated in a volcanic country, its massive towers, turrets, and ruined walls being admirably suited to the sombre scenery by which it is surrounded. Streets narrow and ill paved, and the houses gloomy, old, and out of repair. There is a fine old archway, supposed to be Roman, forming the gate of the town on the side next Coblentz; and below it, in a line towards the river, are the ruins of an extensive palace or castle, supposed to have been built by the Goths soon after the expulsion of the Romans. It exports two singular productions, viz., mill-stones made of porous lava, and large quantities of pounded *tufa*, denominated *trass*, a cement which, when mixed with water, becomes as hard as stone. The former are in great demand in most parts of Europe; the latter is principally used by the Dutch in the construction of their dikes, but is also exported to other countries. Immense rafts of timber from the German forests, destined for the Low countries, are formed near Andernach. (*Barrow's Tour through Holland, &c.*; and *Schreiber's Rhine.*)

ANDERSON, dist. S.C. Situated in the N.W. part of the state, and contains 800 sq. m. It lies between Savannah and Saluda rivers, by branches of which it is drained. It contained in 1840, 18,499 neat cattle, 10,387 sheep, 26,381 swine, and produced 106,105 bushels of wheat, 698,518 of Indian corn, 2,349,054 pounds of cotton, and had twenty stores, one cotton factory with 1308 spindles, thirteen flouring-mills, thirty-eight grist-mills, twenty-nine saw-mills, twenty-six distilleries, eight tanneries, five academies, 233 students, twenty-nine schools, 687 scholars. Pop.: whites 12,747, slaves 5683, free coloured 63; total, 18,493. Cap. Anderson.

ANDERSON, p. v., capital of Anderson, dist. S.C., 127 m. N.W. Columbia, 546 W. It contains three churches, one Presbyterian, one Baptist, and one Methodist, two academies, six stores, forty dwellings, and about 500 inhab.

ANDERSON, county, Ky. Situated in the central part of the state, and contains 170 sq. m. Drained by Salt river and its branches. It contained in 1840, 4418 neat cattle, 8518 sheep, 14,237 swine, and produced 24,526 bushels of wheat, 7685 of rye, 221,574 of Indian corn, 34,476 pounds of tobacco. It had five stores, nine grist-mills, seven saw-mills, eight distilleries, seven schools, 175 scholars. Pop.: whites 4372, slaves 1059, free coloured 21; total, 5452. Capital, Lawrenceburg.

ANDERSON, county, Tenn. Situated in the central part of the state, and contains 750 sq. m. Drained by Clinch river. It contained in 1840, 5428 neat cattle, 5463 sheep, 18,655 swine, and produced 18,003 bushels of wheat, 335,685 of Indian corn, 5402 pounds of tobacco, 8386 of cotton, 5034 of sugar. It had seven stores, one flouring-mill, fifteen grist-mills, six saw-mills, eighteen distilleries, one academy, 14 students. Pop.: whites 5218, slaves 425, free coloured 15; total, 5658. Cap. Clinton.

ANDERSON, t., Hamilton county, O., 10 m. E. Cincinnati. Bounded S. by Ohio river. Pop. 2311.

ANDERSON, t., Rush co., Ia. It has two schools, 60 scholars. Pop. 1423.

ANDERSON, t., Warwick co., Ia. It has three schools, 100 scholars. Pop. 348.

ANDERSONTOWN, p. v., cap. of Madison co., Ia., 39 m. N.E. Indianapolis, 548 W. Situated on the S. side of the W. branch of White river. It contains a court-house, jail, several stores, and about 125 inhab.

ANDES (THE), an immense mountain range, runs along the whole W. coast of S. America, covering, with its chains, declivities and valleys, about a sixth part of that continent. The *Cordillera*, a name sometimes given to this chain, is properly applicable only to the innermost and highest ridge of the mass.

Cape Horn, on cape Horn Island, in about 56° S. lat., may be considered as the S. extremity of the Andes. The most northern chain of the mountains is the Paramo* de las Rosas, which extends to the E. of lake Maracaybo, and terminates at about 9° N. lat. The whole system is thus found to extend lengthwise over 65 degrees of lat. Its width varies very much; in some parts it occupies only between 30 or 40 miles across; in others it covers with its branches and valleys a country extending 500 miles and upwards from E. to W.

Beginning our survey of this mountain system at its southern extremity, we find that it commences at the cape of Good Success, on the W. shores of the straits of Le Maire, in about 70° W. long. Even the high rocky mass which constitutes the island of Staaten Land, and extends more than a degree farther E., may be considered as a continuation of this range, from which it is separated only by the straits of Le Maire, between 30 and 40 m. across. From the cape of Good Success the range runs W. along the S. shores of king Charles's Southland, the most extensive of the islands constituting the S. Archipelago of America, commonly called Terra del Fuego. It covers about a third part of the surface of that island, as well as the whole of the islands lying S. of it; as Navarin, Hoste, Wollaston, Hermit, and cape Horn. Towards the straits of Le Maire, the range consists of rocky hills, of no great elevation; but farther W. they rise to an altitude of 2000 or 3000 ft. Cape Horn itself is a conspicuous rock, with a steep ascent, upwards of 3000 ft. high. Mount Sarmiento, near Magdalen channel, is the highest summit, and rises above 6000 ft. about the sea.

In the W. part of king Charles's Southland, the range extends over the whole district S. and W. of Admiralty bay. Farther W. it changes its direction, running in a N.W. direction as far as the frith of Sansalid (Ancon Sinsalida of the Spaniards), 59° S. lat., and 73° W. long. This part of the range, whose mean width may be about 100 or 120 m., is longitudinally divided by that portion of the strait of Magalhaens which extends from cape Froward to cape Victoria. Two transverse channels divide the south portion into two islands. The E. or Magdalen channel, separates Clarence island from King Charles's Southland; and the W. extends between Clarence island and South Desolation; the latter bears the name of Barbara Channel. That part of the range which lies to the N.E. of the strait is intersected by two deep transverse inlets. The south-eastern, called Jerome Channel, terminates on the E. in two large lagoons, called Otway and Skrying waters, which are both situated on the eastern side of the Andes in the plains of Patagonia. By this extensive inlet, Brunswick peninsula is divided from King William's Land. The N.W. transverse inlet bears the name of Smyth's Channel, and divides first King William's Land from Queen Adelaide's archipelago, and afterwards joins the frith of Sinsalid, which likewise penetrates through the whole chain of the Andes, and terminates with its numerous branches in the plains of Patagonia. S. of this frith the mountains rise somewhat higher than on King Charles's Southland, but their mean elevation does not exceed 4000 ft. above the sea.

The mountain range south of the frith of Sinsalid may be called the *Magalhaens Andes*, extending principally on both sides the strait bearing that name. It consists of islands and peninsulas intersected by deep but narrow arms of the sea. The summits of the mountains are covered with eternal snow, the snow line occurring in these countries at about 3500 feet above the sea. The lower parts of the mountains, and the steep and rocky shores of the islands, are partly covered with evergreen woods; except towards the ocean, where they present the aspect of bare black rocks.

At the frith of Sinsalid begins the uninterrupted chain of the Andes. At this place it again changes its direction, running due N. with slight bends as far north as the Bight of Arica (18° S. lat.). It comprehends the Patagonian Andes between 52° and 42°, the southern Chilean Andes between 42° and 35°, and the northern Chilean and Atacamean Andes between 35° and 20° S. lat.

The *Patagonian* Andes extend from the frith of Sinsalid to the N. corner of the gulf of Ancud, opposite the island of Chiloe. They are only known from the side of the ocean, whence they rise to a considerable height with an extremely steep ascent. It would seem as if the range in this part had once occupied a much greater breadth, and that by some extraordinary convulsion the whole of the

* *Paramo*, rendered *desert* in the dictionaries, signifies in S. America neither a desert nor a heath, but, like the Peruvian word *puna*; denotes a mountainous place covered with stunted trees, exposed to the winds, and in which a damp cold perpetually prevails. Under the torrid zone the *paramos* are generally from 10,000 to 12,000 feet high. They are, in fact, the lower summits of the Cordilleras. Snow often falls in them, but it remains only a few hours. In this respect they are distinguished from the *nevados*, which enter the limits of perpetual snow. The paramos are almost constantly enveloped in a cold thick fog; so that, when a thick small rain falls, accompanied with a depression of the temperature, they say at Bogota or at Mexico, *caen un paramito*. Hence has been formed the provincial word *emparamarse*, to be as cold as if one were on a paramo. (*Humboldt, Pers. Nat.*, ii., p. 238; *Modern Traveller*, xxvii., p. 14.)

western declivity, with the summits of the range, had been broken down and buried in the ocean, so that only the eastern declivity has remained standing. The numerous and rocky islands which skirt this shore in all its extent, except at the protruded cape of Tres Montes, appear to support such a supposition. The eastern declivity of the range has not been examined; but what we know of it seems to be sufficient to warrant the supposition that in this part the Andes occupy a width of only from 30 to 40 miles. The mean height of the Patagonian Andes may be estimated at about 5000 or 6000 feet. None of its summits which have been measured exceed 9000 feet. But snow mountains, and even glaciers, are stated to be frequent. The lower part of the declivity is covered with trees and shrubs, the upper part bare, as also those portions of the shore which are exposed to the immediate effects of the gales blowing from the Pacific.

The *Southern Chilean* Andes extend from the most N. corner of the gulf of Ancud (42° S. lat.) to the high peak of Tupungato (near 33° S. lat.). Towards the S. extremity, the Andes keep, for some extent, a distance of about 150 m. from the shores of the Pacific, the greatest which they attain in their whole course; but towards the N. they gradually approach it to within about 100 miles. Between the Andes and the shore are extensive plains, from 1200 to 2000 feet above the sea; and from these plains the mountains rise, with an extremely steep acclivity, to the mean elevation of 13,000 or 14,000 feet above the sea. Some summits attain 15,000, and even 15,500 feet. Though our knowledge respecting this part of the Andes be very scanty, it would seem that they form one extensive mass from 60 to 80 miles across, which, however, in its upper part is furrowed by a longitudinal valley, divided by short transverse ridges into several shorter valleys. This great mass of rocks is mostly clothed with forest trees and a rich vegetation; but in the interior it presents only bare rocks, nearly without plants of any description.

Three passes are known to traverse the Chilean Andes. That farthest S. skirts the high volcano of *Antuco*, between 37° and 36° S. lat., leading from the small town of Tucapel to the great plains E. of the Andes. It is also used by the aborigines inhabiting these plains, who bring to Chile salt and some commodities. The second road traverses the *Pass del Planchon*, which crosses the mountain ridges near 35° S. lat., beginning on the west at the village of Curico, and leading to the territory of the Pehuenches, who occupy the E. declivity of the Andes, and thence to Mendoza. It is said to be the lowest of the mountain passes of the Andes, vegetation ascending up to the highest part of the road; it is farther stated to be more gentle in its ascents and descents. Yet it is little used, except by persons trading with the Indians in the Pampas. The third pass is that of *Portillo*, which at first runs along the river Maypo, S. of Santiago, the capital of Chile, and afterward crosses the two ridges of the Andes, which enclose the valley of Tunuyan. On the west ridge the road rises to 14,362, on the E. to 13,210 feet above the level of the sea. From the latter it descends to the plains, and leads to Mendoza. It is the nearest way between the last-mentioned town and Santiago, the capital of Chile, and is therefore sometimes, but not frequently, used.

The high peak of Tupungato may be considered as forming the boundary between the S. and N. *Chilean* Andes. N. of this summit the Andes, which farther S. form only one enormous mass of rocks, divided into two masses, which enclose long and wide valleys considerably lower than the surrounding ridges. The first valley of this description is that of Uspallata, which extends about 180 or 200 miles S. and N. It is traversed by two rivers: the Rio de Mendoza, which flows S.; and the Rio de S. Juan, which runs N. The watershed between them lies N. of 32° S. lat. This valley is about 15 m. in width, and presents an undulating surface. It is about 6000 feet above the level of the sea. The range E. of it, called the Paramillo de Uspallata, seems not to exceed 10,000 ft.; but the W. or principal range attains 14,000 ft. and upwards. The former is about 25, and the latter more than 70 m. across. The E. range has two narrow breaks, by which the two rivers of the valley find their way to the plains extending E.

Over these two ranges, and through the valley of Uspallata, lies the most frequented mountain road crossing the Andes. On the W. it begins at the town of Santa Rosa, in the valley of the Quillota river (2614 feet above the sea); it next follows the bed of that river for a great distance, and then crosses the high range nearly at equal distances from the mountain summits of Tupungato and Aconcagua (between 33° and 32° S. lat.). The Cumbre, or highest point, is 12,454 feet above the Pacific. Hence the road descends along the Rio de Mendoza into the valley of Uspallata, passes the Paramillo range, and enters the plains near Villa Vicioss, whence it runs along the last-mentioned mountain chain to Mendoza (2608 feet above the sea); from Mendoza it leads over the Pampas to Buenos Ayres. Though much frequented, it cannot be passed by carriages, and only mules are used for the transport of commodities, and by passengers. In winter (from June to September) the passage is very dangerous, on account of the heavy falls of snow, which cause frequent losses of life and property. The pass is by some named that of the Cumbre, and by others of Uspallata.

N. of the valley of Uspallata the Andes continue to form two ranges, including extensive longitudinal valleys. The first in order is that of Agualasta, of which we know only that its soil is sterile, but its mountains rich in metallic ores. Then follows the valley of Andalgala, which is entirely unknown. The latter extends to 23° S. lat. A great number of mountain passes are stated to exist over the western range enclosing these valleys, which would indicate that the mean elevation of the Andes is here much less than in other parts. But none of these passes seem to be much used, nor has any of them been visited by European travellers. It is, however, known, that towards the Pacific this range does not descend with a short and rapid declivity, as in the S. Chilean Andes, but by table-lands in the form of terraces, which near the principal chain are 5000 feet and more above the sea, but lower by degrees as they approach the ocean, where they still form a shore from 300 to 500 feet high. Being furrowed by deep water-courses, these table-lands, when seen from the banks of the rivers, appear frequently like mountains of considerable height.

From their farthest S. point as far as the N. point of the valley of Uspallata, the Andes do not send out lateral branches. But from the E. range, including the valleys of Agualasta and Andalgala, several ranges branch off into the E. plains, and extend in a S. and E. direction to a distance of from 200 to 250 miles. By these lateral chains the countries extending E. of the Andes, between 33° and 23° S. lat., are rendered hilly, and in some districts even mountainous. In the S. districts the height of the ranges is not considerable, but farther to the north it increases greatly; and the chain, which branches off at the north end of the valley of Andalgala, and forms at present the boundary between the republics of Buenos Ayres and Bolivia, may attain a height of 10,000 feet above the sea. It terminates at no great distance from the point where the Rio Grande enters the Rio Vermejo.

Between 23° and 20° S. lat., the principal range of the Andes seems to constitute a single chain, rising to a mean height of above 15,000 feet. In it stands the Nevado de Chorolque, which is stated to rise 16,548 feet above the sea; but it is probable that it is at least 1000 feet higher. From this chain several lower and narrow ridges run E. 120 or 150 m. The S. districts of Bolivia are in consequence rendered a succession of valleys and mountains. However, these ridges do not attain a great elevation over the plains on which they rise. A road traverses the principal chain; it begins on the coast of the Pacific at Cobija, or Puerto de la Mar, the principal harbour of Bolivia, passes over the high Andes of Lipez near the volcano of Atacama, and descends to Tupiza; hence it runs to Potosi and Chuquisaca. This road is not much used, on account of the sterility of the surrounding country, and the difficulty of procuring provender for the mules and other animals of burden. In some parts water too is extremely scarce.

Near 20° S. lat. is the mountain knot of Porco. Here begin the *Bolivian Andes*, which extend to 14° S. lat., and may be considered as constituting the central portion of the whole mountain system. In no other part do the mountains attain an equal height, nor do they extend to such a considerable breadth. They present here one immense mass of rocks, extending in length over six degrees of latitude, and measuring in breadth at the S. extremity more than 250, and at the N. about 200 miles. The upper part of this enormous mass is between 13,000 and 14,000 ft. above the level of the sea. On its edges are placed numerous mountain summits, which rise many thousand feet above the upper surface of the mass, so that the whole presents to the eye a plain surrounded everywhere by high ridges. The mountains enclosing the plain at its S. extremity rise to a great elevation, but not so high as those towards the N. The famous Cerro de Potosi is only 16,037 feet high, and that of Porco 15,913 feet. In summer they have no snow upon them. The W. range contains summits of much greater elevation. The volcano of Gualatieri (near 19° S. lat.) rises 22,000 feet, and the Nevado de Chuquebamba (near 15° S. lat.) to 21,000 feet above the sea. The E. range is still higher. Between the Cerro de Potosi and 16° 50′ S. lat. none of its summits attain 17,000 feet of elevation, which here constitutes the snow line. But farther N. a great number of snow-topped peaks raise their heads above the clouds. At 16° 40′ stands the Nevado de Illimani, which attains 24,000 feet; and farther N. the Nevado de Zorata, which is about a thousand feet higher. The elevation of these two summits has been determined by Mr. Pentland; but he

states that there are others which seem not much lower, especially the Nevado de Yani, N. of mount Zorata. These two high ranges run nearly parallel to one another; south of 17° S. lat. nearly due S. and N., but N. of that parallel S.S.E. and N.N.W. At their N. extremity (14° S. lat.) they are united by a transverse range, which extends N.N.E. and S.S.W., and is known by the name of Andes of Vilcanota. This latter range has several summits covered with perpetual snow, but their elevation has not been ascertained.

The country enclosed by these ranges forms an immense Alpine valley, whose lowest parts are nearly 13,000 feet above the sea. It does not present a level plain; for those portions of it which are contiguous to the ranges are covered with mountains, or, rather, hills, rising several hundred and in many places even a thousand feet above their bases. But the internal districts preserve a sufficiently level surface to be called a plain. This is known under the name of the valley of Titicaca, or of the Desaguadero. The first denomination is derived from the lake of that name which occupies the N. portion of the valley, covering about 4000 sq. m. It is famous in the history of Peru for the miraculous appearance of Manco Capac, the founder of the Inca dynasty. From its S. extremity issues a river, called the Desaguadero, which traverses the whole valley from 15° to 19° S. lat., where it is lost in a small lake. The length of the valley is upward of 300 m., but its width varies. In the parallel of Puno (15° 50′) it exceeds 60 m., and in lat. 16° 50′ it is still wider; but from this point to its S. termination it gradually narrows, so as in the parallel of Oruro (17° 58′) not to exceed 35 m. According to the statement of Mr. Pentland, the area of this valley, including the lake, exceeds 18,000 sq. m., of which the lake covers between a fourth and a fifth part. The surface of the lake is 12,795 ft. above the level of the sea.

The ranges enclosing the alpine valley of Titicaca are traversed by several mountain roads, of which the following are the most frequented: That through the pass of *Potosi*, traversing the Puerto between the Cerro of Potosi and that of Huayna Potosi. It leads from Potosi to Oruro, and rises in its highest point to 14,320 feet. The road over the pass of *Condor Pacheta*, between Oruro and Cochabamba, rises in its highest part to 13,950 ft. above the sea. The road through the pass of *Pacuani*, leading from La Paz to the countries east of the ridges, rises to 15,226 ft. The most used road is over the western range, and that through the pass of *Las Gualillas*, leading from Arica on the coast, and Tacna, to La Paz, in the valley of Titicaca; it traverses the range at 17° 50′ S. lat., S. of the Nevado de Chipicani, where it rises to 14,830 ft. Farther N. (16° 2′ S. lat.) is another road, which, connecting Arequipa with Puna, attains in the pass of *Altos de Toledo* an elevation of 15,528 feet above the sea.

Several lateral ridges run off from this great mass of rocks to the E.; but none of them seems to be distinguished by its height or extent, except the Sierra de Santa Cruz, which detaches itself from the principal range about 17° 10′ S. lat., and terminates near the banks of the Rio Guapai or Rio Grande, within a few leagues of the town of S. Cruz de la Sierra. It extends about 300 miles, and is of considerable elevation in its western part, where it forms the Nevado de Tinaica, near Cochabamba; farther east it becomes gradually lower.

The *Peruvian Andes* occupy the next place, extending from 14° to 6° S. lat. Between these latitudes they measure from 400 to 450 m. in width, and their area does not probably fall short of 200,000 sq. m. On their borders extend two ranges; of which the E., separating the mountain region from the great plains extending south of the Amazon, branches off from the E. extremity of the Andes of Vilcanota in a N. direction. It divides the affluents of the Ucayale from those of the Yavari, and terminates near 7° S. lat., about 160 m. from the Amazon. We know very little of this range, but it does not seem to rise any where to a great height; probably none of its summits exceed 10,000 ft. above the sea.

The W. range of the Peruvian Andes, which, with its W. declivities, approaches the Pacific ocean to a distance of 50 miles or less, must be considered as the principal chain, on account of its height and breadth, and because it forms with the N. parts of the Andes an uninterrupted chain. It may be said to commence near the Nevado de Chuquebamba, where the Andes of Vilcanota join the W. range of the valley of Titicaca. It is remarkable that the Peruvian Andes seem to be rather a continuation of the Andes of Vilcanota than of the great W. chain; for near 16° S. lat. and between 71° and 75° W. long., the Peruvian Andes extend in a direction E. and W., whilst three degrees farther S. the Bolivian Andes run S. and N. In this portion of the Andes are some very high summits. Besides the Nevado de Chuquebamba, already noticed, are the Cerro de Huando and the Cerro de Parinacocha, whose elevation, however, has not been determined. Near 75° W. long., the principal chain of the Andes declines to N.W., and runs in that direction to the neighbourhood of Cape Parina, the most W. extremity of S. America. In the S. portion of this chain several summits rise above the snow line, but the elevation of none of them has been determined. The best known are, the Toldo de la Nieve, seen from Lima, to the S.E. of which it is situated; the Altunchagua, near 10° S. lat; and the Nevado de Hauylillas, 7° 50′ S. lat. But between the last-named snow-peak and mount Chimborazo, in the Andes of Ecuador, or Æquator (2° S. lat.), there is no summit which attains the snow line.

The country lying between the two outer ranges of the Peruvian Andes presents a continual succession of high ridges and long valleys, here and there intermixed with plains of moderate extent. It forms the best portion of the republic of Peru. The most remarkable district seems to be the plain of Bombon, near 11° S. Lat., which is 13,500 feet above the level of the sea, and extends about 18 miles in width from E. to W., and 40 or 50 from S. to N. A great part of this elevated plain, which is enclosed by two ridges of mountains, and on which the argiferous Cerro of Pasco is situated, is covered with swamps. The water running off from them, and from the elevated ground, which frequently is covered with snow, is collected in several lakes, of which three are especially noticed, as giving birth to three considerable rivers. The farthest N. is the lake of Llauricocha, from which the Amazon rises; the farthest S. is called the lake of Quiluacocha, which gives birth to the Sanja or Mataro, one of the principal branches of the Ucayale. Between these lakes is that of Chiquiacola, whence the Rio Huallaga issues. The plain of Bombon is farther to be considered as a mountain knot, from which different ranges branch off in different directions. Besides the principal range of the Peruvian Andes, which lies contiguous to it on the W., two mountain chains run off from it to the N., and one to the S. The most W. of the two N. chains runs nearly parallel to the principal range of the Peruvian Andes, and forms the E. boundary of the valley of the Maranon or Upper Amazon. It rises to a great elevation, but does not enter the snow line. One of its farthest N. branches extends close to the banks of the Amazon, where it forms the famous Pongo (cataract) of Manseriche. A lateral ridge of this chain, branching off from it at about 7°, runs E., and terminates on the banks of the Rio Huallaga, where that river forms its great cataract, or *pongo*. The farthest E. of the N. chains separates the valley of the Huallaga from the *pampas* of S. Sagramento, traversed by the Rio Ucayale. It is towards its beginning in the mountain knot of Bombon of great height, but lowers considerably farther N., terminating between 6° and 7° S. lat. at the Pongo of the Huallaga. The S. chain, issuing from the plain of Bombon, runs S.S.E., nearly parallel to the principal range of the Andes, and encloses the rich valley of the Rio Sanja. It terminates in the most S. bend of that river, about 13° S. lat. and 74° W. long.; and nearly opposite another range of high mountains, which issue from the Andes of Vilcanota, and run N., separating the valley of the Rio Apurimac from that of the Rio Quillabamba or river of Cuzco. The valleys enclosed by these several chains of mountains seem to have a mean elevation of from 3000 to 5000 feet above the sea.

The roads traversing the Peruvian Andes are very imperfectly known. That most to the S. leads from Arequipa (near 16° 30′ S. lat.) on the coast to Cuzco in the valley of the Quillabamba, and traverses very high ranges of mountains. Another road leads from Lima to the town of Tarma, in the valley of the Sanja, and thence to Guancavelica, Huamanga, and Cuzco. It rises on the principal chain at the Portacuelo de Tucto to 15,760 feet above the sea. Farther north is the road passing over the plain of Bombon to the Cerro de Pasco. It traverses on the principal range two mountain passes; of which the W., called Alto de Tacalbamba, attains an elevation of 15,135, and the E. or Alto de Lachagual, 15,480 feet above the sea. Another road connects the town of Truxillo with the valley of the Maranon. It traverses the great range near the Nevado de Guaylillas, and leads to Huamachuco and Caxamarquilla; but we are not acquainted with its particulars.

The *Andes of Ecuador*, or the *Æquator*, extend to the N. of the Peruvian Andes. Their commencement may be fixed opposite the Punta de Aguja (6° S. lat.), and the place where the Maranon changes its N.N.W. course into a N.N.E. In the same parallel the chain also changes its direction. It runs between 6° S. lat. and the equator, nearly due north. This portion of the mountain system closely resembles the Chilean Andes. It constitutes one enormous mass of high rocks, of about 80 or 100 miles in width, overtopped longitudinally by a double series of very elevated summits, so that between them a succession of high valleys is formed. These Andes are also distinguished from those between 33° and 6° S. lat. by their not sending off to the E. lateral branches. Their eastern declivities are supported by short

contreforts, which probably nowhere extend beyond 50 m. into the E. plains.

It is remarkable that the elevated valleys occupying the middle of the range rise in elevation as they advance farther N. That portion of the range which lies between 5½° and 3½° S. lat. is occupied by an extensive mountain knot, the Andes of Loxa, which, however, at no place attains the snow line. Then follows the longitudinal valley of Cuenca, which extends from 3° 15′ to 2° 30′, and rises to about 7800 feet above the sea. On this side no snow mountains occur. The mountains of Assuay, which form the N. boundary of the valley of Cuenca, extending between the two outer ranges, rise to 15,500 feet above the sea, and enter the snow line; but they are narrow, occupying only about 3 min. of lat. (between 2° 27′ and 2° 30′). To the N. of them extends the longitudinal valley of Alausi and Hambato, which extends between 2° 27′ and 40′ S. lat., and rises to about 7920 feet above the sea. The summits of the ranges which enclose it on the E. and W. rise to a great elevation. On the western range stands the famous Chimborazo, rising 21,420 ft. above the level of the sea. It was until lately considered as the highest summit of the Andes; but it is now known that the high peaks of the Bolivian Andes, the Nevado de Zorata and the Illimani, rise from 3000 to 4000 ft. higher. On the E. range stand the volcanoes of Sangay, Collanes, and Llanganate. On the N. the valley of Alausi and Hambato is bounded by a narrow transverse ridge, the Alto de Chisinche, which hardly rises 300 ft. above the adjacent level ground. But at its extremities, and precisely on the lateral ranges, rise two very high summits; on the E. the volcano of Cotopaxi, attaining 18,880 ft.; and on the W. the Yliniza, attaining 17,376 ft. above the sea.

The valley of Quito extends from 40′ S. lat. to 20′ N. lat., and has an elevation of 9600 ft. above the sea. It likewise is skirted by very high summits, on the E. by Antisana, which attains 19,136 ft., and by Cayambe Urcu, which attains 19,648 ft. above the sea. The summit of the latter mountain is traversed by the Æquator. On the W. range the highest summits are the Pichincha, rising to 15,936 ft., and the Cotocache, 16,448 ft. above the sea.

The three longitudinal valleys of Quito, Alausi, Hambato, and Cuenca, being only separated from each other by very narrow transverse ridges, may be considered as one valley, extending 240 miles in length, with a mean breadth of from 12 to 16 miles. They form the most populous and richest portion of the republic of Æquator.

The northern boundary of the valley of Quito is formed by a transverse ridge between the Nevado of Cotocache and the volcano of Imbabura (21′ N. lat.). To the N. of it lie the *Andes of los Pastos*, an extensive mountain region, which extend to 1° 13′ N. lat., and is crowned by several high summits and volcanoes; as the volcanoes of Cumbal, Chiles, and Pasto. The narrow valleys which lie between the different ridges by which it is traversed are, at a medium, 10,000 feet above the sea.

This portion of the Andes is directed from S.W. to N.E., and may be considered as the centre of the N. Andes; for it is here that the chain begins to divide into two principal branches; the western of which is called Cordillera de la Costa or de Sindagua, whilst the E. bears the name of Andes de los Pastos.

The Andes of Sindagua have a break at about 1° 20′ N. lat., by which the Rio de las Patias carries off the waters descending from the Andes de los Pastos and those which collect in the valley of Almaguer. This valley extends between 1° 13′ and 1° 56′ N. Its surface is very uneven, and its mean elevation may be about 6900 feet above the sea. In the mountains which extend to the E. of it is a large alpine lake, the Cianega de Sebondoy, in which the Rio Putumaya or Ica, a large tributary of the Amazon, takes its origin. This E. chain expands considerably to the N. of 1° 56′ N. lat., so as to form a mountain knot, which receives the name of Paramo de las Papas. A little farther north (2° 5′ N. lat.) the knot divides into two chains of mountains, which, advancing N., enclose the valley of the Rio Magdalena, as we shall see afterward. From the mountain knot of the Paramo de las Papas a transverse ridge branches off westward, uniting the eastern chain of the Andes with the cordillera of Sindagua, and separating the valley of Almaguer from the great valley of the Cauca. Near the place where this transverse range leaves the mountain knot of los Pastos is the volcano de Puracé, 14,544 feet above the sea. This volcano may be considered as the most N. point of the Andes of Æquator, comprising those of Quito and of los Pastos.

The countries lying on both declivities and at the foot of the Andes of the Æquator are very thinly inhabited, and almost entirely by aboriginal nations, unacquainted with civilization and commerce. But the elevated valleys lying between the two ranges are comparatively well peopled, partly by the descendants of Europeans, and partly by Indians who have made some progress in civilization, and are acquainted with the advantages of commerce. Hence the great commercial road which traverses this portion of the Andes runs longitudinally over the internal valleys, beginning on the north at Popayan (2° 26′ 17″ N. lat.) in the valley of the Cauca, and terminating at Truxillo (8° 5′ 40″ S. lat.) on the Pacific. From Popayan (5794 ft. above the sea) it ascends the Alto de Roble (6176 ft.), and then the Alto de Quilquase (6416 ft.). Hence it descends to the Rio de Guachicon (3042 ft.), whence it rises again by degrees to the town of Almaguer (7440 ft.) in the valley of Almaguer. It next enters the mountains of los Pastos, passing over the Paramo de Puruguay (9408) to the village of Pasto (8578 ft.). S. of this it descends to the Rio de Guaitara (5456 ft.), and again ascends a steep declivity to the village of Guachugal (10,320 ft.), whence it passes to the village of Tulian (10,112 ft.). Having traversed the Paramo de Boliche (11,504 ft.), and the Alto de Pucara (10,400 ft.), it descends by a steep declivity to the river Chota, which is passed at the Ponte de Chota (3280 ft.), and hence it leads upward to the town of Quito (9536 ft.).

From Quito the road runs over the plain to the Alto de Chisinche, which has a little more than 10,000 feet of elevation. It next passes through the valley by Hambato (8864 ft.), Riobamba Nueva (9472 ft.), Guamote (10,224 ft.), and Alausi (7984 ft.). Between the last-mentioned place and the town of Cuença is the famous and dangerous pass over the Paramo de Assuay, which in its highest point, the Ladera de Cadlud, rises to 15,536 ft., and is above the snow line. More or fewer lives are annually lost on this *paramo*. Cuença is 8640 ft. above the sea. Leaving this town the road descends to the Rio de Saraguru (7376 ft.), and again rises to the Alto de Pulla (10,000 ft.), whence it passes to Loxa (6768 ft.).

From Loxa the road passes to the W. declivity of the Andes, where it traverses Ayavaca (8992 ft.) and Olleros (4768 ft.), whence it repasses the range by the Paramo de Guamani (10,960 ft.), and enters the valley of the Maranon. In this it traverses Guancabamba (6360 ft.), Zulaca (4336 ft.), the Paramo de Yamoca (8768 ft.), the Passo de Pucura (3552 ft.), Montan (8560 ft.), and Caxamarca (9200 ft.). From the last-mentioned place it again passes the Andes to Guangamarca (8000 ft.), and runs hence to Cascas (4384 ft.) and Los Mokinos (608), terminating at Truxillo (300 ft. above the sea). Thus this long road runs continually over mountains in traversing 9½° of lat.

From Guayaquil a road leads to Quito. From the first-mentioned place it runs through the low grounds skirting the Rio de Guayaquil to Caracol, and then along the banks of the Rio Ojibar to Caluma, where the ascent of the mountains commences. The acclivity is extremely steep between Caluma and Chimbo, which is situated on an elevated country S. of the Chimborazo. From Chimbo the road leads to Mocha and Hombato, where it joins the great mountain road.

There exists a road between Quito and the harbor of Carondelet over the pass de Malbucha, but we are not acquainted with the particulars relating to it.

We observed above, that at about 1° 20′ N. lat. the Andes of Sindagua branch off from the mountain knot of los Pastos. The E. range divides again at about 2° 5′ N. lat. in two high mountain ranges. Thus we find N. of the latter parallel the Andes divided into three distinct chains, which enclose the valleys of the rivers Magdalena and Cauca. These chains are called the E., Central, and W. Andes.

The *Eastern Andes* of New Granada run between 2° 5′ and 5° 30′ N. lat., nearly parallel with the central range N.N.E.; but N. of 5° 30′ they incline farther E., running due N.E. Though none of its summits, except the Nevado de Chita (5° 50′ N. lat.) and the Nevado de Mucuchues (8° 12′) enter the line of perpetual congelation, its mean height is commonly above the region of trees; and the *paramos*, which extend on its summits, have a scanty vegetation, and rise to an elevation of between 12,000 and 14,000 ft. Las Rosas, the most N. of these paramos, terminates near 9° N. lat., and may be considered as the most N. extremity of the Andes; for the hilly country lying farther N. about the towns of Tucuyo and Barquisimento is not known to contain summits exceeding 4000 or 5000 ft. in elevation, and on that account alone cannot be considered as a continuation of the gigantic mountain system of the Andes.

The eastern declivity of this range is so precipitous that it affords no space for agriculture, and can only be ascended with great difficulty; but on its W. declivity recline several extensive table-lands, exhibiting a more or less level surface, and rising to an elevation of from 6000 to 9000 ft. above the sea. Such are the rich and fertile plains of Bogota, with those of Tunja, Socorro, Sogamozzo, and Pamplona. These table-lands terminate rather abruptly, and at a little distance from the banks of the Rio Magdalena. The river Funzha, or Rio de Bogota, when issuing from the plain, precipitates itself at Tequendama, at two bounds, down a perpendicular height of 650 feet. In no other cataract is

there so great a mass of water precipitated from so great a height; and the solitude of the place, the luxuriance of the vegetation, and the dreadful roar, present a scene of unrivalled sublimity.

The E. Andes are twice traversed by the road leading from Bogota to Caraccas. From the capital of New Granada it runs over the table-land of Bogota and Tunja to the sources of the Tegula, a tributary of the Sogamosso, where it passes over the Paramo de Almocadero, on the summit of which it attains an elevation of 12,850 ft. above the sea. It then descends towards the E. plain; before attaining which, it again ascends the range to the town of Pamplona, which probably is not less than 9,000 ft. high. To the N. of this it traverses the upper part of the range, and passes to Rosario de Cucuta. From the last-named place the road is made over the high grounds which skirt the N.W. declivity of the chain, passing through Merida, Mendoza, and Truxillo, to Tocuyo. From Tocuyo it traverses the hilly region by which the Sierra de la Costa is united to the Andes, passing through Barquisimento, S. Carlos, Valentia, and Victoria, to Caraccas.

The *Central Andes* of New Granada run N. with a slight declination to the E., and form between their commencement and 5° 15′ one great mass of rocks, about 40 or 50 m. in breadth, whose sides are only furrowed by ravines, but not intersected by valleys. Its mean height seems to be rather greater than that of the E. Andes, and it contains several summits which exceed the snow line. The most remarkable of them are from S. to N.; the Nevados de Huila, de Baraguan, de Tolima (which attains 18,336 ft.), and de Hervio. In the vicinity of the latter (5° 15′) the range expands to about double its width, separating at the same time into several ridges, so as to form a mountain knot, with intervening valleys. This mountain region, known under the name of Sierra de Antioquia, forms in its upper valleys a high country, from 6000 to 7000 ft. above the sea, on which the ridges rise 2000 ft. and more. It approaches very close to the Rio Cauca, so as to skirt its bed for about 150 m. Opposite to the high banks formed by these ridges, other mountains, belonging to the W. Andes, approach as near to the river, which runs for nearly 150 m. in an immense cleft, over a rocky and rugged bottom, and forms a series of cataracts and rapids between Salto de S. Antonio and Bocca del Espirito Santo. In all this space the river is quite unfit for navigation, and travelling by land is in this country very fatiguing, and not without danger. The ridges which issue from the mountain knot of the Sierra de Antioquia approach the Rio Magdalena to a distance of a few miles, and terminate not far from the place where that river joins the Rio Cauca, about 8° 30′.

That portion of the central Andes which forms one undivided mass is crossed by two roads, one leading from Bogota to Popayan, and the other to Cartago. The first runs, after descending from the elevated plain of Bogota to the banks of the Rio Magdalena, in the valley of this river to the S. as far as the town of La Plata, whence it turns W., and crosses the range over the Paramo de las Guanacas, on which it rises to 14,705 ft. above the sea. It then descends into the valley of the Cauca to the town of Popayan. The road between Bogota and Cartago descends from the plain of Bogota (8736 ft.), crosses the Rio Magdalena at the pass de Guayacana (1200 ft.), passes through the town of Ibague (4480 ft.), and crosses the range by the famous mountain pass of Quindiu, between the Nevados of Baraguan and Tolima; at its highest point, the Garito del Paramo, it attains an elevation of 11,504 ft. above the level of the sea. It descends afterward to the town of Cartago in the valley of the Canca (3152 ft.).

The *Western Andes* of New Granada are the same range, which, farther S., is called Sierra de la Costa or de Sindagua. It lowers considerably in advancing to the N., so that between 2° 30′ and 5° N. lat. its mean elevation does not exceed 5000 or 6000 ft. above the sea, or from 2000 to 3000 ft. above the valley of the Cauca; nor is its breadth considerable, probably not more than from 15 to 20 m., but it rises with a very precipitous declivity. N. of 5° the range is higher, and its breadth more considerable. Its highest summit is the Torra del Choco, S.E. of Novita, which, however, is far from attaining the snow line, and probably does not rise to much more than 10,000 ft. N. of this summit the range approaches close to the Rio Cauca, forming its high banks between the Salto de S. Antonio and the Bocca del Espirito Santo, and constituting with the opposite ranges of the central Andes, as it were, one mountain knot. The western Andes send from this point a range towards the Caribbean sea, which skirts the Rio Cauca on the W., extending to the N., of 8° N. lat., and contains the Alto de Viento, a summit which attains more than 9000 ft. of elevation.

From the W. Andes a ridge branches off near 6° N. lat. It runs to the W., and separates the sources of the Rio de S. Juan, which falls into the Pacific, from those of the Atrato, which runs to the Caribbean sea. This range soon turns to the N.N.W., and advances in that direction between the Rio Atrato and the Pacific. Its elevation seems not to be considerable at the beginning, and it grows lower as it advances farther N. It seems to disappear entirely between 7° and 8°, opposite to the harbour of Cupica on the Pacific; for no mountain range is found on the isthmus of Panama, where it is narrowest.

Six roads are said to cross the W. Andes, but they can only be used with great difficulty, on account of the extreme steepness of the ridge. They are commonly impracticable for mules, and travellers as well as goods are brought over on the backs of Indians. The roads most used are that of Las Juntas, which leads from Cali in the valley of the Cauca to Buenaventura, a harbour on the Pacific; the road of S. Augustin, connecting Cartago with Novita; and that of Verras, by which the town of Citara, in the valley of the Atrato, communicates with Antioquia on the banks of the Cauca.

The Geology of the Andes is very imperfectly known. Only a small portion of their immense extent has been visited by scientific travellers; and the information obtained from them teaches only a few isolated facts, which do not justify general conclusions. We are, however, informed, that the most frequent of the primitive rocks of the Alps—granite and gneiss—are by no means frequent in the Andes, which are composed mostly of porphyry and mica-slate. Porphyry is by far the most widely-extended of the unstratified rocks of the Andes, and occurs through the whole range at all elevations, and frequently the highest summits are composed of it. Next to porphyry and mica-slate, trachyte and basalt are most frequently met with.

Volcanoes are frequent in certain portions of the range. Capt. B. Hall observed a phenomenon, which induced him to think that a volcano exists on one of the larger islands N. of cape Horn, and that the observed phenomenon was produced by an eruption; but Capt. King, who surveyed these islands about ten years ago, seems not to have found a volcano in Terra del Fuego, nor in any other portion of the range S. of 46° S. lat. But farther N. they occur in great numbers. Four volcanoes are visible from the island of Chiloe: they lie on the opposite coast, between 46° and 42° S. lat. Still more numerous are the volcanoes in the Chilean Andes, not less than nineteen being known to be there in a state of activity. The most N. is that of Coquimbo, somewhat to the S. of 30° S. lat. But between this volcano and that of Atacama (between 21° and 22° S. lat.) no volcano is stated to exist, that of Copiapò, which appears on our maps, being unknown in the country. Farther N. the volcanic mountains occur only in the W. range of the Bolivian Andes; none of the high summits of the E. range having ever been known to have made an eruption, or emitted smoke. It is not known whether volcanoes exist in the Andes between 14° and 5° S. lat., but it is certain that in this part of the range they are not numerous, as no mention of them has been made by travellers. That portion of the Andes in which volcanic agency is most active lies between 3½° S. lat. and 2° N. lat. The number of summits whose eruptions are recorded is here very considerable; and Humboldt is inclined to think that the valleys N. of the pass of Assuay are to be considered as being placed on an extensive volcanic basis, and that most of the numerous summits surrounding them have once served, and may again serve, as channels for the subterranean fire communicating with the atmosphere. The farthest N. of these volcanoes is that of Puracé in the neighbourhood of Popayan, where the Andes begin to divide into three ranges; which seem to be, in their present state, quite exempt from volcanic agency, none of their summits having ever made an eruption.

No portion of the globe is subject to such frequent and frightful earthquakes as the countries embosomed within the range of the Andes, and those lying between them and the Pacific ocean. The towns of Bogota, Quito, Riobamba, Callao, Copiapo, Valparaiso, Concepcion, and others, have, at different times, been more or less destroyed by their agency; and some more than once.

Line of perpetual Congelation.—The observations made by Humboldt in the Andes induced him to fix the snow line near the equator, at an elevation of 15,750 ft.; and he thought that, near the tropic, it would be found at about 14,000 ft., or somewhat higher. But Mr. Pentland found it near 17° S. lat., at nearly 17,000 ft.; and later observations fix it near 12° S. lat., at about 16,400 ft. above the level of the sea. It is farther remarkable, that though a great number of summits rise above the snow line, glaciers are of rare occurrence in the Andes. This is partly to be attributed to the relative position of their summits, which generally form a continuous line, without having other summits on their sides; and partly to the considerable distance which everywhere is found to intervene between two summits. It is only in the narrow ravines by which some of the sides of the giant summits are furrowed, that glaciers of small extent are met with.

Vegetation of the Andes.—The different plants and trees peculiar to the different regions of the globe appear in regular succession, as we ascend from the level of the ocean to the heights of the Andes. In the lower grounds, between the tropics, from the level of the sea to the height of from 3000 to 5000 ft., cassava, cacao, maize, plantains, indigo, sugar, cotton, and coffee are cultivated. Indigo and cacao, the plantain or the banana tree, and the cassava root require great heat to be brought to maturity, generally a climate of which the mean temperature is 75°. But cotton and coffee will grow at a considerable elevation, and sugar is cultivated with success in the temperate parts of Quito. Maize is cultivated in the same climate as the banana; but its cultivation extends over a much wider sphere, as it arrives at maturity at an elevation of 6000 ft. above the sea. The low country within the tropics is also the region of oranges, pineapples, and the most delicious fruits. Between the altitudes of 6000 ft. and 9000 ft. lies the climate best suited for the culture of all kinds of European grain. Wheat, under the equator, will seldom form an ear below an elevation of 4500 ft., or ripen if above that of 10,000 ft. At the same time it must be observed, that the European colonists have not sufficiently varied their agricultural experiments to ascertain exactly the minimum of height at which European cerealia would come to maturity in the equinoctial regions of America. Humboldt mentions that in the Caraccas he saw fine harvests of wheat near Victoria, in the latitude of 10° 13′ N., at the height of 1640 and 1900 ft., and at Cuba wheat flourishes at a still smaller elevation. Rye and barley, especially the latter, resist cold better than wheat; they are, accordingly, cultivated at a greater elevation. Barley yields abundant harvests at heights where the thermometer rarely keeps up during the day above 57° Fah. Within the limits in which European grain flourishes is to be found the oak, which from an elevation of 9200 ft. never descends, near the equator, below that of 5500 ft., though it is met with in the parallel of Mexico at the height of only 3620 ft. Beyond the limit of 9000 ft. large trees of every kind begin to disappear, though some dwarfish pines are to be found at the height of 13,000 ft., nearly 2000 ft. from the line of perpetual snow. The grasses clothe the ground at an elevation of from 13,000 ft. to 15,100 ft.; and from this to the regions of ice and snow, the only plants visible are the lichen, which covers the face of the rocks, and seems even to penetrate under the snow.

In districts as elevated as the valley of Titicaca, agriculture is confined to potatoes, onions, and capsicum, and to the grain called *quinoa* (*Chenopodium quinoa*, Lin.); barley and rye are only cultivated as fodder. On the plain of Bogota a farinaceous root, called *arecacha*, is cultivated, and lately some attempts have been made to introduce its culture in England. Trees are found to ascend to 12,000 ft. or 14,000 ft. on the declivities of the mountains; but their summits, which commonly form plains of some extent, are nearly bare of vegetation, nourishing only two or three kinds of low plants.

Among the vegetable productions of the Andes, none has obtained greater celebrity than the *cinchona*, or Jesuits' bark, which is now known to grow not only on different parts of the Andes, but also on the other high mountains of S. America. The best bark, however, is collected on the Andes between 5° N. lat. and 5° S. lat., where the trees grow at an elevation of from 10,000 to 14,000 ft. above the sea.

Zoology of the Andes.—This we are very imperfectly acquainted with. The most remarkable genus is that which comprehends the guanacos, llamas, and vicunas, of which the llamas are used as animals of burden; but they are slow, making only about twelve miles a day, and carrying about seventy pounds of burden. The vicunas give a very valuable kind of wool. Among birds, the *condors* have always attracted the attention of travellers, on account of their enormous size. They are a species of vulture.

Mineral Wealth.—If the high table-land of Anahuac in Mexico be excepted, no mountain range can vie with the Andes in mineral riches, especially in the precious metals. Many of the rivers descending from the Andes between the tropics contain small particles of gold in their sand. The particles of gold deposited in the alluvial soil skirting the beds of some of these rivers have attracted the attention of Europeans, and at some places the soil is carefully washed. The alluvial soils richest in gold are those lying to the W. of the central Andes of New Granada, on both sides of the Rio Cauca; as also in the provinces of Barbacoas and Choco along the Pacific. In the latter districts platina also occurs; and, till within these few years, when it has been found in the Ural mountains, these were considered as the only places in which it was to be met with. Alluvial soils rich in gold are also found along the rivers which descend from the range of the Bolivian Andes, between 14° and 17° S. lat.; and here, too, considerable quantities of gold are extracted. The annual produce of the *lavaderos* and gold mines of the Andes is stated by Humboldt to have amounted, in the beginning of the 19th century, to 223,450 oz.; equal, at £4 per oz., to £1,133,716.

Silver occurs in many places of the range between 33° and the equator; but it is commonly found at an elevation where vegetation nearly ceases, which renders the working of the mines very expensive, and frequently disappoints the otherwise well-founded expectations of the undertakers. The number of mines which have been worked and abandoned is very great; many of them, however, are still worked. The most celebrated silver mines are those of Potosi and Pasco. The former are in the Cerro de Potosi (19° 26′ S. lat.), which rises to 16,037 ft. above the sea. This mountain is perforated in all directions; and it is said, though the statement be probably exaggerated, that there are no fewer than 5000 excavations in it. The Cerro de Pasco is a hill, rising on the high plain of Bombon (about 11° S. lat.). It has been worked for more than two centuries, and may now be considered as the richest silver mine of America: unless, which is doubtful, it be surpassed by the silver mines discovered in N. Chili in 1830, about 30 or 40 m. S. of the town of Copiapo, where silver ore is said to be very abundant, and so rich as to yield forty or even seventy ounces in each *cargo*. At the beginning of the present century, the annual produce of the silver mines of the Andes was stated by Humboldt to amount to 601,492 lbs. troy; which, if we take the silver at five shillings the ounce, gives a sum of £3,074,476. It is not easy to estimate its amount at present, but probably it is not much fallen off.

Mercury or quicksilver occurs in many places N. of 14° S. lat., and S. of the equator; but since the destruction of the mines of Guancavelica, we are not sure whether it be anywhere worked. These, which were extremely rich, yielding from 4600 to 6000 cwt. a year, were unluckily ruined in 1788, through the ignorance and mismanagement of a superintendent.

Copper seems to occur very frequently S. of 14° S. lat. Large masses of nearly pure copper are stated to exist on the surface of the S. extremity of the valley of Titicaca, but the expense of bringing them down to the coast is at present so great that they cannot be turned to advantage. In the N. provinces of Chili several mines are worked with advantage. Miers estimated the quantity of copper exported from these countries in 1824 at 40,000 cwt.; in 1829 it rose to 60,000, and has since materially increased. It is mostly exported to China, India, and the U. States.

Ores of lead, tin, and iron are said to exist in various parts; but they are not worked.

Population of the Andes.—It is a characteristic feature of S. America, that its extensive plains, which comprise more than three fourths of its surface, are very thinly inhabited; nor does it appear likely that large portions of them should ever be brought to such a state of cultivation as to maintain a dense population. At present, far the greater number of the inhabitants are met with on the table lands, and in the valleys of the Andes. It has been doubted whether the whole population of S. America exceeds 12,000,000; but this, we have little doubt, is below the mark. We are inclined to think that the inhabitants of the Andes, including the coast of the Pacific, amount to more than 6,000,000. This coast is favoured with an excellent climate, and that portion of it which lies between 40° and 30° S. lat. has in general a good soil; but between 30° and 5° S. lat. it is a complete desert—a circumstance mainly attributable to the entire want of rain, a single drop never refreshing its arid soil. In this respect it forms a singular contrast with the coast extending between the equator and the Isthmus of Panama, where hardly a day passes without rain, and where at certain seasons it pours down in such abundance as to change all the lower lands into swamps, and to render the country extremely unhealthy. The whole coast along the Pacific does not probably contain 1½ million inhabitants; so that more than 4½ millions live within the mountain system.

The state of these countries seems to have been little different at the time when America was discovered. In the Andes only was found a government regularly arranged, and a nation which had made a considerable progress in civilization, and which chiefly subsisted by the produce of its agriculture. Here only the Spaniards were able to conquer the country; in the other parts of America they established colonies, and tried by various means to subject the savage nations in their neighbourhood: these attempts succeeded in some instances, and in others not.

The population of the Andes is composed of the descendants of the Spaniards, and of the ancient Peruvians. Negroes have also been introduced in the N. districts, and are pretty numerous in the valleys of the Rio Magdalena and Rio Cauca; they are also found on the coast in the provinces of Barbacoas and Choco, and, in small numbers, on the remainder of the coast as far S. as Arica (13° S. lat.). The whites constitute the great bulk of the population in the valleys of the Rio Magdalena and Cauca; in the latter no aborigines are met with. But on the high valleys of Ecuador,

on the plain of Bombon, on the table land of Titicaca, and in the valleys which extend to the E. of the great chain of the Andes, the ancient Peruvians are by far the most numerous class of inhabitants, the whites being there probably much less than a fourth part of the population. The Peruvians belong to the copper-coloured race spread nearly over the whole American continent. They speak different languages; but the Quichua, sometimes called the language of the Incas, is understood or spoken by most of them. Travellers in general admit their frugality and industry in agriculture, working the mines, and some branches of manufacturing industry; but they are altogether deficient in that activity, spirit of enterprise, and desire to excel by which Europeans are distinguished.

Travelling in the Andes.—The improvement of the countries embosomed within the Andes is much retarded by the want of easy communication. Sometimes the intercourse between places in the immediate vicinity of each other is interrupted by *quebradas*, or rents, generally narrow, sometimes of a vast depth, and with nearly perpendicular sides. The famous natural bridge of Icononzo, in Colombia, leads over a small quebrada: it is elevated about 312 feet above the torrent that flows in the bottom of the chasm. Most of the torrents that are passed in travelling over the Cordilleras are fordable; though their impetuosity is such when swollen by the rains as to detain travellers for several days. But when they are too deep to be forded, or the banks too inaccessible, suspension bridges are thrown over them, of a singular make; but which, notwithstanding their apparently dangerous and fragile construction, are found to answer the purposes required. Where the river is narrow, with high banks, they are constructed of wood, and consist of four long beams laid close together over the precipice, and forming a path of about a yard and a half in breadth, being just sufficient for a man to pass over on horseback. These bridges have become so familiar to the natives that they pass them without apprehension. Where the breadth of the river will not admit of a beam being laid across, ropes constructed of *bejuces*, a species of thin elastic cane, of the length required, are thrown over. Six of these ropes are stretched from one side of the river to the other; two, intended to serve as parapets, being considerably higher than the other four; and the latter being covered with sticks laid in a transverse direction, the bridge is passed by men, while the mules, being divested of their burdens, are made to swim across. All travellers have spoken of the extreme danger of passing these rope bridges, which look like ribands suspended above a crevice or impetuous torrent. But this danger, according to Humboldt, is not very great when a single person passes over the bridge as quickly as possible, with his body leaning forward. But the oscillations of the ropes become very great when the traveller is conducted by an Indian who walks quicker than himself; or when, frightened by the view of the water seen through the interstices of the bamboos, he has the imprudence to stop in the middle of the bridge, and lay hold of the ropes that serve as a rail. Some of the rivers of the higher Andes are passed by means of an invention or bridge denominated a *tarabita*. It conveys not only the passengers, but also their cattle and burdens; and is used to pass those torrents whose rapidity and the large stones continually rolling down, render it impossible for mules to swim across. It consists of a strong rope of bejuco, extended across the river, on each bank of which it is fastened to stout posts. On one side is a kind of wheel or winch to straiten or slack the rope to the degree required. From this rope hangs a kind of moveable leathern hammock, capable of holding a man, to which a rope is fastened for drawing it to the side intended. For carrying over mules two ropes are necessary, and these much thicker and slacker. The creature being suspended from them, and secured by girths round the belly, neck, and legs, is shoved off, and dragged to the opposite bank. Some of these bejuco bridges are of great length, and elevated to a great height above the torrent.

A bridge of this sort was constructed by the 5th Inca over the Desaguadero, or river that issues from lake Titicaca, where it is more than 200 feet in width; and, on account of its utility, is still kept up. Sometimes, instead of being made of bejucos or osiers, these suspension bridges are made of twisted strands or thongs of bullock's hide. Mr. Miers passed along one of this sort in Chili, 225 feet in length, by 6 feet wide; it conveyed over loaded mules, and was perfectly secure. (*Ulloa, Voyage en Amerique*, i., 358; *Miers, Chili*, i., 385; *Humboldt's Researches*, ii., 72.)

The ruggedness of the roads in the less frequented parts of the Andes, can hardly be described. In many places the ground is so narrow, that the mules employed in travelling have scarcely room to set their feet, and in others it is a continued series of precipices. These paths are full of holes, from two to three feet deep, in which the mules set their feet, and draw their bellies and their riders' legs along the ground. The holes serve as steps, without which the precipices would be in a great measure impracticable; but, should the creature happen to set its foot between two of these holes, or not place it right, the rider falls: and if on the side of the precipice, inevitably perishes. This danger is even greater where the holes are wanting. The tracks are extremely steep and slippery, and in general chalky and wet; and where there are no holes to serve as steps, Indians are obliged to go before with small spades to dig little trenches across the path. In descending those places where there are no holes or trenches, and which are sometimes many hundred yards deep, the instinct of the mules accustomed to pass them is admirable. They are sensible of the caution requisite in the descent. On coming to the top of an eminence, they stop; and having placed their fore feet close together, as if in a posture of stopping themselves, they also put their hind feet together, but a little forward, as if going to lie down. In this attitude, having, as it were, taken a survey of the road, they slide down with the swiftness of a meteor. The rider has only to keep himself fast in the saddle, without checking his beast; for the least motion is sufficient to disorder the equilibrium of the mule, in which case they must both unavoidably perish. The address of these creatures is here truly wonderful; for in this so rapid motion, when they seem to have lost all command of themselves, they follow exactly the different windings of the path, as if they had previously reconnoitred and settled in their minds the route they were to follow, and taken every precaution for their safety. There would otherwise, indeed, be no possibility of travelling over places where the safety of the rider depends on the experience and address of his beast.

The valleys of the Cordilleras, which are deeper and narrower than those of the Alps and Pyrenees, and present scenes of the wildest aspect, give rise also to several other peculiarities in the mode of travelling. In many parts, owing to the humidity of the climate, and the declivity of the ground, the streamlets which flow down the mountains have hollowed out gullies from about 20 to 25 feet in depth. The pathway which runs along those crevices is frequently not above a foot or a foot and a half in breadth, and has the appearance of a gallery dug and left open to the sky. In some places the opening above is covered by the thick vegetation which grows out from both sides of the crevice, so that the traveller is forced to grope his way in darkness. The oxen, which are the beasts of burden commonly made use of in this country, can scarcely force their way through these galleries, some of which are more than a mile in length; and if the traveller should happen to meet them in one of the passages, he has no means of avoiding them but by climbing the earthen wall which borders the crevice, and keeping himself suspended by laying hold of the roots which penetrate to this depth from the surface of the ground. "In many of the passes of the Andes," says Humboldt, "such is the state of the roads that the usual mode of travelling for persons in easy circumstances is in a chair strapped to the back of one of the native porters (cargueros), or men of burden, who live by letting out their backs and loins to travellers. They talk in this country of going on a man's back (andar en cargueros), as we mention going on horseback. No humiliating idea is annexed to the trade of cargueros; and the men who follow this occupation are not Indians, but mulattoes, and sometimes even whites. It is often curious to hear these men, with scarcely any covering, and following an employment which we should consider so disgraceful, quarrelling in the midst of a forest, because one has refused the other, who pretends to have a whiter skin, the pompous title of Don or Su Merced. The usual load of a carguero is six or seven arrobas; those who are very strong carry as much as nine arrobas. When we reflect on the enormous fatigue to which these miserable men are exposed, journeying eight or nine hours a day over a mountainous country; when we know that their backs are sometimes as raw as those of beasts of burden; that travellers have often the cruelty to leave them in a forest when they fall sick; that they earn, by a journey from Ibague to Cartago, only 12 or 14 piastres in from 15 to 25 days; we are at a loss to conceive how this employment of a carguero should be eagerly embraced by all the robust young men who live at the foot of the mountains. The taste for a wandering life, the idea of a certain independence amid forests, leads them to prefer it to the sedentary and monotonous labour of cities. The passage of the mountain of Quindiu is not the only part of South America which is traversed on the backs of men. The whole of the province of Antioquia is surrounded by mountains so difficult to pass, that they who dislike entrusting themselves to the skill of a bearer, and are not strong enough to travel on foot from Santa Fe de Antioquia to Bocca de Nares or Rio Samana, must relinquish all thoughts of leaving the country. The number of young men who undertake the employments of beasts of burden at Choco, Ibague, and Medellin, is so considerable, that we sometimes meet a file of fifty or sixty. A few years ago, when a project was formed to make the passage from Nares to Antioquia passable for mules, the cargueros presented formal

remonstrances against mending the road, and the government was weak enough to yield to their clamours. The person carried in a chair by a carguero, must remain several hours motionless, and leaning backwards. The least motion is sufficient to throw down the carrier; and his fall would be so much the more dangerous, as the carguero, too confident in his own skill, chooses the most rapid declivities, or crosses a torrent on a narrow and slippery trunk of a tree. These accidents are, however, rare; and those which happen must be attributed to the imprudence of travellers, who, frightened at a false step of the carguero, leap down from their chairs." (*Researches*, i. 69.)

In order to protect travellers, when they are sojourning in this desert country, from the inclemency of the weather, the cargueros provide themselves with several hundred leaves of a plant of the banana species, which they pluck in the mountains before they begin their journey. These leaves, which are membraneous and silky, are of an oval form, 2 feet long, and 16 in. in breadth. When the travellers reach a spot in the midst of the forests where the ground is dry, and where they propose to pass the night, the cargueros lop a few branches from the trees, with which they make a tent. In a few minutes this slight timber-work is divided into squares by the stalks of some climbing plant, or by the threads of the agave. The banana leaves having in the mean time been unrolled, are now spread over the above work, so as to cover it like the tiles of a house. These huts, thus hastily built, are cool and commodious; and Humboldt mentions that he passed several days in the valley of Boquia under one of those leafy tents, which was perfectly dry, though exposed to violent and incessant rains.

No doubt the access to the Andes will, in the course of time, be facilitated by the establishment of steam packets on the Amazon and its tributaries. That this has not been attempted ere now is, we apprehend, a consequence rather of the revolutionary anarchical state in which the country has been plunged since the overthrow of the Spanish government, than of any natural difficulties in the way of such navigation. Anarchy, however, must in the end exhaust itself; and either a free government or a despotism be established in its stead. And it is hardly possible to suppose that any regular government, whatever may be its character, should be established for any considerable period without turning its attention to the means of developing the extraordinary resources of these fine countries: and of these none can be either so effectual, or so obviously indispensable, as the opening of improved communications with the coast, and with the great navigable rivers of the interior.

ANDES, p. t., Delaware co., N. Y., 87 m. S.W. Albany, 334 W. Watered by Papacton branch of Delaware river. The village contains two churches, one store, and about twenty dwellings. In the town are six stores, one woollen factory, two grist-mills, twelve saw-mills, seventeen schools, 737 scholars. Pop. 2176.

ANDLAU, a town of France, dep. Bas Rhin, arrond. Schelestat, on the Andlau, 10 m. N.N.W. Schelestat. Pop. 2257.

ANDORRE (REPUBLIC OF), a small independent state on the S. declivity of the Pyrenees, between the dep. of Ariége in France, and the district of Urgel in Spain. It stretches from N. to S. about 36 m., and from E. to W. about 30, comprising 3 mountain valleys, and the basin formed by their union. These valleys are among the wildest and most picturesque in the Pyrenees, and the mountains, with their immense peaks, by which they are enclosed, among the highest and least accessible. It is watered by several small rivers; the largest of which, the Embalin, having received the others, falls into the Segre, an affluent of the Ebro. Pop. from 7000 to 8000, divided among six communes. Andorre, the principal town, has about 2000 inhab. It has but little arable land, but a considerable extent of excellent pasture grounds, sheltered by vast forests of fir. The inhab. depend principally on their flocks and iron mines, the produce of the latter finding a ready market in Spain. This little state, though connected in some degree with both its powerful neighbours, has preserved its independence for about 1000 years. The government is composed of a council of 24 members, chosen for life, each commune electing four. The council elect two Syndics (*Hugo*), who enjoy considerable authority, convoking the assemblies, and carrying on the government when they are not sitting. It is to Charlemagne that Andorre owes its independence. In 1190, that prince having marched against the Moors of Spain, and defeated them in the neighbouring valley of Carol, the Andorrians are said to have rendered themselves so useful to the French army, supplying them with provisions, and taking care of their wounded, that the Emperor, by way of recompense, made them independent of the neighbouring princes, and permitted them to be governed by their own laws. After him Louis le Debonnaire ceded to the Bishop of Urgel a part of the rights over Andorre which Charlemagne had reserved to himself and his successors. In virtue of this grant, the Bishop acquired right to a part of the tithes of the six communes, and a spiritual jurisdiction over the country, which he still exercises.

In 1793, the rights exercised by the sovereigns of France in Andorre being considered as feudal, were abandoned, and the republic was for a time completely separated from that country; but notwithstanding this temporary independence, the Andorrians continued to preserve their attachment to France. They resisted the violation of their territory by the Spaniards, and furnished to the French armies during the late war, guides and assistance of every kind. At the same time they anxiously solicited the establishment of the ancient order of things: and Napoleon yielded to their wish. By a decree of the 20th of March, 1806, Andorre was declared to be a republic connected with France; its viguier, or criminal judge, was to be a Frenchman, of the dep. of Ariége; and it was allowed to import certain quantities of certain specified articles, free of duty, on payment of the trifling sum of 960 fr. a year. Except, therefore, as regards the spiritual jurisdiction of the Bishop of Urgel, which cannot be said to interfere with its independence any more than the Pope's ecclesiastical authority over Catholic countries can with theirs, Andorre is altogether independent of Spain; and, as regards France, the annual payment it makes to her is not a tribute, but an inadequate compensation for a valuable privilege; and there being little crime in Andorre, the appointment of a Frenchman for criminal judge was more with a view to deter French criminals from taking refuge in this neutral territory, than to assert any superiority. Andorre may, therefore, be justly considered as the oldest free republic in existence. The people all belong to the Church of Rome, and are very religious. Their clergy, and the more wealthy of the inhabitants, are educated at Toulouse or Barcelona. Each curé, in addition to his pastoral duties, has charge of a school, where the poor are instructed gratuitously; but this does not give him much extra trouble, few of the peasants thinking it necessary to send their children to school to acquire what, in their land of shepherds and labourers, they imagine can be of little consequence in their future lives. Hence the great majority of the people can neither read nor write.

The Andorrians are simple and severe in their manners, the vices and corruptions of cities not having hitherto found their way into their valleys. They live as their forefathers lived a thousand years before them; the little they know concerning the luxuries, arts, and civilization of other countries, inspiring them rather with fear than envy. Their wealth consists in their sheep or cattle, or in the share they may have in iron forges, only a very few of their number being the proprietors of any land beyond the garden which surrounds their cottage. Each family acknowledges a chief who succeeds by right of primogeniture. These chiefs, or eldest sons, choose their wives from families of equal consideration with their own, reprobating *mesalliances*, and looking little to fortune, which, besides, is always very small upon both sides. They never leave the paternal roof until they marry; and if they marry an heiress they join her name to their own; unless married, they are not admitted to any share in the management of public affairs.

When there are only daughters in a family, the eldest, who is heiress of the entire property, and succeeds as an eldest son would do, is always married to a cadet of another family, who adopts her name, and is domiciliated in her family. By this arrangement, the principal Andorrian houses have continued for centuries without any change in their fortunes, *ni plus riche, ni plus pauvre*. The poorest inhabitants are not so badly off as in most other countries; their wants are few and easily supplied, the opulent families taking care of those who are not; and the latter honouring and respecting their benefactors.

The Andorrians are in general strong and well proportioned; the greater part of the diseases proceeding from the moral affections are unknown, as well as those originating in vice and corruption. The costume of the men, composed of coarse brown cloth made from the wool of their own sheep, resembles that worn by the peasants of Bigorre, with this difference, that the Andorrians wear the flowing red cap of the Catalans. There would seem to be but little gallantry among these mountaineers, for the women are not admitted to any of the assemblies where public affairs are considered; nor even to the masses performed upon the reception of the bishop or judge. Crime of every kind is rare, and punishments, though mild, are effectual. There are no law-suits relative to paternal successions; and should disputes of any kind arise, they are at once referred to the Syndics, whose decision is never controverted. The men are all liable to serve in the militia, should they be required; and every head of a family is obliged to have in his possession at all times a musket, and a certain quantity of powder and ball.

Commerce of every kind is free; but, with the exception of iron, of which it has some mines and forges, its manufactures are all of the coarsest and rudest kind.—(For farther parti-

ticulars, see the art. on *Andorre* in *Hugo*, *France Pittoresque*, art. *Ariége: Mr. Murray's Summer in the Pyrenees*, &c.)

ANDOVER, a borough and m. town of England, co. Hants, near the Anton, on the great road from London to Salisbury, being 63 m. W.S.W. of the former, and 17 N.E. of the latter. The Parl. borough and subordinate district, which last includes 10,780 acres, has 4953 inhab., of which the borough may have about 4000. It is compactly built, extending on either side about one-third of a mile from the market place, in the centre of which is a modern town hall, supported on arches, under which are held the markets. The church, an old Gothic building, is on the N. side of the town. There is an hospital for six poor men, a free school founded in 1569, and a charity school for 30 boys. Some trade is carried on in malting, and the manufacture of silk; but its principal support is derived from its being a considerable thoroughfare, and the only market for the surrounding country. It is in a thriving condition; and contains several good shops and respectable private houses. The great annual fair of Weyhill (which see) is held within a short distance. There is a canal from the town to Southampton. It returns two members to the H. of C. From 1689, down to the passing of the Reform Act, the right of voting was in the bailiff and corporation. No. of £10 houses, 325; Parl. constituency, 1836–37, 229. (*Parl. and Municipal Boundary Reports*.)

Andover, p. t., Oxford co., Me., 62 m. W.S.W. Augusta, 694 W. Watered by a branch of Androscoggin river. It has one store, one grist-mill, two saw-mills, six schools, 105 scholars. Pop. 551.

Andover, p. t., Merrimac co., N. H., 22 m. N.W. Concord, 497 W. Watered by Blackwater river. It has an academy, with a fund of $10,000, three stores, one grist-mill, two saw-mills, nine schools, 344 scholars. Pop. 1168.

Andover, p. t., Windsor co., Vt., 20 m. S.W. Windsor, 91 S. Montpelier, 453 W. Drained by head branches of Williams river. It contains four churches, one Congregational, one Baptist, one Methodist, and one Universalist; two stores, two grist-mills, one saw-mill, one fulling-mill, nine schools, 293 scholars. Pop. 877.

Andover, p. t., Essex co., Mass., 21 m. N. Boston, 16 N.W. Salem, 454 W. Bounded N.W. by Merrimac river. Watered by Shawsheen river. Great Pond, in the N.E. part, covers 450 acres. The principal village is in the S. parish, and contains a bank, a fire insurance company, a bank for savings, and five churches, one Congregational, one Episcopal, one Baptist, one Methodist, and one Universalist—Phillips academy, and the Andover Theological Seminary. Phillips academy was founded in 1778, and has a fund of $50,000. The number of students is limited to 130, all of whom study the learned languages. It has several instructors. The edifice is 80 by 40 feet. The Andover Theological Seminary was founded in 1807, and opened in the autumn of 1808. The buildings consist of three dwellings for professors and three public edifices, of brick; Phillips Hall, 90 by 40 feet, four stories high, containing 32 rooms for students; Bartlet Chapel, 96 by 40 feet, containing a chapel, library, and three lecture rooms; and Bartlet Hall, 104 by 40 feet, four stories, containing 32 suits of rooms for students. It has five professors—one of sacred literature, one of Christian theology, one of sacred rhetoric, one of sacred rhetoric and ecclesiastical history, and one assistant professor. The course of study includes three years, and the students are divided into three classes, junior, middle, and senior. Tuition and room-rent are free to all, and farther assistance is afforded to the indigent. A public examination and commencement are held on the 4th Wednesday of September, annually. There are two vacations of six weeks each. The number of students is 129; whole number educated 785, and it has 17,500 vols. in its libraries. Funds to the amount of about $400,000 have been contributed by a few liberal donors. A teachers' seminary was founded here in 1830, which is flourishing. The village has an elevated and commanding situation, and contains many handsome dwellings. There were in the town in 1840, fourteen stores, five fulling-mills, six woollen factories, three grist-mills, five saw-mills, four academies, 379 students, twenty-three schools, 1153 scholars. Pop. 5207.

Andover, p. t., Alleghany co., N. Y., 127 m. W by S. Albany, 317 W. The village contains one Presbyterian and one Baptist church, twenty-five dwellings, and about 150 inhabitants. There are in the town two stores, one fulling-mill, one grist-mill, four saw-mills, eight schools, 240 scholars. Pop. 848.

Andover, t., Ashtabula co., O. It has seven schools, 313 scholars. Pop. 881.

ANDRACIO, or ANDRACY, a town of Spain, on the S. W. coast of the island of Majorca. Pop. 3500. It is situated at a little distance from the sea, but it has a small port accessible to vessels drawing little water. Its territory is productive of olives.

ANDRE (ST.), the name of various small towns and villages in different parts of France.

ANDRE, or ENDRE, (ST.), a town of Hungary, on the right bank of the Danube, opposite to the island of the same name, 111 m. N. Buda. Pop. 8,000. It has one Catholic and seven Greek churches. The hills in the vicinity produce excellent wines, and the island in the river is celebrated for its fertility.

ANDRE' D'APCHON (ST.), a village of France, dep. Loire, 8 m. W. Roanne. Pop. 1740.

ANDRE'-DE-CUBSAC (ST.), a town of France, dep. Gironde, cap. cant. 12 m. N.N.E. Bordeaux. Pop. 3329. It is situated at a little distance from the Dordogne; but it has a port, Cubsac, on that river. The high road from Bordeaux to Paris crosses the Dordogne at this point, passengers and carriages being conveyed across in a large ferry boat of a new construction.

ANDRE' DE SANGONIS (ST.), a town of France, dep. Herault, 19 m. W. by N. Montpellier. Pop. 2150.

ANDRE' DE VALBORGNE (ST.), a town of France, dep. Gard, cap. cant., 42 m. N.W. Nismes. Pop. 1720.

ANDREA (ST.), a village of Naples, prov. Principato Ultra, 3 m. S.E. Conza. Pop. 2900.

ANDREASBERG, a town of Hanover, principality of Grubenhagen, in a district which has mines of iron, cobalt, copper, and silver. Pop. 3400. It has a college, a council of mines, and manufactures of lace and thread.

ANDREW'S (ST.), an ancient and celebrated city and sea-port of Scotland, co. Fife, finely situated on a low eminence on the German ocean, 31 m. N.E. Edinburgh, lat. 56° 20′ N., long. 2° 50′ W. Pop. 4,465. It chiefly consists of three principal streets, leading in a W. direction from the cathedral, is in general well built, and has been much improved during the present century. St. Andrew's was long the metropolitan see of Scotland; and is highly interesting from its numerous remains of other ages, and the historical associations connected with it, many highly important events having occurred within its precincts. Its splendid cathedral, founded in 1160, and completed in 1318, was reduced to a ruin in 1559 by the barbarous zeal of the reformers. The castle, long the residence of its archbishops, and a place of considerable strength, stood on a precipice overhanging the sea. The famous Cardinal Beaton was assassinated in it in 1546, in revenge of the share he had in bringing Wishart, a preacher of the reformed doctrines, to the stake in the previous year. Its picturesque ruins now serve as a landmark for ships. There are also, among others, the ruins of a chapel, and a square tower 108 feet high, called the chapel and tower of St. Rule or St. Regulus, supposed to be the most ancient of the existing fabrics. The priory of St. Andrew's was one of the best endowed in Scotland; and part of a gigantic wall, intended to inclose the grounds of the priory, 870 feet long, 22 high, and 4 thick, with 14 turrets, erected by Prior Hepburn in 1516, is still in good preservation, and is not one of the least interesting relics of bygone times. The parish church, founded in the 12th century, but rebuilt in 1797, has a monument to Archbishop Sharpe, assassinated in 1679. The university of St. Andrew's, the most ancient in Scotland, and now the principal support of the city, was founded in 1410, by Bishop Wardlaw, and confirmed by a papal bull dated the following year. It originally consisted of three colleges, St. Salvador's, St. Leonard's, and St. Mary's; of which the two former were united in 1747, when the buildings of St. Leonard's were pulled down. The two colleges are in different parts of the town, and their professors and discipline are quite distinct. The United College consists of a quadrangular edifice, in which some excellent rooms were recently erected at the expense of government. This institution is appropriated to the study of languages, philosophy, and science, and St. Mary's to that of theology. The chapel of the United College, founded by Bishop Kennedy in 1458, is a fine specimen of the light Gothic; but though used as the college chapel, and as a parish church, it is in a very bad state of repair. It has a tomb of the founder; on opening which, in 1683, six silver maces were found, of which three were sent to the other Scotch universities, and three retained in the college. St. Mary's College is a handsome stone structure. A library contiguous to the latter, and containing 45,000 volumes, is common to both colleges; and until the privilege was commuted, in 1836, for £456 a year, it was entitled to a copy of every work entered at Stationer's Hall. The United College and St. Mary's have together eleven professors; each college has a principal, and the university is presided over by a lord-rector and a chancellor. The endowments are considerable, each professor receiving at an average about £230 a year, exclusive of fees from pupils. The average number of the latter during the ten years ending with 1838–39 has been 172, of whom 43 have belonged to the theological college of St. Mary, and the remaining 130 to the United College. The fee for attending one of the literary classes is £3 3*s*.; students in the theological classes pay no fees—with the exception of a fee of 5*s*. on matriculating, which is common to both establishments. The United College has 21 bursaries, of the gross

annual value of about £800, and St. Mary's seven bursaries, of the gross annual value of £300. Recently a very large addition has been made to the facilities for education already enjoyed by St. Andrew's, through the liberality of Dr. Bell, of Madras, who bequeathed the sum of £45,000 three per cent. stock for the erection of a seminary on a comprehensive plan in this his native city. A fine building for this school has been erected at a little distance from St. Mary's College. The number of teachers in the *Madras College* (the name given to Dr. Bell's establishment) is *nine*, exclusive of assistants. This seminary affords instruction gratis to the poor; and the fees are very low even to the rich, being only 7*s.* 6*d.* per quarter for Latin and Greek; the same for German and French; the same for mathematics, and the same for drawing: 5*s.* per quarter for geography: 3*s.* for writing: 2*s.* 6*d.* for arithmetic: and 2*s.* for English. Students may attend one or more classes, and pay accordingly. The average number of pupils at this seminary has been about 800, but it is rapidly increasing. Of this number above a half are strangers, attracted to the city by the deservedly high character of this excellent institution, the best probably of its kind in the empire. The harbour, partly formed by two piers, is on the E. side of the town, extending about 430 yards inland; but it dries at low water, and the access to it being difficult, it is little frequented by shipping. The society of St. Andrew's is comparatively good; the advantages afforded for education, and the cheapness of living, having attracted to it a considerable number of genteel families, whose circumstances may not be sufficiently prosperous to permit of their residing at Edinburgh or other expensive towns. It has no manufactures worth notice, unless it be that of *golf-balls*, or balls for playing the game of golf, which employs about six or seven men, who produce annually about 1100 dozen balls, of which about 800 dozen are sent to other places, the rest being consumed in St. Andrew's, which has been long famous for this game. A good workman makes eight or nine balls a day. St. Andrew's unites with the two Anstruthers, Crail, Cupar, Kilrenny, and Pittenweem in returning a member to the H. of C. No. of £10 houses, 313; constituency in 1838, 250.

ANDRIA, a town of Naples, prov. Terra di Bari, cap. cant., 9 m. S. Barletta. Pop. 13,500. It stands in a plain on the edge of the enclosed country, and its environs are far from unpleasant. It is the seat of a bishopric, has a superb cathedral, a royal college, and three *monts-de-piété*. It was founded in 1046 by Peter, count of Trani, and acquired its name from the *antra*, or caverns occupied by the first settlers. (*Swinburne's Two Sicilies*, i., p. 399; *Dict. Geog.*)

ANDRO, or ANDROS, an island of the Grecian Archipelago, lying to the S. of Negropont, and immediately to the N. of Tino, from which it is separated by a very narrow channel. It extends about 27 m. in a N.W. and S.E. direction, but its breadth does not exceed 7 or 8 m. Though mountainous, it has several extensive, fertile, and well-watered valleys, and a number of villages. The pop. has been estimated at from 13,000 to 16,000. Wine is the principal article, the annual product amounting to 280,000 gals.; exclusive of which there is a considerable export of silk, oil, oranges, citrons, &c. The corn raised in the island generally suffices for the consumption of the inhabitants. Andro, or Castro, the capital, a considerable town, with about 5000 inhabitants, is situated on the E. coast of the island; its port, which is defended by a castle, is too shallow to admit any but the smallest description of vessels. Port Gaurio, or Gabrio, on the W. side, is a much better harbour. The Andrians took the part of the Persians on the latter invading Greece, for which they were afterward chastised by Themistocles. (*Tournefort, Voyage du Levant*, i., p. 347; *Consular Return.*)

ANDROSCOGGIN, river (or Ameriscoggin), Me., is formed by the junction of Magalloway river and the outlet of Umbagog lake. It runs S. into N.H., and then E. into Me., and enters Kennebec river in Merrymeeting bay, 18 m. from the ocean. It is 140 m. long, 100 of which are in Me.

ANDROS ISLANDS, or ISLES DEL ESPIRITU SANTO, a group of islands among the Bahamas, which extend about 120 m. from N. to S., lat. 24° to 25° 20′ N., long. 77° to 78° W.

ANDUJAR, a town of Spain, Andalusia, on the Guadalquiver, in a plain at the foot of the Sierra Morena, 20 m. N.W. Jaen, lat. 38° 1′ 32″ N., long., 3° 59′ 33″ W. Pop. nearly 14,000. Mr. Townsend says that, in 1786 it contained 6800 families, which, if accurate, would show a great decline in the interval. (*Travels in Spain*, ii., p. 297.) It is supposed to be built of the ruins of the ancient *Forum Julium*; it is defended by an old castle, and has numerous churches and convents, a theatre, and an old bridge of fifteen arches over the river. Its environs are fruitful, and the inhabitants are mostly employed in agriculture; but there are tanneries, and manufactories of wine and water coolers, made of a peculiar species of white clay found in the neighbourhood.

ANDUZE, a town of France, dep. Gard, cap. cant., on the Gardon, 26 m. N.W. Nismes. Pop. 5403, mostly Protestants. It is ill built, but agreeably situated at the foot of the Cevennes, between rocks and hills planted with vines and olives. It has a tribunal of commerce, with manufactures of hats, silk, hosiery, cloth, earthenware, and glue, a silk filature, and tannery.

ANET, a handsome town, dep. Eure et Loire, cap. cant., 9 m. N.N.E. Dreux. Pop. 1432. It is principally celebrated for the ruins of its fine castle, built by Henry II. for Diana of Poitiers, and destroyed during the revolutionary phrensy in 1792. There are in its environs forges and paper-mills.

ANET, a village of Switzerland, cant. Berne, on a hill, 17 m. W. by N. Berne. Pop. 2400. Roman antiquities are found in the neighbourhood.

ANGELICA, p. t., capital of Alleghany co., N.Y., 262 m. W. Albany, 235 W. The village contains a court-house, jail, a bank, three churches, one Presbyterian, one Episcopal, and one Methodist, 120 dwellings, and about 900 inhabitants. The town contains eleven stores, two fulling-mills, one woollen factory, two grist-mills, four saw-mills, nine schools, 317 scholars. Pop. 1257.

ANGELO (ST.), the name of several towns in Italy, of which the principal are St. Angelo in the Lombardo-Venetian kingdom, prov. Lodi, 7 m. S.W. Lodi. Pop. 6000. ST. ANGELO in the same kingdom, prov. Padua, 11 m. N.E. Padua. And ST. ANGELO, in Naples, *Principato Citra*, 16 m. S.S.E. Campagna. Pop. 2500.

ANGELO DE LOMBARDI (ST.), a town of Naples, *Principato Ultra*, 48 m. E. Naples. Pop. 6000. It is the seat of a bishopric, has a college, and two parish churches. In 1664 it was almost entirely destroyed by an earthquake.

ANGERBURG, a town of Prussia, prov. E. Prussia, cap. circ., on the Angerap, 60 m. S.E. Konigsberg. Pop. 3000. It has a castle and manufactures of woollen stuffs and leather. The Angerap falls, a little to the S. of the town, into the large, irregularly shaped, shallow lake of Mauer, celebrated for the abundance and excellence of its eels.

ANGERMUNDE, a town of the Prussian States, prov. Brandenburg, reg. Potsdam, cap. circ., on the lake Munde, 43 m. N.N.E. Berlin. Pop. 3900. It has manufactures of hats, woollen stuffs, tobacco, &c.

ANGERS (the *Juliomagus* of Cæsar, afterward *Andegavia*, and hence *Angers*) a very ancient city of France, dep. Maine et Loire, of which it is the capital, on the Mayenne, which divides it into two portions, near its confluence with the Loire and the Sarthe, lat. 47° 28′ 9″ N., long. 0° 33′ W. Pop. 29,066. The town is surrounded by massive walls, built in 1214 by John, king of England. Speaking generally, it is ill built, and is mean looking; houses partly of wood and partly of slate, streets narrow and crooked; but since 1814 it has been in several respects improved, and some good streets have been opened. Principal objects of attraction, cathedral and castle. The first, begun in 1225, and of large dimensions, has its front ornamented by two symmetrical spires, each 225 feet high. It contains the monument of Margaret of Anjou, daughter of René, king of Sicily, and wife of Henry VI. of England. The old castle, the former residence of the dukes of Anjou, stands on a rock having the river at its foot: its plan is that of a vast parallelogram, surrounded by high massive walls, defended by deep fosses cut out of the rock, and by eighteen towers: but these, with one exception, have now been reduced to the height of the walls. The castle serves at present as a prison for the city, and a powder magazine: on the side next the river it is becoming ruinous. Angers is the seat of a royal court for the depts. of Maine et Loire, Sarthe, and Mayenne; has a tribunal of original jurisdiction, an academy, a royal college, a school for deaf and dumb, a secondary school of medicine, &c. It has also a school of arts and trades, being, with the exception of that at Chalons-sur-Marne, the only school of the kind in France. Of the pupils, 450, nominated by the minister of commerce and public works, receive their instruction wholly or partly at the expense of the state. The other pupils pay 500 fr. a year. Each department is entitled to send three pupils to this school—the instruction of one to be entirely gratuitous, the others paying, one a fourth part, and one a half of the ordinary pupils. It has also a school of design; an agricultural society; a public library, containing 25,000 volumes; a museum with about 600 pictures, many of them good; a botanical garden; a cabinet of natural history; a theatre, &c. There is a royal manufacture of sailcloth, a cotton mill, with manufactures of linen, serges, handkerchiefs, hosiery, starch, &c., a sugar refinery, a wax refinery, and tanneries. The town has two mean bridges, and it labours under a deficiency of water, that of the Mayenne not being fit for use. Mr. Inglis describes Angers as a place where provisions of all sorts, including fruit, vegetables, and wine, are extremely cheap, and states, that for £10 a year a very commodious house may be had. But there are no villas in the vicinity, and the town is itself far from agreeable. Previously to the revolution Angers was the seat of a university.

founded in 1808; it had also a celebrated academy of *belles lettres*; and such was the fame of its riding-school, that it was attended by Peter the Great. It suffered severely during the wars of La Vendée; but, as previously stated, since the peace of 1815 it has been comparatively prosperous, and various improvements have been effected. Angers has produced several distinguished persons, among whom may be specified Bodin, the author of the work *De la République*, published in 1576, Menage, and Bernier, the famous traveller.

The slate quarries in the vicinity of Angers, whence the town is built, and which also supply large quantities of roofing slates to other depts., are immense excavations; but for details with respect to them, see the art. MAINE ET LOIRE. (*Hugo, France Pittoresque*, art. *Maine et Loire; Inglis's Switzerland*, p. 346, *&c.*)

ANGERVILLE, a village of France, dep. Seine et Oise, 22 m. S. Versailles. Pop. 1526.

ANGHIARI, a town of Italy, prov. Arezzo, near the Tiber, 18 m. E. Arezzo, Tuscany. Pop. 3000. It is celebrated for the victory obtained near it in 1440 by the Florentines under Piccinini over the forces of the Duke of Milan. This also is the name of a village of the Veronese, and of a decayed city on the banks of the Lago Maggiore.

ANGLES, a town of France, dep. Tarn, cap. cant., 16 m. E.S.E. Castres. Pop. 2870. This is the name of several small villages in other parts of France.

ANGLESEY (the *Mona* of Tacitus), an island and co. of N. Wales in the Irish Sea, separated from the mainland of Britain by the Menai Strait. It is of a triangular form, extending, Holyhead included, about 27 m. from E. to W., by about 20 from N. to S.; area, 173,440 acres; surface gently undulating; climate temperate, but liable to fogs; there is in most parts a great deficiency of wood, and it has generally a bare, uninviting aspect.

Since 1768 Anglesey has been famed for its mineral riches, the celebrated copper mines in the Parys mountain having been discovered in the course of that year; but they have now greatly declined. (See *Amlwch.*) Lead ore and asbestos have also been found; and coal is wrought to some extent at Maltraeth. Soil various, but principally a fine loamy sand, which, when properly cultivated, is highly productive. Agriculture is not, however, in an advanced state. So late as 1810, it was no uncommon thing to take five white crops in succession, most of which were so poor as hardly to pay their expense; but an improved system is being gradually introduced. The stiff loams, of which the extent is considerable, are usually manured with a sort of shelly sand. Principal crops, oats, barley, wheat, and potatoes, the latter being grown more extensively than in any other part of N. Wales. Grazing is the principal object of the farmer's attention. About 6500 head of cattle are annually sent from the island to the mainland, exclusive of considerable numbers of sheep. Average rent of land, in 1810, was 7*s.* 6*d.* an acre. Manufactures unimportant, consisting merely of some of the coarser descriptions of woollens. Chief towns, Beaumaris, Holyhead, Amlwch, Llanerchymidd, and Llangefni. It is divided into three cantreds, six comots or hundreds, and seventy-three parishes. The pop., which in 1776 amounted to 19,786, had increased in 1841 to 50,890. It returns a m. to the H. of C. for the co., and one for the boroughs of Beaumaris, Holyhead, &c. Co. constituency in 1836-37, 1439.

Anglesey seems to have been a principal seat of the Druids. The Romans, under Suetonius Paulinus, having taken it after a fanatical resistance, A.D. 61, cut down the groves of the Druids, *sævis superstitionibus sacri*, and seem to have exterminated both the priests and their religion. (*Tacit. Annal.*, lib. 14, § 30.) It was subjugated along with the rest of Wales, by Edward I., and was incorporated with England and made a county by Henry VIII. The two most important events in its recent history are the discovery of the Parys mines, in 1768, and the building of the Menai bridge in 1825. (See *Davies' N. Wales, passim; Beauties of England and Wales*, art. *Anglesey*, *&c.*)

ANGLET, a town of France, dep. Basses Pyrénnées, near Bayonne, famed for its excellent white wine. Pop. 2944.

ANGOLA, DONGO, or AMBONDE, a kingdom of the W. coast of Africa, extending from 8° 20′ to 9° 15′ S. lat., and from 14° to 18° or 19° E. long. On the N. it is separated from Congo by the Danda; on the S. the Coanza divides it from the districts of Quassima and Libolo; on the W. it has the Atlantic ocean; and on the E. it is joined by the territories of Genga and Dala Quieuca (the W. portion of the Maiemba of the Jesuits), and the powerful interior kingdom of Matamba. It is rectangular shaped, lies nearly parallel to the equator, being about 350 m. in length from E. to W., 50 or 60 m. in width from N. to S.; containing an area of probably not less than 18,000 or 20,000 sq. m. (*Blaeu. Geog.*, ix., 129; *Barbot's Voy. to Congo*, 515; *Lebat*, i., 59; *Bowditch, Map of Congo, Angola, and Benguela; Acc. of Discov.*, 22, 143.)

This country is properly a part of Congo, from which, however, it has been politically separated since the middle of the 16th century, when a chief, whose name or title was *Angola*, made himself independent of the king of Congo, and gave its present designation to his new kingdom, the native name of which was Dongo, or Ambonde. (*Lebat*, ii., 427; *Barbot*, 520.) It is very powerful among the neighbouring states, the paramount authority of its monarch being acknowledged by several districts, some of them greatly exceeding itself it extent.

Physical Character.—Angola is extremely mountainous, with no plains, except upon the sea shore, and some small plateaus on the sides and in the gorges of mountains. The land appears, however, to be making advances on the sea, and forming islands, which are wholly of an alluvial and level character; such is the isle of Loanda, lying a short mile from the coast, and forming, with the Cabo Palmarcinho, one of the most convenient harbours on the W. coast of Africa. The cape itself is also a plain of the same nature, and very evidently in a state of progress westward. (*Pigafetta, Del Regno di Congo*, 10; *Merolla, Viaggio del Congo* 70; *Barbot*, 521; *Lebat*, i., 60.)

The country is extremely well watered (as, indeed, is the whole of Congo); the principal streams are the Coanza, Benga, and Danda, which run nearly parallel to each other, and to the equator; the first and last forming the S. and N. boundary of the country.

Soil, Climate, &c.—The worst soil in Angola is that upon the coast, and the more recently formed islands, which is sandy, but by no means desert; for, at any time, by digging to the depth of a foot, or less, an abundant supply of good water may be procured. It is, however, a remarkable fact, that at the ebb tide these temporary wells are always found rather brackish, while at the flood their contents are perfectly sweet. (*Pigafetta*, 16; *Lebat*, i., 89.) The mountain sides, and the valleys of the rivers, present all the richness of soil common in equatorial countries which are well irrigated, though the useful productions of the land are said to be chiefly owing to the agricultural labours of the Portuguese. (*Barbot*, 516.) The climate is excepted by Adams (*Remarks*, 200) from the general charge of malignity towards Europeans under which the rest of tropical Africa labours; and Pigafetta expressly states that the "habitation is excellent, the air beyond all credit temperate." *La stanza vi è benissima, l'aere oltre ad ogni credenza temperato* (p. 6). He adds also, what would imply that the mountains are of no great height, that the heat on their summits is not less than that in the plain. Situated so near the equator, Angola might be expected to have two dry and two rainy seasons in each year; but this does not appear to be the case; and, indeed, the accounts of travellers on this point are sufficiently conflicting. Pigafetta says (p. 7) that the rainy season is from April till August; Lebat (i., 107), that it occupies November, December, and sometimes January. Barbot (522) leaves it uncertain, but makes the dry season extend from May to September, though he remarks that this period is not without an intermixture of pleasant showers; and to add to the uncertainty on this point, Degrandpré (*Voyage à la Côte d'Or d'Afrique*, i., 4) says, that rain *seldom* falls, and *never* abundantly; that the showers are irregular, and that *no one time is more subject to them than another*.* The same author remarks, that the abundant dews are fully sufficient for the development of vegetation, and in this he is borne out by all the other authorities. The trade wind blows steadily from S.W. to S., the sea breezes commonly from W.S.W., and the land wind from E. by N. Angola is, however, sufficiently remote from the internal deserts to prevent the ill effects that might be otherwise feared from this breeze. Tornadoes are not unfrequent; and at such times the wind shifts violently to all points of the compass, settling, finally, into the direction of the trade. (*Barbot*, 522; *Pigafetta*, 7.) Gold and silver have been discovered in the mountains near the coast; but no gold dust is found, though it appears to have existed formerly. Iron is produced plentifully through the energy of the Portuguese; and copper is said, but upon no clear evidence, to exist in the interior. (*Degrandpré*, i., 38; *Bowditch*, 19.) Lead, sulphur, and petroleum are among the mineral treasures; but there is no mention of precious stones. The natives are reasonably good miners, under European direction; and it is asserted that the subterraneous exhalations produce as sensible a difference in *their colour*, as the same cause is known, in many cases, to effect in that of Europeans. (*Lebat*, i., 95.)

Vegetation has the magnificence observable in all well-watered tropical regions. A species of the Ficus, called by the natives Ensada, and possessing the property of dropping its branches to the ground, where they take root and germinate like a new plant, is very abundant. Some of these trees, resembling small thickets more than individual plants, extend to more than 1600 paces in circumference, and are

* If this be accurate, the discrepancies of the other authorities may arise from their observations having been made in different years; though it must be remarked that Lebat asserts ten or twelve days to be the utmost difference ever observed in the recurrence of the rainy seasons. (i., 106.)

said on good authority to be capable of sheltering 3000 men! The ensada is an extremely useful plant; the fruit, which resembles an ordinary fig, is an important article of food; its outer bark assists in the construction of huts and boats, and an inner coating, being washed and beaten, is manufactured into cloth. (*Barbot*, 521.) The date, and every other species of palm, the citron, orange, lemon, ananas, guava, banana, cocoa, tamarind, mangrove, and every fruit and forest tree common to the equinoctial regions, grow here spontaneously, and reward the least expense of labour with the most abundant return. The same remark holds good with regard to yams, potatoes, and the whole race of roots; and though the climate be too hot for the production of European grain, yet four species of wheat, Turkish, Sarasin, Massingo, and Luno, are raised in great abundance. Pulses of all kinds are likewise plentiful; and the sugar-cane, pepper-vine, and a plant called mandioca, of which a very good bread is made, absolutely struggle with man for the possession of the soil. Many trees produce fine gum or resins; and, in a word, there is scarcely a vegetable production which Angola does not, or under reasonable care might not be made to produce. (*Lebat*, i., 112–152; *Barbot*, 516: *Degrandpré*, i., 5–14.) The woods and mountains shelter lions, tigers, leopards, hyænas, and wolves; of smaller wild animals, there are foxes, wild cats, &c. Of the useful animals, there are hares, rabbits, all the species of antelopes, stags, goats, and hogs of the Chinese variety. The sheep, cow, horse, and ass are strangers to the country, and known only as importations from Europe; but the zebra, elephant, and rhinoceros traverse the woods, and the hippopotamus is found in the rivers. The civet cat is also a native of this country, which likewise abounds in monkeys of all kinds, among which is the chimpanzee, the most intelligent of the tribe. A species of wild dog is said to be found in the woods.

To enumerate the birds of this part of Africa, would be to give a list of almost interminable length; all that are found in other tropical regions, and some that are peculiar, flourish here. The fisher and the sergo, or honey bird, are among the latter, and with whole hosts of pelicans, and nearly every variety of parrot, constitute the chief characteristic of Angolian ornithology. Reptiles numerous, consisting of centipedes, scorpions, and exceedingly venomous serpents. Some of the lizard tribe, as the cameleon, are less dangerous than these; but the rivers swarm with two or three species of crocodiles, which make fishing dangerous, and bathing all but fatal. Life is as abundant in the waters as on the land; and besides the usual tenants of the deep, as whales, sharks, dolphins, mackerel, oysters, crabs, &c., the coasts and rivers possess an endless list of creatures, the very names of which are unknown in Europe. Insects are as numerous, beautiful, and destructive as in other tropical climates; and among the last-named class, termites or white ant stands pre-eminent. (*Lebat*, i., 152–206; *Degrandpré*, i., 14–38; *Barbot*, 516–518.)

Population, Customs, &c.—The population is dense for a barbarous country, the monarch being called Incue, from the great number of subjects under his command. (*Barbot*, 520.) It is not, however, easy to assign the amount, but it may perhaps be taken at between 2,000,000 and 3,000,000. The capital city, St. Paul, or Loanda, contains 8000. (*Bowditch*, 8.) The natives have few of the negro peculiarities in form or feature: they are of ordinary stature, well limbed, and, but for their colour, very like the Portuguese, by whom they are surrounded. Blue eyes and red hair are not uncommon among them. (*Pigafetta*, 6.) Society is divided into four classes, two free and two slaves; the first two consisting of nobles and husbandmen or artificers; the others of slaves, native born, and those acquired by war or foreign purchase. Marriage is an extremely simple ceremony, a mere agreement between the husband and the father of the woman. The appearance of the first tooth in children is an important epoch, the infant being then carried from house to house, and gifts extorted from friends and strangers. For the rest, they do not differ much from other negroes. Dancing is a favourite diversion, and a religious rite; and, like other African people, their ceremonies are defiled with blood and cruelty. Money is of several kinds: *marked cloths*, the shell of a small fish called simbo, a red wood brought from Malemba, and iron, which last was introduced by the Portuguese. The year is divided into 12 months, and the week into 4 days, of which the last is observed as a sabbath. (*Lebat*, i., 110, 379, &c.; *Barbot*, 518; *Merolla*, 367, &c.; *Bowditch*, 20, &c.) The country is parcelled out into an immense number of little lordships, each under a magistrate called a sova. It would appear that the king is able to control the petty despotism of these governors; for they have neither wealth nor any other distinction, except the personal respect paid to them, which is, however, very profound, to distinguish them from any other freemen. (*Barbot*, 520.) The religion of the bulk of the people is Feticism, differing in nothing from that on the coast of Guinea (*see* ASHANTEE); but there are many Christian families among the natives, and at one time the Jesuits had converted nearly the whole population, and established a regular form of church government. (*Pigafetta and Merolla, passim*; *Barbot*, 521; *Lebat*, ii., 244, *et seq.*) But the effect of their labours has now nearly vanished, and the negroes have relapsed into the idolatrous rites of their ancestors. (*Degrandpré*, i., 47; *Bowditch*, 112.) The language is less barbarous, and more uniform, on this coast than in most other parts of Africa; the whole of Congo, that is the country between the Coanza and the Zaire, speak a dialect of the same tongue (*Merolla, passim*; *Barbot*, 512), which, according to Degrandpré (i., 56), is extremely musical and flexible; not particularly sonorous, but very agreeable; with a perfect syntax, and bearing in some points a resemblance to the Latin. He imagines that this fact may prove a guide to the obscure history of these countries, may it not, however, be owing solely to the long intercourse which has existed between the natives and the Christian priests from Portugal and Italy?

Trade, &c.—The Portuguese established a factory on this coast in 1485 (*Merolla*, 76); and their power has been constantly extending to the present time. Two of their establishments are 700 m. inland; but it is not to be supposed that they possess a sovereignty over the whole country to this extent. Their posts, called fairs, or *faiceria*, are little more than entrepôts for trade; though the residents exercise a political power in their immediate neighbourhood. These establishments have, it is said, excited a spirit of manufacture and commerce among the negroes; but we doubt much whether this has been the case in any considerable degree; and whatever beneficial influence they might otherwise have had, has been countervailed and nullified by the support given by the Portuguese authorities to the slave trade. In fact, Angola has been for a lengthened series of years the great mart whence slaves have been obtained for Brazil; and though their importation into the latter be now, in appearance at least, prohibited, it is believed that they are still conveyed in great numbers to that country. Bowditch gives the following account of the trade of Angola in 1803:

Exports from Angola to Lisbon, 1803.

		Reis.
171	Quintals of Ivory, 1st quality . .	1,770,000
77	. . . 2d quality . .	462,000
41	. 3d quality . .	164,000
289	Quintals	2,396,000

No account is taken of the gold, iron, or other commodities exported; but in 1804, the amount of ivory was much greater, namely, in gross,

750¾ Quintals	4,779,600 R

Imports from Lisbon to Angola, 1803.

	Reis.
Provisions	18,889,769
Woollen goods	87,174,602
Linens	25,474,860
Portuguese manufactures	36,882,655
Drugs	1,572,120
Asiatic manufactures	240,878,320
Metals	23,665,115
Sundries	45,425,600
	R. 480,789,012

In 1804, the gross imports amounted to 410,128,585 reis but in this there is no account of drugs or Asiatic manufactures. (*Bowditch*, 9, *et seq.*, 146–153.)

ANGOLA, p. t., capital of Steuben co., Ia., 174 m N.N.E Indianapolis, 549 W. It contains a court-house, jail, two schools, 53 scholars. Pop. 166.

ANGORA, or ENGOURI, the ancient *Ancyra*, a city almost in the centre of Natolia, near the N.E. source of the Sakariah, or *Sangarius*, lat. 40° 29′ N., long. 33° 18′ E After undergoing various revolutions, it fell under the dominion of the Romans; and being embellished and otherwise favoured by Augustus, the inhabitants erected to his honour the celebrated *Monumentum Ancyranum*, a temple of white marble, on the walls of which an account of the principal events in the life of Augustus was inscribed. The ruins of this edifice still remain. Notwithstanding the demise of its powerful patron, Ancyra continued to flourish It was here that St. Paul preached to the Galatians; and when the Christian religion spread itself over the world, it was advanced to the dignity of an apostolic see. It came into the possession of the Turks in 1359. The great battle between the Turkish sultan Bajazet, or Bayazid, and the famous Tartar conqueror Tamerlane, or Timur Bec, which ended in the total defeat and capture of the former, was fought in the vicinity of Ancyra in 1401. It continues to be one of the principal cities of Natolia; and is celebrated for manufactures of stuffs made of the silk-like wool of the *goat of Angora*, a variety peculiar to the country round the

town. The population has been variously estimated at from 35,000 to 80,000. We incline to think that the first number is nearest the mark. (*Tournefort, Voyage du Levant*, ii., p. 463, 464; *Kinneir's Journey*, p. 63, &c.)

ANGOSTURA, a city of S. America, rep. of Venezuela, on the S. bank of the Orinoco, about 240 m. above its embouchure, and about 190 feet above the level of the sea, lat. 8° 8′ 10″ N., long. 63° 55′ 20″ W. It was founded in 1568. Owing to its situation in a fertile country, on a great navigable river, and its command of a very extensive inland navigation, Angostura is favourably situated for commerce, which it carried on to a very considerable extent previously to the revolutionary struggles. These, however, have diminished its commerce, wealth, and population. The last, which in 1807 was estimated at about 8500, does not now, perhaps, exceed 3500. It has a large hall, where meetings of Congress have been held; with a hospital and a college; and is defended by a fort on the opposite bank of the river. Though low, and subject to inundation, the climate is temperate and not unhealthy.

ANGOULEME (an. *Iculisma*), a city of France, dep. Charente, of which it is the capital, on a plateau elevated 221 feet above the river Charente, lat. 45° 38′ 57″ N., long. 0° 9′ 18″ E. Pop. 16,530. The old town, which occupies the summit of the plateau, has narrow, crooked streets, and is *triste et laide*. In its centre stands the old castle in ruins. The walls, with which the city was formerly surrounded, have been mostly demolished, and the ramparts converted into public walks. The new town, built on a declivity to the S. of the old town, has broad straight streets, good houses, and is rapidly increasing. There are also several suburbs, of which Houmeau is the most important. Its port is the entrepôt of the commerce of Angoulême: cathedral ancient, but neither large nor beautiful; and, with the exception of the fine bridge over the Charente, and an obelisk erected in honour of the present Duchesse d'Angoulême, the other public buildings deserve no particular notice. The *Place d'Artois* is a fine promenade, and, from its elevated position, commands a view of the valley of the Anguienne and the surrounding country. Angoulême is the seat of a court of assizes, and of a tribunal of original jurisdiction; and has a royal college; a society of agriculture, arts, and commerce, which publishes memoirs once a month; a public library with 16,000 volumes; a cabinet of natural history; a school of midwifery; a foundling hospital, and various other hospitals; a theatre, &c. It had also a royal marine school, the buildings of which are on a large scale: this institution was, however, closed in 1830; but it is expected that it will be re-opened. Angoulême is celebrated for the extensive paper manufactures in its vicinity: it has also fabrics of serges and coarse stuffs, and earthenware; with extensive distilleries, which produce excellent brandy; tanneries, a cannon foundry, a manufactory of arms, a sugar refinery, &c. The *pâtés de perdrix aux truffes d'Angoulême* are sent to all parts of Europe.

Angoulême is very ancient, being noticed by Ausonius, who flourished in the 3d century. Balzac was a native of the town and so also was the detestable regicide, Ravaillac, the assassin of Henry IV. In the vicinity are the ruins of the famous abbey *de la Couronne*, founded in 1122, long the ornament of the Angoumois. This venerable and magnificent structure, after escaping the revolutionary phrensy, was demolished in 1808. The fountain of Trouve, a few miles from Angoulême, is, next to that of Vaucluse, the most celebrated in France. (*Hugo, France Pittor.*, art. *Charente*, &c.)

ANGOUMOIS, the name of a district in France previously to the revolution, nearly but not exactly coinciding with the dep. Charente. It formed, in connexion with the district of Saintonge, one of the provinces into which France was formerly divided.

ANGRA, a town and seaport of the island of Terceira, one of the Azores, being the capital of the archipelago, and the residence of the governor, at the bottom of a deep bay or creek, lat. 38° 38′ 33″ N., long. 27° 12′ 33″ W. Pop. variously estimated at from 10,000 to 15,000. It is beautifully situated on a hill, rising gradually from the sea. The streets are broad and regular, and the houses, generally of three stories, though gloomy, are well built. It is well supplied with water, but the streets, as well as the inhabitants, are notwithstanding excessively filthy. There are a great number of churches, and it formerly also had various monasteries and convents; but the latter have been dissolved, and the buildings applied to other uses. As a port, Angra has nothing to boast of: it is open to all winds from the S.S.W. by the S. to the E. The swell from the S.W. in particular, which sets round mount Brazil, on the W. side of the bay, is tremendous. In the bad weather months, large vessels anchor in the mouth of the bay, abreast of St. Antonio, in 28 and 30 fathoms, to be ready instantly to put to sea in the event of storm setting in, the coast affording no shelter. The town is defended on the W. by the citadel at the foot of mount Brazil, and on the opposite side of the bay by the fort of St. Sebastian, the distance between them being about ¾ m. (*Boid's Azores*, p. 210; *Purdy's Sailing Directions for the Atlantic*, p. 230.)

ANGRA, a sea-port town of Brazil, prov. Rio Janeiro, bears S.W., distant 78 m. from the city of that name. Its port admits large ships; it is fortified by two redoubts, and has some commerce.

ANGUILLA, or SNAKE ISLAND, so called from its tortuous figure, an island belonging to the British in the W. Indies, being the most northerly of the Carribbee islands, and separated by a narrow channel from St. Martins: lat. 18° 8′ N., long. 63° 12′ E. It is from 25 to 30 m. in length, by about 6 m. in breadth. Pop. about 3000, of whom about 2400 are blacks. Surface flat; soil chalky, and not very productive: and there is a deficiency both of wood and water; climate healthy. By far the largest portion is uncultivated. It produces some sugar and cotton, with maize and provisions of various kinds. A salt lake in the middle of the island furnishes (or at all events did furnish) a considerable supply of salt. It has no good harbour. The town, an inconsiderable place, stands near the N.E. extremity of the island. The colonists elect their chief magistrate, subject to the approval of our governor of Antigua. (*Edwards*, ed. 1819; and *Official Returns*.)

ANGUILLA, one of the Bahama islands, about 20 m. long, and 5 broad; lat. 23° 36′ N., long. 79° 20′ W.

ANGUILLARA, a town of Austrian Italy, on the Adige, 23 m. S. Padua. Pop. 2300. This also is the name of a town of nearly equal size in the Papal states, on the S. side of the lake Bracciano, 16 m. N.N.W. Rome.

ANGUS, see FORFAR.

ANHALT, a country of Germany, almost surrounded by the Prussian dominions, having Brandenburg on the N., Prussian Saxony on the E. and S., the county of Mansfeldt on the S.W., and Brunswick and the Prussian circ. of Magdeburg on the N.W. Its greatest length is 60 m., and its breadth varies from 12 to 16. Principal river the Elbe, by which it is intersected. Area, 1018 sq. m. Pop. 146,233. It is mostly flat, and is very fertile and well cultivated. It is divided into the three duchies of Anhalt-Bernburg having an area of 339 sq. m., and a pop. (in 1833) of 45,135; Anhalt-Cœthen, area 318 sq. m., pop. (in 1833) 40,153; and Anhalt-Dessau, area 360½ sq. m., pop. (in 1837) 60,945. The consent of the states is necessary to the imposition of any new tax. Inhab. mostly Protestants and very industrious. The entire principality furnishes 1224 men to the army of the confederation. Principal towns, Dessau, Zerbst, Coethen, and Bernburg.

ANHOLT, a small Danish island in the Cattegat, nearly halfway between Lessoe and Zealand. A light-house, having the lantern elevated 112 feet above the level of the sea has been erected on its most easterly promontory, in lat. 56° 44′ 20″ N., long. 11° 38′ 51″ E.

ANIANE, a town of France, dep. Herault, cap. cant., 16 m. W. by N. Montpellier. Pop. 2650.

ANIMALLY or ANIMALAYA, a town of Hindostan, prov. Coimbetoor, on the Alima, lat. 10° 31′ N., long. 77° 1′ E. In 1800 it contained 400 houses.

ANJAR, a town of Hindostan, prov. Cutch, cap. district of same name, ceded in 1816 to the British, near the N.E. shore of the gulf, lat. 23° 3′ N., long. 70° 11′ E. It is fortified, but not strongly. In 1819 nearly half the town was destroyed by an earthquake, but only 165 persons lost their lives. The pop. was estimated in the following year at 10,000. (*Hamilton's E. I. Gazetteer*.)

ANJENGO, a sea-port town of S. Hindostan, prov. Travancore, 18 m. N.N.W. cape Comorin, lat. 8° 37′ N., long. 76° 53′ E. The E. I. company had a factory here from 1684 to 1813, when it was abolished. The best coir cables on the Malabar coast are made here and at Cochin; and pepper, coarse piece-goods, drugs, &c., are exported.

ANJOU, an ancient prov. and gov. of France, now distributed among the depts. of Maine et Loire, Loire Inferieure, Vendée, Indre et Loire, Sarthe, Ile et Vilaine, Mayenne, and Deux Sèvres.

ANKLAM, a town of the Prussian states, prov. Pomerania, cap. circ. on the navigable river Peene, about 7 m. from where it falls into the strait separating the isle of Usedom from the continent. Pop. 7000. It was founded in 1188; has a college and three hospitals, with manufactures of cloth, linen, &c., and carries on a considerable trade in ship-building and shipping.

ANKOBER, a town of Abyssinia, cap. prov. Efat.

ANKOI, or ANDKHO, a town of Bokhara, 75 m. W. Balkh, lat. 36° 48′ N., long. 66° E. Mayendorff says that it has nearly 4000 houses, which would infer a pop. of at least from 25,000 to 30,000, consisting principally of Arabs. A small river flows past the town; but, as it dries in summer, the inhab. are obliged to supply themselves with water from wells. (*Voyage à Boukhara*, p. 143.)

ANNABERG (ST.), a town of Saxony, circle Erzgebirge, 8 m. S.W. Marienburg. Pop. 4500. It is well built, has

three churches, two hospitals, and a gymnasium, with manufactures of lace and ribands. In its vicinity are mines of iron, tin, cobalt, and silver.

ANNAH, a town of Asiatic Turkey, cap. Sanjiack, on the Euphrates, 160 m. N.W. Bagdad, lat. 34° 10 N., long. 41° 47' E. It is finely situated on the route of the caravans that cross the desert of Mesopotamia. It was surprised in 1807 by the Wahabites, who, after committing all sorts of excesses, set it on fire. The pop. does not probably exceed from 3000 to 4000. The environs are very fertile.

ANNAMABOE, a sea-port town on the Gold coast of, Africa, formerly prov. Fanti, empire of the Ashantees, lat. 5° 5' N., long. 1° 15' E., one of the principal marts for slaves. It was burned by the Ashantees in 1808. Pop. probably from 3000 to 4000.

ANNAMOOKO, one of the Friendly Islands (which see).

ANNAN, a borough, sea-port, m. town, and p. of Scotland, co. Dumfries. The town is situated on the E. side of the river Annan, which is here crossed by a fine bridge of three arches erected in 1824, about 1½ m. above its confluence with the Solway frith, 67 m. S. Edinburgh. Pop. 5033. It is clean, well-built, neat and thriving; has a handsome new church and spire; a good natural harbour, which has been much improved by an embankment constructed at the expense of Mr. Irving of Newton; and an academy well attended. There is here a cotton manufactory, which, in 1837, employed from 120 to 140 hands. Ship-building is also carried on to a considerable extent; but the principal trade of the town consists in the curing of bacon and hams for the Newcastle and London markets; and in the shipping of corn, fat cattle and sheep, by steam, for Liverpool. In 1837 there belonged to the town thirty-four vessels, of the burden of 1639 tons. Annan unites with Dumfries, Kirkcudbright, Lochmaben, and Sanquhar, in returning a member to the H. of C. £10 houses in 1831, 153; constituency in 1837, 179. (*Boundary Report*, p. 137; *New Statistical Ac. of Scotland*, art. *Annan*.)

ANNAN, the river on which the above town is built. It rises on the S. side of Hartfell, a mountain on the confines of the cos. Dumfries and Peebles, near Moffat, and after pursuing a S. course of about 36 m. in a direct line, unites with the Solway frith, 1½ m. below Annan, to which it is navigable. It has near its mouth salmon fisheries, which let, in 1837, for about £550 a-year.

ANNANDALE, the name given to the valley or low grounds traversed lengthwise by the river Annan.

ANNAPOLIS, a town of Nova Scotia, on the S. side of the river of the same name, near where it falls into its estuary or basin, on the S.W. side of the bay of Fundy, lat. 44° 47' N., long. 65° 50' W. The harbour is spacious and secure. This is the oldest European settlement in N. America, having been founded in 1604. It was called Fort Royal by the French; but, on their ceding the prov. to England in the reign of Queen Anne, it received its present name in honour of her Majesty. Notwithstanding it was the cap. of the prov. till the foundation of Halifax in 1750, and its fine harbour, it never attained to any considerable magnitude. At present it does not contain above fifty or sixty houses, shops, &c., and the fortifications and government buildings are going to ruin. (*M'Gregor's British America*, i., p. 360.)

ANNAPOLIS, city and port of entry, cap. of Anne Arundel co. and of the state of Maryland, is situated on the W. side of the Severn, 2 m. from its entrance into Chesapeake bay, 28 S.S.E. Baltimore, 40 E.N.E. W. It was established as the seat of government in Md. in 1699. Pop. 1830, 2623; 1840, 2792. It is regularly laid out with streets diverging from the state-house and the Episcopal church. The state-house is a venerable and handsome building, in which the American congress, during the revolutionray war, held some of its sessions, and in the senate chamber of which Washington resigned his commission at its close. A state library kept in it contains 10,000 vols. It contains also the county buildings and two churches, one Episcopal and one Methodist, a market house, bank, forty stores, two printing-offices, two semi-weekly newspapers, five academies, 97 students, three schools, 181 scholars, and about 300 dwellings. St. John's college, a branch of the university of Maryland, is located here. It was founded by the Roman Catholics, but became extinct, and has been resuscitated under a different direction. It has a president, five professors, or other instructors, 27 students, 190 alumni, and 4000 vols. in its libraries. The commencement is on the 22d of February. There is another branch of the university at Chester, on the eastern shore.

ANN ARBOR, p. v. cap. of Washtenaw co., Mich., 40 m. W. by S. Detroit, 526 W., situated on elevated ground on the W. side of Huron r. It is regularly laid out, and contains a court-house, jail, a bank, four churches, one Presbyterian, one Episcopal, one Baptist, and one Universalist, twenty-seven stores, one flouring-mill, one saw-mill, one woollen factory, one iron foundry, two printing-offices, two weekly newspapers. The University of Michigan is located here, and the academical branch has 70 students. In the t., besides the above, are two distilleries, two breweries, one flouring-mill, and four saw-mills.

ANNE ARUNDEL county, Md., situated in the central part of the state, and contains 730 sq. m. Bounded E. by Chesapeake bay. Patapsco r. bounds it on the N., and Patuxent r. on the S.W. It contained in 1840, 13,854 neat cattle, 18,189 sheep, 31,741 swine, and produced 206,143 bushels of wheat, 26,179 of rye, 266,132 of oats. It had 127 stores, two fulling-mills, two woollen factories, two cotton factories with 400 spindles, four furnaces, five flouring-mills, thirty-three grist-mills sixteen saw-mills, three printing-offices, one weekly and two semi-weekly newspapers, one college, 35 students, thirteen academies, 242 students, thirty-two schools, 1018 scholars. Pop., whites, 14,630, slaves 9819, free coloured 5083; total, 29,532. Capital, Annapolis.

ANNECY, a town of the Sardinian states, cap. prov. Genevois, at the northern extremity of the lake of the same name, 22 m. S. Geneva. Pop. 5700. It is pleasantly situated among hills and mountains; and is thriving and industrious, having establishments for the spinning of cotton and silk, with manufactures of earthenware and glass, vitriol, straw hats, white iron and steel, &c. It is the seat of a bishopric, and is very ancient.

ANNET, one of the Scilly islands, about 1 m. from that of St. Agnes.

ANNONAY, a town of France, dep. Ardèche, being, though not the cap., the principal town of the dep., at the confluence of the Cance and the Deume, 7 m. from the Rhone. Pop. 7689. It is a thriving, improving town, agreeably situated on the elevated uneven ground between the two rivers, with surburbs on the opposite banks; being well, though irregularly built. The only public building worth notice, is an obelisk in honour of the celebrated aeronaut Montgolfier, a native of the place. Annonay is principally distinguished by its manufactures, particularly by that of paper, long reckoned the best in France; and hence the recommendation, so frequently seen in French catalogues, of books being printed on *papier fin d'Annonay*. (See ARDECHE.) It has also manufactures of cloth, woollen stockings, and gloves; establishments for the spinning of cotton and silk, part of the latter of a peculiarly fine quality, being employed in the manufacture of tulles and blondes; with dye-works, tanneries, &c. The town is proprietor of a large nursery; and in its vicinity is the first suspension bridge constructed in France.

ANNSVILLE, t., Oneida co., N.Y., 25 m. N.W. Utica, 118 m. N.W. Albany. It contains two stores, one woollen factory, one grist-mill, thirteen saw-mills, one furnace, three tanneries, twelve schools, 519 scholars. Pop. 1765.

ANNVILLE, p. t., Lebanon co., Pa., 19 m. E. Harrisburg, 129 W. Watered by Swatara cr. and its branches. It contains eleven stores, one fulling-mill, one woollen factory eight grist-mills, five saw-mills, one oil-mill, one distillery, six schools, 194 scholars. Pop. 2949.

ANOPSHEHR, a town of Hindostan, prov. Agra, on the W. side of the Ganges, 68 m. E.S.E. Delhi, lat. 28° 23' N., long. 78° 8' E. It is surrounded by a strong mud wall, and is thickly inhabited. (*Hamilton's E. I. Gazetteer*.)

ANSON, county, N. C., situated in the S. part of the state, and contains 760 sq. m. Yadkin r. bounds it on the E. and Rocky r. on the N., by branches of which it is drained. It contained in 1840, 15,461 neat cattle, 10,4[illegible] sheep, 28,492 swine, and produced 39,991 bushels of wheat, 416,102 of Indian corn, 9,078,659 pounds of cotton, and has seventeen stores, two flouring-mills, thirty grist-mills, thirteen saw-mills, twenty-one distilleries, seven academies, 1[illegible] students. Pop., whites 9633, slaves 5304, free coloured 14[illegible] total, 15,077. Capital, Wadesborough.

ANSPACH, or ANSBACH, a town of Bavaria, cap. circle Rezat, on the Rezat, 24 m. S.W. by W. Nuremburg, lat. 4[illegible] 14' 30" N., long. 10° 30' 15" E. Pop. 16,500. It is surrounded by walls, and has four gates; is the seat of the provincial authorities and of a court of appeal. The objects most deserving of attention are the castle and gardens the formerly belonged to the Margraves of Anspach; the church of St. John, with the tombs of the princes. It has a gymnasium, a hospital, an orphan hospital, a library of 16,0[illegible] vols., with a cabinet of medals, &c.; and manufactures of woollen and cotton stuffs, earthenware, white lead, and playing cards.

ANSTRUTHER (EASTER and WESTER), two [illegible] considerable royal burghs and sea-ports of Scotland, co. Fife, on the N. shore of the frith of Forth. Pop. of both boroughs, with their parishes, in 1831, 1437; Parl. const. 1837, 63. They unite with Crail, Pittenweem, and Killrenny, in returning a m. to the H. of C.

ANTALOW, a considerable town of Abyssinia, cap. prov. Enderta, 85 m. S.S.E. Axum. Pop. probably about 6000.

ANTEQUERA, a large town of Spain, Andalusia, 30 [illegible] N.N.W. Malaga, lat. 37° 9' N., long. 4° 32' W. Pop. 20,1[illegible]

It is built partly on a hill, and partly on a plain; has an old castle built by the Moors, several churches and convents, with establishments for the spinning of silk and cotton, and fabrics of paper, morocco leather, and soap. There are in its neighbourhood quarries of marble of different colours, and plaster, a salt lake, and a mineral spring. It was taken by assault from the Moors, by Ferdinand, afterwards king of Arragon, in 1410.

ANTES, p. t., Huntingdon co., Pa., 116 m. W.N.W. Harrisburg, 172 W. It contains four stores, four grist-mills, thirty-eight saw-mills, one furnace, eight schools, 560 scholars. Pop. 2154.

ANTHEME (St.), a town of France, dep. Puy de Dome, cap. cant. on the Ance, 9 m. E. Ambert. Pop. 3901.

ANTHONY (ST.), FALLS OF, in the Mississippi river, about 2000 miles above its entrance into the gulf of Mexico, in 54° 13′ N. lat., 93° 40′ W. long. The river is 627 yards wide above the falls, and 209 yards below. An island divides the river into two parts. The perpendicular fall is 17 feet high, with 58 feet more of a rapid below, so that the fall from some distance below appears higher than it is. When the river is high, its presents a grand appearance, and a beautiful rainbow is formed in the rising spray. The country around is highly picturesque. The falls are passed by a portage 260 rods long.

ANTHONY, (ST.), a cape on the coast of S. America, Argentine republic, being the S. extremity of the estuary of the La Plata, lat. 36° 15′ 19″ S., long. 56° 37′ W.

ANTIBES (an. *Antipolis*), a sea-port town of France, dep. Var, cap. cant. on the Mediterranean, 22 m. E.N.E. Frejus, lat. 43° 34′ 40″ N., long. 7° 7′ 50″ E. Pop. 5939. Being an important station on the side of Italy, Antibes is pretty strongly fortified. It is the seat of a tribunal of commerce, and of a school of navigation. The port, which is circular, of considerable size, and easy access, is formed by a mole projecting from the town, the distance from its extremity to the point on which fort Carré is built being only about 150 fathoms. In most parts the port is shallow; but within and near the mole there are from 15 to 18 feet water. The inhabitants are principally employed in the fishing and curing of sardines and anchovies.

Antibes is very ancient, having been founded by a colony from Marseilles, 340 years B.C. It was afterwards occupied by the Romans, by whom it was fortified and embellished. Having been destroyed by the Saracens towards the end of the 9th century, it continued in a comparatively neglected state, till it was again fortified by Francis I. and Henry IV. It was unsuccessfully besieged by the English and Imperialists in 1746. (*Hugo, France Pittoresque*, art. *Var.*)

ANTICOSTI, a large island in the mouth of the St. Lawrence, between 49° and 50° N. lat., and 61° 43′ and 64° 35′ W. longitude. It has an unfavourable soil, is without a single good harbour, and is uninhabited, with the exception of the attendants on the light-houses, one of which has been erected on its E. point, and another either has been or is about to be erected on its W. extremky.

ANTIGUA, an island belonging to Great Britain, in the West Indies, being one of those denominated the Windward islands. It was called by the natives Xaymaca, but Columbus gave it the name of Santa Maria de la Antigua. It is about 25 m. N.E. Montserrat, and 40 m. N. Guadaloupe. It is oval-shaped, being 20 m. in its greatest length, and contains about 108 sq. m., or nearly 70,000 acres. The pop. has decreased since 1774, when it had 2500 whites, and 37,808 slaves. In 1837 the people of colour and whites together were only about 2000; and the blacks, all of whom were enfranchised in 1834, about 33,000. It has little of the mountainous character of the neighbouring islands, the greatest elevation being only 1210 feet. On approaching it from the sea, instead of mountains clothed with rich foliage and luxuriant vegetation, a barren rugged coast, almost destitute of verdure, presents itself. A few miles, however, from the shore, the prospect is more pleasing, the country being agreeably diversified with hill and dale; and when not parched by the droughts to which it is subject, green fields of cane, clumps of feathery bamboos, flowers of dazzling brilliancy, and verdant cliffs hung with beautiful varieties of intertropical plants, enchant the voyager. The island has neithes fountain nor river, and but a few scanty springs among the hills. Rain water, preserved in tanks, is substituted, and it is found particularly light and pleasant to the palate. The soil in the high lands is a reddish clay on a substratum of marl; that in the low lands a rich dark mould on a substratum of clay. The climate is remarkable for its want of moisture, though the average fall of rain be 45 inches. The dew is scanty, and the rainy season very uncertain, but it may be said generally to extend from June to the end of the year. The alternations of temperature are very slight, the thermometer seldom ranging more than 4° in 24 hours. The deaths among the white troops for the last 20 years, according to Captain Tulloch's tables, was 40·6 per 1000 of mean strength. Among the black troops, 28·9. The sugar cane is the principal article of cultivation; but sufficient ground provisions are also procured in favourable seasons for the supply of the inhabitants. The crops vary considerably. In the years 1770, 1773, 1778, there was no produce of any kind, the canes and ground provisions being destroyed by drought, and the inhabitants would have perished, but for the importation of flour and cornmeal from America. The total value of imports in 1833 was £170,334 ster., the principal of which were grain, meal, and flour, cotton manufactures, linens, woollens, and fish. In 1834, the value of the imports was £176,076. There would seem to have been a very extraordinary falling off in the exports of produce from Antigua since 1834, in consequence, partly, perhaps, of deficient harvests, but more, as we apprehend, of the emancipation of the slaves. The principal imports into the United Kingdom from Antigua in the undermentioned years, have been—

	Sugar.	Rum.	Molasses.
1834 —	257,177 cwts.	71,445 gals.	87,892 cwts.
35 —	174,818 —	67,051 —	75,985 —
36 —	135,482 —		
37 —	62,170 —	11,536 —	26,993 —

The shipping entered inwards in 1833, was 33,654 tons, employing 2270 men; outwards, 28,009 tons, and 2163 men. The legislature is composed of a governor, a council of 12, and an assembly of 25 members. The courts of equity and law are the same as in Great Britain. The governor for the time being acts as chancellor of the court of equity, and suitors have a right of appeal from his decrees to the king in council, on giving security for costs. The militia consists of 89 officers, and 993 rank and file. There are ten public or free schools, and four private, fifteen infant, and many Sunday schools, giving instruction, in all, to nearly 1000 children. The manners, customs, and habits of the people differ in no degree from those of the other West Indian Islands. The revenue, in 1831, was £16,097, the expenditure £15,708. The island contains six towns and villages, viz., St. John's, Parham, Falmouth, Willoughby Bay, Old Road, and James Fort. St. John's, the capital, on the N.W. side of the island, lat. 18° 22′ N., long. 64° 42′ W., is regularly built, partly on a high rock, connected with the mainland by a causeway, which is, however, submerged at high water. In the harbour there is sufficient depth of water for merchant vessels, and perfect security in all winds. English Harbour, on the S. side of the island, is, however, the best harbour in Antigua, and is, indeed, one of the best in the West Indies. It has water for ships of any size, and is well sheltered in all weathers. It has a dock-yard, a naval hospital, and every convenience for careening and repairing ships. (*Blunt's American Navigator*, p. 402.) Antigua is the oldest W. I. colony, after St. Kitt's and Barbadoes, in possession of the English, having been acquired in 1632. Its planters have been remarkable for their leniency to the slaves, who were finally enfranchised in 1834. The amount awarded to Antigua out of the £20,000,000 granted for the freedom of the slaves, was £425,866 7*s.* 0½*d.*, those of Anguilla included. The average value of each slave was reckoned at £14 12*s.* 3*d.* (*Edward's; Parl. Papers, &c.*)

ANTILLES, see WEST INDIES.

ANTIOCH (vulg. *Antakia*) (*Antioch*), properly Antiocheia, (Ἀντιόχεια), a famous city of Syria, and once the residence of its sovereigns, on the left bank of the Assy (*Orontes*), 20 m. above its mouth; 32 m. E. Aleppo, and 20 m. S. Iskenderoun, in lat. 36° 12′ N., long. 36° 15′ E. The population, which at its most flourishing epoch probably amounted to 400,000, is now reduced to from 6000 to 10,000, of whom about a tenth part may be Christians, and about the same proportion Jews.

Modern Antioch does not cover more than a sixth part of the area of the ancient city, the walls of which, though ruinous, may still be distinctly traced throughout their whole circuit. The Bab-Boulous (Gate of St. Paul), the entrance from the E., is now ½ m. from the nearest houses; and, in every other direction except the W., the buildings have similarly receded from their old limits. Volney describes it as a wretched collection of huts, built of mud and straw, with narrow and miry streets, and exhibiting every appearance of misery and desolation. Kinneir, however, says that "the houses are in the Turkish fashion, small, but neatly built of hewn stone." But though this be the case with some of them, the majority are constructed of slight materials; and, unlike the houses of other Syrian or rather Eastern towns, have sloping roofs covered with thin tiles. There are ten or twelve mean and unimportant mosques, with low minarets; but in this city, so famous in the annals of Christianity, there is not at present a single Christian church! The baths and bazars are numerous, but neither exhibit anything remarkable. It has manufactures of coarse pottery, cotton stuffs, leather, &c.; but the greater part of the inhabitants are engaged in the cultivation and manufacture of silk.

All traces of its famous theatres, its circus, and its magnificent baths, have irretrievably perished. For about ½ m. on the E. of the town, a part of the ancient pavement still exists; and on the S. are the ruins of an aqueduct, which conveyed a supply of water from the foot of the Djebel Okrah (an. *Mt. Cassius*). The old walls are, however, interesting monuments. The situation of the ancient city was most delightful. It occupied the summits and slopes of two considerable hills, and the plain between them and the river. Over these hills and across this plain, the walls were built nearly in a rectangular form, inclosing a space of several m. in circumference. They are of various ages, part being, apparently, as old as the first foundation of the town, part referable to the æra of Roman power, and part the work of the crusaders. They are carried over the beds of mountain torrents, and down the sides of almost perpendicular precipices, filling up the intervening gorges and ravines, so that they vary from 20 or 30 feet in height to upwards of 70. The oldest portion of the walls is also the most perfect; it stands upon a rock, and, having been originally well built, has resisted the influence of time and the shocks of earthquakes. There are two bridges, one of five arches with piers, cut out of the rock, across a ravine; and one of inferior dimensions, across the Orontes. In the sides of the mountains to the S.E. of the town are numerous excavations, apparently intended for cemeteries or catacombs, some of which are now used as places of worship by the Christian population.

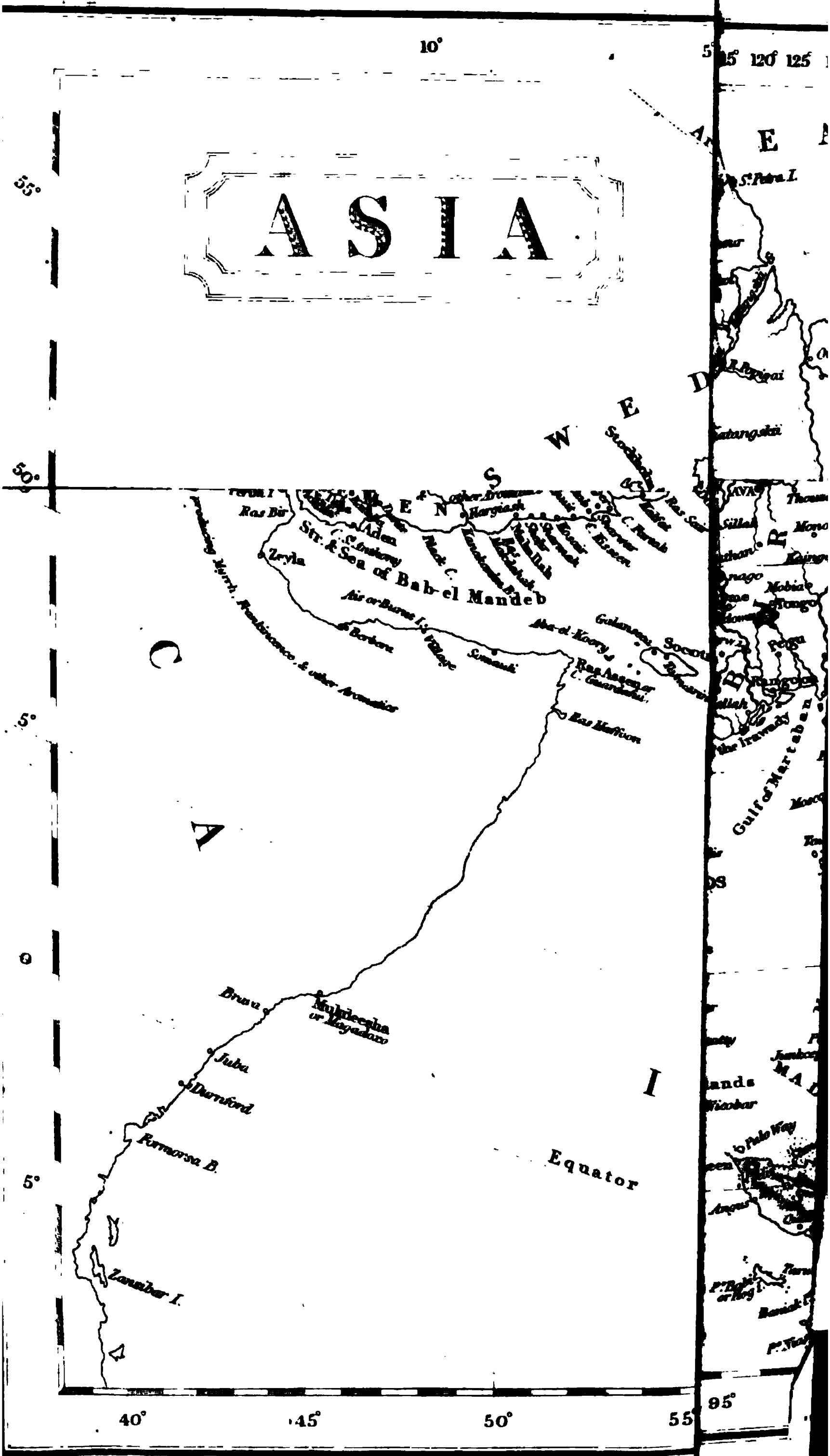
The ancient Syrian name of Antioch is said to have been Riblath; but being enlarged and beautified by Seleucus Nicator, he gave it, B.C. 301, after his father, the name of Antioch. It became at once the capital of the Macedonian kingdom of Syria, and continued for nearly 2½ centuries to be the residence of the monarchs of the Seleuceidan dynasty. About 65 years B.C., the conquests of Pompey brought Antioch, with the whole of Syria, under the control of Rome. At this æra it consisted of four distinct towns, each having separate fortifications, the whole being surrounded by a common wall; hence it was sometimes called Tetrapolis. Under the Romans, Antioch continued to advance in importance: it was the centre of an extensive commerce, the residence of the governor of Syria, the frequent resort of the emperors, and the most celebrated town of the empire (the capital only excepted) for the amusements of the circus and the theatre. It is intimately connected with the early history of Christianity, the doctrines of which were planted in it by Paul and Barnabas; and in it, also, the term *Christian* had its origin as a distinctive appellation. (Acts, xi. 26). It has suffered severely on many occasions from earthquakes. One of the most celebrated and disastrous of these calamities occurred A.D. 115. The emperor Trajan, who had just concluded his victorious Parthian campaign, being then in the city, it was crowded with troops and strangers from all parts of the ancient world. The shocks are said to have continued for a lengthened period, and to have been most severe; the emperor himself narrowly escaped with some bruises, and many thousands of individuals were buried in the ruins of the city. (*Ancient Univer. Hist.*, xv., 138, 8vo ed.) It again suffered severely from similar catastrophes in the years 340, 394, 396, 458, 526, and 588; the last destroying, it is said (but such statements are almost always much exaggerated), above 60,000 persons. Notwithstanding these repeated inflictions, and its devastation by Chosroes the Persian in 548, it revived again and again, and continued to be the "Queen of the East," and a place of great importance, till 638, when it fell under the power of the Saracens. In 1098 it was taken by the crusaders, and continued to be the capital of a Christian principality till 1269, when it was taken by the Egyptian sultan, by whom it was partially demolished. It was added to the Ottoman empire by Selim I., in 1516; but its commercial importance had already vanished; and it has continued, under the barbarous sway of the Turks, to decline till it has reached its present state of comparative insignificance.

The valley of the Orontes spreads, in the neighbourhood of Antioch, into a fertile plain, 10 m. in length, and 5 or 6 in width; the town and river, occupying the extreme edge, being close to the bounding mountains on the S.E. The soil is excellent, consisting of a rich alluvial deposit, producing figs, olives, vines, and mulberries in great abundance. The deserted space within the old walls are one continued garden; but in general the country is ill-cultivated, being abandoned to the Turkmans and other wandering tribes. Pliny speaks of a part of Antioch lying on the right bank of the river. (*Hist. Nat.*, v. 21.) This must have been a suburb, and probably, as in the case of Aleppo, as extensive as the town within the walls; but no vestiges of it now remain.

Modern critics and travellers differ in opinion as to the site of the grove, and village of Daphne, and temple of Apollo, in the immediate vicinity of Antioch. Gibbon has given the following description of this long-famous seat of religion and pleasure. "At the distance of 5 m. from Antioch, the Macedonian kings of Syria had consecrated to Apollo one of the most elegant places of devotion in the pagan world. A magnificent temple rose in honour of the god of light; and his colossal figure almost filled the capacious sanctuary, which was enriched with gold and gems, and adorned by the skill of the Grecian artists. The deity was represented in a bending attitude, with a golden cup in his hand, pouring out a libation on the earth, as if he supplicated the venerable mother to give to his arms the cold and beauteous Daphne; for the spot was ennobled by fiction, and the fancy of the Syrian poets had transplanted the amorous tale from the banks of the Peneus to those of the Orontes. The ancient rites of Greece were imitated by the royal colony of Antioch. A stream of prophecy, which rivalled the truth and reputation of the Delphic oracle, flowed from the Castalian fountain of Daphne. In the adjacent fields, a stadium was built by a special privilege which had been purchased from Elis: the Olympic games were celebrated at the expense of the city; and a revenue of £30,000 sterling was annually applied to the public pleasures. The perpetual resort of pilgrims and spectators insensibly formed, in the neighbourhood of the temple, the stately and populous village of Daphne, which emulated the splendour, without acquiring the title, of a provincial city. The temple and the village were deeply bosomed in a thick grove of laurels and cypresses, which reached as far as a circumference of 10 m., and formed in the most sultry summers a cool and impenetrable shade. A thousand streams of the purest water springing from every hill, preserved the verdure of the earth and the temperature of the air; the senses were gratified with harmonious sounds and aromatic odours; and the peaceful grove was consecrated to health and joy, to luxury and love. The vigorous youth pursued, like Apollo, the object of his desire, and the blushing maid was warned by the fate of Daphne to shun the folly of unseasonable coyness. The soldiers and the philosophers wisely avoided the temptation of this sensual paradise, where pleasure, assuming the character of religion, imperceptibly dissolved the firmness of manly virtue. But the groves of Daphne continued for many ages to enjoy the veneration of natives and strangers; the privileges of the holy ground were enlarged by the munificence of succeeding emperors; and every generation added new ornaments to the splendour of the temple."—(*Calmet, Dictionnaire de la Bible*, art. *Antioche; Decline and Fall*, cap. 23; *Volney*, ii., 130; *Browne*, 390–392; *Kinneir*, p. 149–161; *Robinson*, ii., 273–277.)

ANTIPAROS (an. *Oliaros*), a small island of the Grecian Archipelago, group of the Cyclades, between Paros and Siphanto, 1½ m. W. of the former, and 16 m. E. of the latter. It is about 7 m. in length from N. to S. by about 3 m. in breadth, its highest point being in lat. 36° 39′ 40″ N., long. 25° 3′ 60″ E. It consists of a mass of marble covered with a moderately fertile soil; and exclusive of some cotton and wine, it produces barley enough to suffice for its inhab. consisting of some 60 or 70 families who live in a miserable village about 1 m. from the shore, and are partially employed in fishing. Though hardly worthy of notice in other respects, this island is famous for an immense subterranean cavern or grotto. Its entrance is on the side of a hill under a low arch. The passage thence to the cavern is long, narrow, and in parts precipitous. "The mode of descent is by ropes, which are either held by the natives, or joined to a cable fastened at the entrance round a stalactite pillar. In this manner we reached the spacious chambers of this truly enchanted grotto. The roof, the floor, the sides of a whole series of magnificent caverns are entirely invested with a dazzling incrustation, as white as snow. Columns, some of which were 25 ft. in length, pended in fine icicle forms above our heads; fortunately, some of them are so far above the reach of the numerous travellers who during many ages have visited this place, that no one has been able to injure or remove them. Others extend from the roof to the floor, with diameters equal to the mast of a first-rate ship of the line. The last chamber into which we descended surprised us more by the grandeur of its exhibition than any other. Probably there are other chambers still unexplored." (*Clarke's Travels*, vi., p. 125, 8vo ed.)

The æra of the discovery of this cavern in modern times is not ascertained; but it was first made fully known by the visit paid to it by M. Nointel, ambassador from France to the Porte, who descended into it with a cortège of no fewer than 500 individuals, at Christmas, 1673. On this occasion it was brilliantly illuminated. His excellency and suite remained in it for three entire days, and celebrated high mass at midnight on Christmas in this most magnificent of subterranean temples. It was also visited by the learned and excellent traveller, M. Tournefort, who supposed that he saw in it conclusive proofs of his singular theory as to the vegetation of stones. (*Tournefort, Voyage du Levant*, i., p. 185–195, 4to ed.) It has since been repeatedly visited by other travellers; and it is said that the smoke from the nu-



ASIA
Str. & Sea of Bab-el Mandeb
Aden
Zeyla
Berbera
Ras Bir
Hargiash
Socotra
Ras Aseer or C. Guardafui
Ras Haffoon
Mukdeesha or Magadoxo
Brava
Juba
Durnford
Formosa B.
Zanzibar I.
Equator
Gulf of Martaban
Rangoon
Pegu
Tongo
St. Petra I.
Ava
Nicobar
10°
55°
50°
5°
0
40°
45°
50°
55
95°
115° 120° 125

orches that have thus been necessarily carried
s recesses, have somewhat impaired its otherwise
d splendour and brilliancy.

VARI, a town of Turkey in Europe, 19 m. W. Scu-
in a short distance of the sea, lat. 42° 15′ 20″ N.,
4′ 15″ E. Pop. 3500. It is defended by a castle
p rock, is the residence of a Greek archbishop, and
pôt of the merchandise of the valley of Drin.

INE, p. t., Clark co., Ark., 86 m. S.S.W. Little
1 W. Pop. 245.

ING, a market town of Belgium, prov. Hainault, 4
Tournay. Pop. 1951.

NIN (ST.), a town of France, dep. Tarn et Ga-
, cant., in a spacious valley at the confluence of
ron and the Bonnette, 22 m. E.N.E. Montauban.
The waters of the Bonnette being charged with
of various tanneries established on its banks, ren-
wn at times unhealthy. It has fabrics of serges
woollen stuffs, paper, &c.; and a considerable
is carried on in leather, prunes, and juniper.

IO (ST.), a city of Mexico, cap. prov. Texas,
ear the source of the river of this name. Pop.
g. 101° W., lat. 29° 50′ N.

AIGUES, a town of France, dep. Ardèche, cap.
. W. Privas. Pop. 2029.

AIN, a town of France, dep. Ille et Vilaine, cap.
he Couesnon, 14 m. S.E. Dol. Pop. 1651.

M, a marit. co. of Ireland, prov. Ulster; its great-
being about 55 m., and its greatest breadth about
ying N. and E. the Irish sea, S. lough Neagh and
W. Londonderry, from which it is separated for
r part by the Bann. It contains 758,866 imperial
which 225,970 are mountain and bog, and 49,790
g part of lough Neagh, which lies principally
county. The N. and E. districts are mountain-
here are some high rugged grounds in other places,
at ground along lough Neagh is in many places
ll, however, there is a large extent of fertile
roperty in very great estates, but large portions
them are leased forever. Farms small: agricul-
t respects similar to that of Down (which see):
nt of land 15s. an acre. The country round Bel-
ore of an improved appearance, and the people
rderly and industrious than anywhere else in Ire-
en manufacture universally diffused; the manu-
cotton has also been successfully introduced, with
s of inferior importance. A coal mine is wrought
stle, but not extensively, the coal being of bad
Besides the Bann and the Laggan, which form
S. boundary, it is watered by many smaller
t none of them are navigable. The N. coast is
e for its basaltic columns, which are particularly
s at the far-famed Giant's causeway (which
s lofty promontories of Bengore and Fairhead are
reat measure, composed of these columns. There
erable salmon fisheries on the coast. Carrickfer-
county town; but the principal towns are Belfast,
Antrim, and Larne. Pop., in 1831, 262,860; in
09: it contains eight baronies and seventy-seven
and returns five m. to the H. of C., viz., two for
ro for Belfast, and one for Carrickfergus. Parl.
cy of co., 1836–37, 3496.

, an inland town of Ireland, cap. co. Antrim,
er, on the Six-mile-water, near its embouchure in
gh, 94 m. N. Dublin. Its ancient name was En-
Natrum-neagh, and it is supposed to owe its origin
ous house founded by a disciple of St. Patrick. It
uch in the wars with the Danes and with the first
settlers; and in 1641 was burned by the Scotch, un-
ue. In 1798 it was the scene of a sanguinary con-
een the king's troops and the insurgents, in which
r were victorious, but with the loss of Lord O'Neil,
mmanded a regiment of militia. Pop., including
the suburb of Parkgate, amounted in 1821 to 2485,
31 to 2655, being half the pop. of the par. of same
which it is situated. In 1834 the pop. of the par.
3; of which 750 were of the E. church, 1252 Roman
s, and 3541 Prot. dis. The town, lying in the bosom
rtle valley, consists of two main streets, with several
es. Houses substantially built of stone, several ex-
g proofs of considerable antiquity. Its public buildings
e par. church, an ancient edifice, but lately repaired;
ious R. C. chapel; two places of worship for Presby-
; two for Methodists; and one for the society of
s. There are schools for boys and girls, under the
ment of Erasmus Smith; and several private schools,
of which nearly 700 children receive instruction; also
licity society, and a savings' bank. Previously to the
the borough sent two m. to the Irish parl. The court-
in the centre of the town, is used for holding general
s of the peace in April and October, and petty ses-
on alternate Tuesdays. The court-leet and court of record of the manor of Moylenny—within which the town is, and at which the seneschal, appointed by the Marquis of Donegal, presides—are also held here; the latter court decides pleas of debt to the amount of £20. Part of the market-house is used as a bridewell. Close to the town is the residence of Viscount Ferrard, and about ½ m. distant is a perfect pillar-tower, 95 ft. high, with a conical roof. The manufactures are those of linen, cotton, and hosiery. There are several bleach-greens in the neighbourhood, and two paper-mills, one of which first introduced into Ireland the process of making paper in webs like cloth, instead of separate sheets. There are also several flour and meal mills, and a brewery: 8445 bushels of malt were manufactured here in 1836. Most of the grain is sent to Belfast, its conveyance being facilitated by the contiguity of lough Neagh, where a small quay has been erected at the mouth of the Six-mile-water. Markets are held on Tuesdays for grain, and on Thursdays for general purposes; and fairs on Jan. 1, May 13, Aug. 1, and Nov. 12. No tolls are now levied. A branch of the Ulster bank was opened in 1836. The post-office revenue increased from £348 in 1830, to £432 in 1836. Two *caravans* and three cars convey passengers between Antrim and Belfast three times a week. The average number carried is fifteen each trip. (*Stat. Survey; Railway Report.*)

Antrim, p. t., Hillsborough co., N.H., 28 m. W. by S. Concord, 460 W. Bounded E. by Contoocook river, by branches of which it is drained. Gregg's pond covers 200 acres, and is 80 ft. deep. It has two stores, one fulling-mill, four grist-mills, seven saw-mills, twelve schools, 421 scholars. Pop. 1225.

Antrim, t., Franklin co., Pa., 11 m. S. Chambersburg. Watered by Conecocheague creek and its tributaries. It contains Greencastle borough, and has five churches, seven stores, one woollen-factory, two flouring-mills, nine grist-mills, eight saw-mills, thirteen schools, 493 scholars. Pop. 4061, of whom 931 are in the borough.

Antrim, t., Sheawassee co., Mich. Pop. 117.

Antrim, t., Crawford co., O. Pop. 261.

ANTWERP (Ger. *Antwerpen*, Fr. *Anvers*), a marit. city of Belgium, cap. prov. and arrond. of same name, on the N. bank of the Scheldt, 26 m. N. Brussels, 32 m. E. Ghent; lat. 51° 13′ 16″ N., long. 4° 24′ 10″ E. It is in the shape of a bow, the arch being formed by the walls and the chord by the river, and is well fortified. A strong pentagonal citadel, built by the Duke of Alva, in 1567, and improved by the French, stands on the south side of the town, which is farther defended by various forts on both sides the river. Though much declined from its former prosperity, Antwerp is a well-built, fine old city, and is in various respects highly interesting. The principal street, Place de Meer, rivals any in Europe. It is about the width of Portland-place, but the variety and richness of the architecture render it far more magnificent. The older and narrower streets, bordered by lofty houses with their gables to the street, are singularly picturesque. Altogether, it is supposed to contain about 10,000 houses, mostly built of stone, and had in 1835 a pop. of 75,362. The great boast of Antwerp is its cathedral, a superb Gothic structure, begun early in the 15th and not finished till the 16th century. Its spire, of the most beautiful and delicate workmanship, is said by Schreiber and others to be 466 ft. high; but, according to a statement in the Penny Cyclopædia this is 100 ft. too much, the height being there affirmed to be only 366 ft.! The interior corresponds in grandeur with the exterior, and it contains two famous pictures of Rubens; one of which, the Descent from the Cross, is generally regarded as his *chef-d'œuvre*. Of the other churches, that of St. James, which contains the tomb of Rubens, St. Andrew, and St. Paul, are the most celebrated. All of them are adorned with fine paintings. The Bourse, or exchange, is one of the finest buildings of its class in Europe: it is said to have served as a model for the London exchange, burnt down in 1837. The *Hôtel de Ville*, a marble structure, rebuilt in 1581 after being destroyed by fire, is a magnificent fabric. The convent of the Recollets has been converted into a museum, in which is a superb collection of paintings, including many that were formerly scattered among the different churches and convents. It comprises some of the choicest specimens of the masters of the Flemish school; as Reubens, Van Dyke, Jordaens, Van Vlen, Martin de Vos, &c. Antwerp has a theatre; an academy of painting (St. Luke's), which originated in the 16th century; a royal academy of the fine arts, established in 1817; an academy of sciences: an Athenæum, or college: Latin, medical, and naval schools; a gallery of sculpture; a public library with 15,000 vols.; a botanical garden; with various learned societies, and many good private collections of works of art. Its charitable institutions include several hospitals, asylums, and workhouses. It is the seat of the courts of assize for the province; of a tribunal of original jurisdiction, a commercial tribunal, &c. The people have every appearance of being in comfortable circumstan-

ces, and are quiet and orderly. The upper classes speak French, and the lower Flemish.

The manufactures are very various, and are of considerable importance and value. They comprise fabrics of silk and cotton stockings, thread and tape, linen, calico printing, &c. Embroidery, bleaching, and ship-building are extensively carried on. The business of sugar-refining employed, in 1834, from 500 to 600 individuals, and consumed about 6,000,000 kilogs. of raw sugar. The lapidaries of Antwerp are very skilful in the cutting of diamonds and other precious stones. Of fifty-four mills for various purposes, within the city in 1834, only *one* was wrought by steam, two by wind, and one by water, the rest being moved by horses! In this respect there is certainly much room for improvement.

The depth of water in the river opposite to the city is from 32 to 40 ft. at ebb tide, with a rise at springs of from 12 to 14 ft.; and as this depth is increased towards the sea, Antwerp is a peculiarly eligible situation for the formation of dock-yards and the building of large ships. Its capability in this respect did not escape the observation of Napoleon, who endeavoured to raise it to the first rank as a naval arsenal. His plans in furtherance of this object were judiciously devised on a very grand scale, and were zealously prosecuted. Two large basins, capable of admitting ships of the line, were excavated on the N. side of the town; one comprising an area of 17, and the other of 7 Eng. acres. Attached to these was an extensive dock-yard, with careening and repairing docks, store-houses, &c., all planned and executed in the best and most approved manner, and at an immense expense. On the downfall of Napoleon, the dock-yard, with its fortifications, &c., was completely destroyed; and it was even debated whether the two great basins should share the same fate! Luckily, however, they were preserved; and, being converted into commercial docks, are of the most signal service to the trade and navigation of the city. The fleet and naval stores in the arsenal, when it surrendered to the allied forces in 1814, were divided; two thirds being assigned to France, and one third to the king of the Netherlands.

Her fine river, and the numerous canals with which it is united, give Antwerp great advantages as a commercial emporium; and during the early part of the 16th century she was one of the first trading cities of Europe. Owing, however, to the ascendency and jealousy of the Dutch, and the supineness of her rulers, her foreign trade was nearly annihilated during the 17th and 18th centuries. But the navigation of the Scheldt, which had been formally closed by the treaty of Westphalia, was re-opened on the occupation of Belgium by the French, and since the peace of 1815 the trade of the town has rapidly increased; and the probability seems to be, looking at the natural advantages of her situation, that it will go on increasing. The greater part by far of the foreign trade of Belgium centres here. The imports consist principally of coffee (16,000 tons), sugar (18,000 tons), cotton, tobacco, and all sorts of colonial produce; with cotton stuffs, wine, hardware, ashes, coal, hides, pepper, indigo and other dye-stuffs, &c. The timber used in ship-building is mostly brought by water from the interior. The exports consist chiefly of corn, linseed, flax, bark, and madder, linen, lace, carpets, tallow, hops, &c.

The increase in the trade of Antwerp is evinced by the fact, that while only 681 ships arrived at the port in 1824, and 800 in 1825, there arrived, in 1836, 1245 ships of the burden of 176,079 tons, and in 1837, 1426 ships of the burden of 225,030 tons. In 1836, fifty-nine ships belonged to the port of the burden of 8754 tons. In 1837 six new vessels were launched.

The railway from Brussels to Antwerp, 28¼ m. in length, was opened throughout the whole distance in 1836. It has been signally successful, and will, no doubt, be of great advantage to both cities.

Antwerp has produced many distinguished men, being the birth-place of the painters Teniers, Van Dyke, Jordaens, and Crayer; the geographer Ortelius, the admirable engraver Edelink, &c.*

Antwerp is very ancient. Ludovico Guicciardini, in his *Descrizione di Paesi Bassi*, describes it in 1560 as a city of vast wealth and the most extensive commerce; adding, that it was no uncommon thing for 500 ships to enter and leave its port in a single day! And making every allowance for the exaggeration obvious in this statement, there is no doubt that it then enjoyed a more extensive foreign trade than any other city in the N. of Europe. But this prosperity was destined to be of short duration. In 1576 it was sacked and partly burned by the Spaniards. In 1585, it was invested by the famous Alexander Farnese, prince of Parma, who took it after a lengthened and memorable siege. After its capture, the greater part of its merchants and principal people emigrated to Amsterdam and other towns in the United Provinces, carrying with them their capital, skill, and connexions. The ruin of its trade dates from this epoch, and was consummated by the Dutch obtaining the command of the river, and by the stipulation in the treaty of Westphalia, by which, as already seen, it was regularly closed. In 1794 it fell into the hands of the French, who made it the capital of the department of Deux Nethes, and held it till 1814. On the revolt of the Belgian provinces in 1830, the Dutch garrison continued to hold the citadel for the king of the Netherlands: and the latter having refused to make it be evacuated, agreeably to the determination of the great powers, a French army of 65,000 men, under Marshal Gerard, entered Belgium in November, 1832, to compel its evacuation. The details of the siege are well known. The trenches were opened on the 29th November; and after an obstinate, but not a skilful or energetic defence, the citadel surrendered on the 24th of December. (*Vandermaelen, Dict. Géog. de la Prov. d'Anvers*, p. 4–20; *Barrow's Family Tour in S. Holland, &c.*, p. 11–41; *Murray's Handbook;* and *Private Information.*)

* It is stated in various publications that Rubens was a native of Antwerp; but in point of fact he was born at Cologne, on the 29th June, 1577, and was ten years old when, on the death of his father, his mother, a native of Antwerp, carried him to that city. (*Biographie Universelle*, art. *Rubens.*)

ANWEILER, a town of Bavaria, circ. of the Rhine, on the Queich, 7 m. W. Landau. Pop. 2000. It has tanneries, and distilleries of Kirschwasser. Its castle, now in ruins, built by the emperor Frederic, was long the depôt of the jewels of the crown.

ANZIN, a village of France, dep. du Nord, in the immediate vicinity of Valenciennes. Pop. 4182. This is the seat of the richest coal mines in France. They have been wrought since 1734, and some of the pits are as much as 1500 feet in depth. The mines of Anzin, Vieux Condé, Furnes, &c., are said to employ in all above 4000 work-people, and to furnish annually nearly 3,000,000 hectolitres of coal. The cost of its production is estimated at 65 cent. the hectolitre; and it is stated that a company at Anzin, for working the mines, clears annually nearly 3,000,000 fr. profit, in consequence of the increased production and price of coal, caused by the high duties on foreign coal. (*Hugo, France Pittoresque*, art. *Nord.*)

AOSTA, a town of the Sardinian states, cap. prov. same name, at the confluence of the Butera with the Dora, at the opening of the two valleys of the Great and Little St. Bernard, 49 m. N.N.W. Turin. Pop. 7000. It has straight, broad streets; and many of the houses having gardens attached to them, it covers a large extent of ground. It is the seat of a council of justice, and of a bishopric; but is principally distinguished by its ruins of edifices constructed by the Romans, among which are a triumphal arch, a superb gate with three arches, the remains of an amphitheatre, &c. It received different names from the Romans, being sometimes called *Civitas Augusti*, *Augusta Prætoria Julia*, and *Augusta Salassiorum;* the latter from its having been the capital of the Salassii, subdued by Terentius Varro.

APENNINES, the name given to the mountain system which traverses the whole length of Italy.

Umbrosis mediam qua collibus Apenninus
Erigit Italiam, nullo qua vertice tellus
Altius intumuit, propiusque accessit Olympo.
Mons inter geminas medius se porrigit undas,
Inferni superique maris; collesque coercent,
Hinc Tyrrhena vado frangentes æquora Pisæ,
Hinc Dalmaticis obnoxia fluctibus Ancon.

Lucan., lib. i.

At its W. extremity this range is so closely connected with the Alps, that it may be considered as an extensive offset of that great system. It is difficult to determine where the Alps terminate and the Apennines begin: some think that the road over the Col di Tende (7° 40′ E. long.) forms the boundary; others assign for it that road which begins on the N. at Alessandria, runs in the valley of the Bormida to Acqui, Signo, &c.), and terminates on the coast at Savona, rising at its highest point to 4460 ft. above the sea; others think that the sea Alps extend to the road which leads from Novi on the N. over the pass of the Bocchetta (2550 ft.) to Genoa on the coast.

The *Northern* Apennines extend from the pass of the Bocchetta E., with a slight declination to the S. through three degrees of longitude (9° and 12°) to Monte Falterona, lying E. of Florence.

The *Central* Apennines extend from Monte Falterona S.E., with some bends to either side, as far as Monte Velino, or nearly two degrees of latitude (44° and 42°).

The *Southern* Apennines, beginning at Monte Velino, run E.S.E. between 42° and 41° N. lat. South of the last-mentioned parallel, between the towns of Conza, Acerenza, and Verosa, and at the sources of the Brandano, they divide into two branches; of which the E., extending first E. and then S.E., terminates at Capo de Leuca, opposite Corfu. The W. range runs between 41° and 39° N. lat., nearly S.S.E., and between 39° and 38° S.S.W., and terminates with the Capo dell' Armi on the S. extremity of the straits of Messina.

The *Northern* Apennines, which, near the pass of the Bocchetta, are of moderate height and breadth, occupy farther E. a greater space and rise to a higher elevation. The highest summits are between 10° and 11° E. long., where Monte Pellegrino rises to 5161 ft., and Monte Cimone to 6975 ft. Their northern declivity towards the plain of the Po is gradual and gentle; but towards the S. they lower with an abrupt and steep descent. On the S. they send off some lateral ranges, among which that which is called the Alpi Apuani is the most remarkable, and highest. It leaves the main range W. of Monte Pellegrino, and is separated from it by a considerable depression. It extends southward, and terminates at a short distance from the sea, near the towns of Massa and Carrara. It forms a mass of finely-crystallized limestone nearly thirty miles long, and scarcely ever at a less elevation than 4000 feet above the sea, rising often much higher, as in the Panni della Croce, at the S. extremity, 6102 ft., the Pizzo d'Uccello, at the N.W. end, 6147 feet, and Monte Salro, near Carrara, 5540 ft. On the slope of the last-mentioned mountain the quarries are worked, from which nearly for 2000 years, the finest marble has been extracted.

Besides the road over the Bocchetta, the N. Apennines are traversed by three roads; one begins at Parma, runs over the plain to Fornovo, and then in the valley of the Taro to the upper part of the range, which it crosses by the pass of Cento Croci; it afterward descends to Pontremoli, and then, mostly in the valley of the Magra, to the gulf of Spezia. Farther E. is the road between Modena and Pistoja; it runs through Pavallo, Pieve Pelago, on the west of Monte Cimone, and traverses the range by the pass of Filmalbo. The third road unites Bologna with Florence; it runs from Bologna over the plain of Lombardy to Lojano, crosses the range by the pass of Pietra Mala, at an elevation of 3284 feet, and descends into the valley of the Sieve, whence it passes over a lateral ridge of moderate elevation to Fiesole and Florence.

The *Central* Apennines may be divided into two parts. Between Monte Falterona (S. of 44°) and Monte Sibilla (S. of 43°) their general direction is S.E., and though their upper declivity is very steep, they do not seem to rise to a great elevation, one of the highest summits, Cima de Vernina, hardly exceeding 4000 feet. Between Monte Sibilla and Monte Velino (N. of 40° lat.) the Apennines attain their greatest elevation. Monte Sibilla rises to 7212 ft., and Monte Velino to 8183 ft. Nearly at equal distance from either, and near the source of the Velino, two lateral ranges branch off, which are overtopped by high summits; on that which runs to the S.E., towards the Adriatic sea, is the Gran Sasso d'Italia, whose summit, the Monte Corno, attains 9521 ft. above the sea, and is the highest in the range. On the W. lateral range is the Terminello Grande, 7034 ft. above the sea. Numerous are the lateral ridges which branch off from the central Apennines. Those running towards the Adriatic sea form nearly right angles with the principal range, preserve for some distance a considerable elevation, and lower afterward rapidly but gradually. They terminate with hills, at no great distance from the shore. The lateral ridges, which traverse the much more extensive country between the Apennines and the Mediterranean, run mostly parallel to the principal range, so that nearly all the rivers of this region run in valleys extending S.E. or N.W., and form, as it were, terraces of different elevation, by which the country gradually lowers towards the sea. In these lateral ridges some summits attain a considerable elevation, as Monte Amiata, W. of Radicofani (S. of 43° N. lat.), which rises to 5794 ft.

Two roads traverse the N. portion of the central Apennines. The northern begins on the side of the Adriatic at Fossombrone, on the Metauro; runs S. to Cagli, and passes over the range between this place and Sigillo, whence it continues to Nocera and Foligno, and hence by Spoleto, Terni, and Narni, to Rome. The S. road begins at Ancona, runs S. to Loreto, and hence W. to Tolentino and Belforte; between the last-mentioned place and Foligno, it passes the range at some distance N. of Monte Sibilla. Only one road traverses the southern higher part of the central Apennines. It begins on the N. at Terni, on the Nera, a tributary of the Tiber, passes hence to Rieti and Civita Ducale, on the Velino, whence it traverses the range by a long mountain-pass, which terminates near Aquila, on the Aterno, and thence the road continues to Sulmona.

The undivided portion of the S. Apennines resembles, in part, the central Apennines: its offsets towards the Adriatic run off at nearly right angles; but on the W. it has a lateral ridge, which runs parallel to it for a distance of more than 50 miles; and between it and the principal range extends a longitudinal valley, drained by the Volturno, and its tributary, the Calore: after these rivers have united, they break through the lateral range, and enter into the plain of Terra di Lavoro. The principal range contains some high summits, as Monte Meta, 7264 ft., Monte Miletto, 6720 ft. above the sea. The highest part, however, seems to be the Matere, an enormous mass of chalk rocks, 40 m. in circ., situated at the sources of the Biferno, nearly in 41½° N. lat. On some of its summits snow is stated to be found the whole year.

Near the sources of the river Calore a lateral branch runs off nearly due W., which terminates with a high ridge on the peninsula S. of the gulf of Naples. It contains the Monte S. Angelo di Castelamare, which rises to the height of 4688 feet. The W. extremity of this ridge is the Punta della Campanella, opposite the rocky island of Capri. Monte Gargano, a promontory projecting into the Adriatic, is commonly considered as the E. extremity of another lateral ridge of the Apennines, but it is quite unconnected with that range, being separated from its nearest offset by a low plain, many miles in breadth.

This range is traversed by two roads: one runs from the town of Naples to Capua and Presenzano, and passes over the lateral ridge enclosing the valley of the Volturno to Venafro and Isernia. Between Isernia and Castel di Sangro it crosses the principal range of the Apennines, and from the last-mentioned place it continues to Sulmona and Chieti. The second road strikes off E. from Naples, and passes over the first range by the pass of Monte Virgine; it then descends into the valley of the river Calore, in which it traverses the towns of Avellino and Ariano. E. of the last-mentioned town is the principal range of the Apennines, over which the road passes to Ponte di Bovino, and then enters the great plain of Puglia (il Tavolieri della Puglia), and continues to Foggia, Bari, &c.

The most easterly ridge, arising from the bifurcation of the Apennines, preserves a considerable elevation as far as the town of Altamura; but E. of that it is continued only by a series of hills, called *Le Murgie*, which extend through the whole of the peninsula lying between the Adriatic and the gulf of Taranto. They are interrupted in several places, and terminate at Capo di Leuca.

The other chain runs directly S., and approaches by degrees the shores of the Mediterranean sea: on the E. side of the gulf of Policastro it comes close to it, and continues to run along the sea as far as the gulf of S. Eufemia, where it suddenly turns to the E., but soon again to the S., in which direction it skirts the eastern shores of Calabria, between the gulf of Squillace and Capo Spartivento. In this chain are some elevated summits. Monte Pollino (near 40° N. lat.) rises to 7067 ft. above the sea, and Monte Alto, the highest summit of the great mountain mass, with which the Apennines terminate on the straits of Messina, is 4380 ft. above the sea.

Geology.—The N. parts of the Apennines are, in general, composed of sandstone and chalk. The former is known in Toscana by the name of *macigno*, or *pietra serena*, and several high mountains are composed of it: others consist of chalk, and others of macigno and chalk together. In the S. ranges the chalk formation predominates, especially on the W. side; on the E. declivity sandstone occurs in few places. A great portion of the hilly districts, which extend to the W. of the range, and intersect the plains along the Mediterranean, is composed of lava and other volcanic productions.

This region extends from Monte Vesuvius on the S., to the river Ombrone, in Tuscany, on the N. Near this river is Monte Amiata and Monte Radicofani (3060 ft. high), both volcanic mountains. A volcanic country encloses the lakes of Bolsena and Bracciano, and the rocky masses near Viterbo are also of volcanic origin. S. of the Tiber other volcanic rocks of considerable extent and elevation form the mountains near Albano: here Monte Cavo rises to 3110 ft. above the sea. The country round Rome is overspread with volcanic matter; and the Seven Hills themselves are partly composed of it. A third volcanic region occurs N. of Capua, near Teano, where several heights rise to a considerable elevation, especially Monte St. Croce. Mount Vesuvius and the volcanic country round the town of Naples, constitute the most southerly region of the volcanic tract which skirts the W. side of the Apennines. On the E. side of the Apennines, only a single extinct volcano has been found; it is Monte Vulture, near Melfi, not far from the place where the bifurcation of the range takes place.

The lower declivities of the principal range, and a great part of the lateral ranges, where they do not rise above an elevation of 3000 ft., are commonly clothed with woods, especially evergreen oak and chestnut. The upper parts of the principal range have, in general, an arid soil, or are formed of bare rocks, of fantastic forms, and destitute of vegetation, except a few stunted bushes. The whole range is poor in metals, none of them occurring, except iron ore in a few places, and of bad quality. But in many places excellent marble is met with, and in a few it is worked.

The higher parts of the Apennines begin to be covered with snow in October, and they are not entirely free from it before June. It is deserving of remark, that the quantity of rain falling in the countries E. of the range is much less than that with which those on the W. are favoured. In the

plain of Puglia the rain amounts to about 19 inches annually, while in that of Terra di Lavoro it is 27 inches.

The countries lying W. of the range are subject to frequent earthquakes, and even some parts of the range itself are visited by them. An earthquake in the country lying about mount Matese occurred in 1805, by which 3974 persons lost their lives, and 1513 were wounded.

APENRADE, a sea port town of Denmark, at the bottom of a bay of the same name, on the E. coast of Sleswick, opposite to the N. end of the island of Alsen, lat. 55° 2′ 57″ N., long. 9° 26′ 38″ E. Pop. 3800. It is the cap. of a bailiwick. Its port is shallow, and not very safe; but it has, notwithstanding, a considerable trade in the export of agricultural produce, with distilleries, breweries, tanneries, &c.

APOLDA, a town of Saxony, circle of Weimar-Jena, 9½ m. N.E. Weimar. Pop. 3300. It has a castle, a college, with a bell-foundry, fabrics of cloth and cassimere, and distilleries. Its fairs, four annually, are well attended.

APPALACHICOLA, river and bay, Ga. and Fl. The river is formed by the junction of Chattahoochee and Flint rivers, whence it flows S. into Appalachicola bay, which opens into the gulf of Mexico. The river is navigable for small vessels 70 m. to the junction, and the Chattahoochee, for boats, 400 m. farther.

APPALACHICOLA, p. v., port of entry, and capital of Franklin co., Flor., 135 m. S.W. Tallahassee, 976 W. Situated on a bluff on a peninsula at the mouth of Appalachicola river. It is regularly laid out, and has an Episcopal church, two banks, seven blocks of brick stores and warehouses, and a weekly newspaper. It has considerable trade in cotton. Twenty steam-boats, besides other craft, navigate the river. It is the seat of an admiralty jurisdiction. The tonnage in 1840 was 4054. It has a good harbour, which is visited by many large vessels.

APPELDOORN, a town of the Netherlands, prov. Guelderland, 17 m. N. Arnheim. Pop. 3000.

APPENZELL (CANTON OF), a canton in the N.E. part of Switzerland, the 13th in the Confederation. It is completely inclosed within the territory of St. Gall, and is shaped somewhat like a ham, the knuckle end stretching N.E.-ward; area, 153 sq. m. (7·2 Germ.). Pop. 49,876; being next to that of Geneva the most thickly peopled of the cantons. Its surface consists chiefly of mountain ranges; those of the S. belonging to the higher Alps; the principal of which, the Hoch Sentis, is 8109 ft. high, but having its summit covered with perpetual snow: most of the others belong to the Lower or Fore-Alps (see SWITZERLAND), which enclose numerous small valleys. It is watered by several rivulets, the chief of which is the Sitter, running through its centre; there are also several small mountain lakes. The prevailing geological formations are calcareous; but pudding-stone and sandy or clay soils are likewise found. Climate cold and variable, but not unhealthy. The mineral riches of the canton consist of peat and coal: salt, chalybeate, and sulphurous springs are met with, some of which, as those of Weissbad near Appenzell, and Waldstatt near Herisan, are used as baths. Its forests, mostly of pine and fir, originally extended over the whole surrounding country; but their extent has been greatly diminished with the increase of population and cultivation; and wild animals, game, fish, &c., have become proportionally rare. Before the Reformation, the whole canton was under one government; but at that epoch, part of the inhab. having embraced the Protestant faith, while the other part continued Catholics, violent disputes were kindled between them, which, after much contest, were at length settled by a singular compromise. By an agreement in 1597, the canton was divided into two portions—*Rhodes Interior* and *Rhodes Exterior*. It was stipulated that the former should be appropriated to the Catholics, and the latter to the Protestants. Accordingly, the two parties separated, and formed two independent democratical republics, having each a distinct system of government, police, and finance. Exterior or Outer Rhodes comprises about two thirds of the whole canton (its N. and W. parts), and has 40,080 inhab., engaged chiefly in manufactures; Inner Rhodes has 9796 inh., principally agriculturists. Both republics have but one vote in the Swiss diet, and send their deputy by turns. Except in a few districts at the N.E. extremity, Appenzell produces neither corn nor wine; but the mountains abound with rich pastures, and cattle-breeding forms the chief occupation of the Inner Rhodes. 15,000 cows and oxen, 600 sheep, and 2000 goats are fed there annually, it being a practice to purchase them when lean, and sell them again when fattened: cheese, beer, and a liqueur made from a fine kind of black cherry, are the other products of the agricultural districts. The manufactures of the Outer Rhodes are cotton and linen goods, and embroidery: there are about 10,000 looms, by means of which are woven an average of the same number of pieces of cloth 16 Fr. ells in length. Machinery has not been introduced: weavers work from thirteen to fourteen hours a day. They are dispersed over the country, and combine with their business as manufacturers that of small farmers being, in each case, assisted by their families.

The houses are distinguished by neatness, convenience, and cleanliness; and being surrounded with gardens and hedges, and thickly scattered over the country, give it somewhat of an English aspect. Weavers generally earn from two to five florins (3*s.* 8*d.* to 9*s.* 2*d.*) per week.

Outer Rhodes has communal and lesser councils, and a grand council, composed of the principal magistrates of each commune, which assembles twice a year, and exercises the executive power. The grand council proposes the laws, and submits them for approval to the *landsgemeinde*, or general assembly of all the males of the republic above sixteen years of age, who meet *armed* on the last Sunday in April, in the open air, and either sanction, or put their *veto* on the laws proposed. Bankrupts, paupers, &c., are precluded from voting; and penalties are imposed on others who do not attend. The government of the Inner Rhodes is similar, except that the clergy take more part in it, and that none under eighteen years of age have the right of voting in the general assembly. Public schools are universally established, in which, after the rudiments of education, arithmetic, drawing, and singing are taught. Music is very generally cultivated. Savings' banks and poor-houses are established in every parish, and there are numerous orphan asylums and other charitable institutions. Appenzell furnishes 972 men to the federal army, and contributes 9236 Swiss francs a year to the funds of the union: the expenses of the canton are very trifling, as the services of the magistrates, &c., are gratuitous. The tax on salt is the only indirect one; the poor are not taxed at all. The Appenzellers of the Outer Rhodes are of German, those of the Inner Rhodes chiefly of more southern lineage; all, however, are lively, intelligent, and exhibit much mechanical ingenuity, and, with few exceptions, are said to be moral, well-behaved, prudent, and simple in their mode of life.

In the 7th or 8th century, the Frankish kings bestowed this country on the abbots of St. Gall, and it remained subject to them until 1401, when the inhabitants revolted, and, with the assistance of their neighbours of Glarus and Schwytz, achieved their liberty, defeating the Austrians and the forces of the abbot in several engagements. In 1513 it was admitted into the confederation, with the history of which it is subsequently connected. (*Coxe's Switzerland*, Letter 4; *Picot, Statistique de la Suisse*, 1830; *Helvetic Almanac; Bowring's Report, &c.*, p. 21–27.)

APPENZELL, a town of Switzerland, cant. Appenzell, cap. Inner Rhodes, and seat of its executive council, in a pleasant valley on the left bank of the Sitter, 9 m. S. St. Gall. Pop. 1400. It is dirty and ill-built; has a Gothic church, built in 1069, which contains various banners taken in former wars by the Appenzellers; two convents; a council-house; and two bridges over the Sitter. The annual general assembly of the republic is held here. About 2½ m. S. are the baths of Weissbad.

APPIN, an extensive district of Scotland, co. Argyle, which see.

APPLE CREEK, p. t., Greene co., Ill., 37 m. W. by S. Springfield, 809 W. It contains one school, 30 scholars. Pop. 1566.

APPLE CREEK, p. t., Cape Girardeau co., Mo., 212 m. S.E. Jefferson City, 880 W. It has one school, 22 scholars. Pop. 1393.

APPLEBY, a borough, m. town, and par. of England, co. Westmoreland, of which it is the cap., 230 m. N.N.W. London, 28 m. S.S.E. Carlisle. Pop. of town, 837, of par. 1459. It stands principally on the left bank of the river, on the slope of a hill, and consists chiefly of one broad street, having the castle at the upper end, and the parish church at the lower. The former, the property of the earls of Thanet, is very ancient, part being either of Saxon or early Norman architecture; but it was mostly rebuilt in 1686. The church was rebuilt in 1655, by Lady Pembroke, a great benefactress of the town, from whom the castle descended to the Thanet family, and has a fine monument to her ladyship. There is a good market-house, erected in 1811; and a town-hall and jail on the right bank of the river, which is here crossed by an old stone bridge. Appleby has a grammar school, founded in the reign of Elizabeth, open to all children belonging to the town on payment of a fee of ten shillings a year, and having attached to it five scholarships at Queen's college, Oxford, and a right to participate in as many exhibitions in the same college. It has also an almshouse, founded by Lady Pembroke, for thirteen poor widows. Previously to the passing of the Reform Act, when it was disfranchised, Appleby returned two m. to the *H. of C.*; but they were in reality the nominees of the Thanet and Lonsdale families. The town is without manufactures, but has a good market.

APPLE RIVER, p. t., Jo Daviess co., Ill., 215 m. N. by W. Springfield, 867 W. Pop. 550.

APPLETON, t., Waldo co., Me., 20 m. S.W. Belfast, 35 E.

by M. Augusta. It contains five schools, 301 scholars. Pop. 891.

APPLING, co., Ga., situated in the S. part of the state, and contains 1600 sq. m. Bounded N. by Alatamaha river. It contained in 1840, 13,398 neat cattle; 9563 swine; and produced 2087 bushels of wheat; 94,945 of Indian corn; 2159 pounds of cotton. It had four stores, seven grist-mills, seven saw-mills, one oil-mill, two schools, 35 scholars. Pop. whites, 1755, slaves, 282, free coloured, 15; total, 2052.

APPLINGTON, p. v., capital of Columbia co., Ga., 111 S.S.E. Milledgeville, 597 W. It contains a court-house, jail, an academy, one Baptist and one Methodist church, three stores and twenty dwellings.

APPOMATTOX, river, Va., after a course of 120 m., enters James river at City Point. It is navigable for vessels of 100 tons, to the falls at Petersburg. Around these falls is a canal; and for 80 m. above them it is boatable.

APPOQUINIMINK, hund., Newcastle co., Del. It has nine stores, three grist-mills, one saw-mill, two schools, 61 scholars. Pop. 2075.

APRICENA, a town of Naples, prov. Capitanata, 7 m. N. N.E. St. Severo. Pop. 2009.

APT (an. *Apta Julia*), a town of France, dep. Vaucluse, cap. arrond., on the Cavalon, 29 m. E.S.E. Avignon, lat. 43° 2′ 39″ N., long. 5° 23′ 52″ E. Pop. 5056. It is situated in a spacious valley, surrounded by hills, covered with vines and olives. The walls, originally constructed by the Romans, and repaired by the comtes de Provence, still partially exist. The older streets are narrow, crooked, and the houses mean; but the more modern streets are broad and straight, and the houses comparatively good. Principal public building, cathedral, of great antiquity, and remarkable for its subterranean chapels, &c. A bridge over the Cavalon, of a single arch, is said to be *étonnante par sa hardiesse*. There are establishments for the spinning of cotton and silk, with fabrics of cloth, hosiery, cotton-stuffs, hats, and earthenware; the latter, and the *confitures* made here, being highly esteemed. Several remains of Roman works are found in the town and its vicinity. (*Hugo*, art. *Vaucluse*, &c.)

APULIA, PUGLIA, or APUGLIA, a portion of S. Italy, lying between 39° 45′ and 41° 46′ N. lat., and 14° 57′ and 18° 34′ E. long., comprising the S.E. provinces of the k. of Naples; viz., Capitanata, Bari, and Otranto; having N.W. the prov. Sannio, N.E. the Adriatic, S.E. the Ionian sea, S. W. and W. the gulf of Taranto and the provs. of Basilicata and Principata Ultra. Area, 8092 sq. m. Pop. (1833), 1,079,709. It has, at its S. extremity, the sub-peninsula of Otranto, which forms the heel of the fancied Italian boot; and on its N.E. shore the promontory of Gargano. Although it has 440 m. of coast, it is singularly deficient in bays and harbours, and the shores are low; forming in both respects a great contrast to the S.W. shores of Naples.

Puglia presents also a striking contrast to Calabria, and the S.W. prov. of Naples, in being almost wholly a plain country, and indeed containing by far the most considerable extent of level lands of any tract of the same size S. of the Po. It is divided into *Puglia piana* and *Puglia montana*; the latter is composed of the Apennine chain, 155 m. in length, which, emerging from Basilicata, runs through the Terra di Bari and Otranto to the extremity of the latter, and of the Garganese, and other branches chiefly in the N. and W. of Capitanata. The mountains of Bari and Otranto are much less elevated than the Apennines in any other region. The plains in the N. are pretty well watered, while those of the central and S. parts are remarkably destitute of water, forming another contrast to the sub-peninsula of Calabria on the opposite side of the gulf of Taranto. Chief rivers, Candelaro, with its tributary streams, Radicosa, Triolo, Salsola, and Colone; and the Cervaro, both of which run into the Lagune Pantano Salso; the Fortore, Carapella, and Ofanto, which discharge themselves into the Adriatic, all in the province of Capitanata; the latter river is the only one not dried up during summer. On its banks near Canne, was fought the famous battle of Canne (see CANNÆ). Thence to C. St. Maria di Leuca, a tract 160 m. in length, there are only a few insignificant streams. There are no lakes, but several lagunes of some size, along the shore round and near M. Gargano, as those of Lesina (14 m. long, and 3 m. broad), Varano, Pantano Salso, and Salpi; and a few smaller ones near Taranto.

Apulia is divided into the following provinces:

Capitanata. Area, 3714 sq. m. Pop. 296,793. Ch. towns, Foggia, 20,687 inh., Manfredonia, M. St. Angelo, Termoli, Vieste, Ascoli.

Terra di Bari. Area, 1712 sq. m. Pop. 495,706. Ch. towns, Bari, 18,937 inh., Barletta, 17,695 inh., Monopoli, 15,525 inh., Trani, 13,787, Bitonto.

Terra d'Otranto. Area, 2666 sq. m. Pop. 287,905. Ch. towns, Lecce, 14,061 inh., Taranto, 14,111 inh., Gallipoli, Brindisi, Otranto.

Aspect and Agriculture.—Much of the land is uncultivated and abandoned to wandering herds of oxen and buffaloes: in other parts, a good deal of corn of different kinds is grown; but maize does not generally flourish, owing to the dryness of the soil. Corn and wool are the chief products of Capitanata, which also produces plenty of wine and oil. In the neighbourhood of Lucera (says *Craven*, 1821), of 27,000 versaras of land (the versaria = 3 acres), 1800 were sown with corn; 3000 with barley; 2500 with oats; 800 with beans; 5500 fallow; 700 covered with olives, vines, and fruit-gardens; the rest in pasture. In this prov. lands are let in large tracts, and a *casale* or large house established upon each farm, in which the *agents* and labourers reside. There are also extensive *tavoliere* or pasture lands belonging to the crown, capable of feeding as many as 1,200,000 sheep. The centre of Capitanata has a sandy soil, and consists chiefly of pasture. From Foggia to Manfredonia, this tract abounds with thistles, asphodels, wild artichokes, and giant-fennel, of the stalks of which latter chair-bottoms and bee-hives are made. On the banks of the Cervaro, the mountains are clothed with fine woods, and thickets of flowering shrubs; near Bovino the plain is wooded with low stunted oaks; a forest of oak, manna and other ash, pitch-pine, chestnut, and evergreens (but none of them large), adorns M. Gargano; the country is well-cultivated at its foot. Capitanata produces excellent vegetables, wine, and fruit of all sorts, liquorice and tobacco. A great deal of wine is produced in the Terra di Bari; the vines are cut low, but not staked as in France; it is fertile in corn, oil, saffron, almonds, tobacco, mulberry-trees, liquorice, and capers, generally without manure, though in some parts the soil is but indifferent. Its sheep (all of a dark colour) furnish the best wool in Apuglia; goats and swine are kept in large numbers. This prov. yields also, annually, 1,660,000 *moggie* of salt, and 12,000 cwts of nitre. The T. d'Otranto "would be one of the richest provinces in Italy, were it not for its wretched administration." (*Rampoldi.*) Its tobacco is as good as that of Seville, but only a given quantity is allowed to be cultivated. It yields wine, olives, cotton (good and abundant), wheat sufficient for the inhab.; the arable lands are well cultivated, but there are no artificial pastures, and much of the land lies waste. The chief natural disadvantage it labours under, is the want of water, and the rain that falls is therefore carefully preserved in subterraneous cisterns.

The hilly parts of Apuglia feed many flocks, and produce an abundance of corn, oil, cotton, and flax; which latter is exported to Venice, Germany, and Switzerland The shore is generally sandy, uncultivated, and covered with bushes, wild prunes, myrtles, ericæ, &c., that serve as food for oxen and buffaloes. The whole country, in Bari and Otranto, abounds with aromatic plants; and both the wines and flesh of some of the animals, as the buffaloes, have an aromatic flavour. Puglia is famous for its deer and other game; the sportsmen run down hares with grayhounds, and pursue the wild-boar with lurchers and mastiffs, riding armed with a lance and brace of pistols. The shores about Taranto furnish large quantities of shell-fish. The viper, asp, a species of large black snake, the tarantula, &c., infest this part of Italy.

The dyeing of wool is an important branch of industry at Taranto; the internal commerce of Apuglia, of which Foggia is the head-quarter, consists chiefly in the sale of wool, cheese (from sheep's milk), and corn.

The country is quite healthy, the people industrious, peaceable, and handsome. Many of them in various districts are Greeks or Albanians; these being, in the Terra d'Otranto, ⅓ of the whole: they preserve their original customs, dress, and religion, and occupy themselves in cotton-weaving. Brigandage is prevalent about Bovino, and on the borders of Sannio, but not in other parts.

This territory was originally called Daunia, Iapygia, Peucetia, and Messapia, and formed part of Magna Græcia. Having fallen under the Roman dominion, Augustus made it the third prov. of Italy, under the name of Apulia. After the fall of the empire in the W., it was occupied successively by Odoacer, Theodoric, and the Greek emperors, till, in the 8th century, it was wrested from the latter by the Arabs; and from them in turn by the Normans, in the 11th century; Robert Guiscard styling himself first Count or Duke of Apuglia. It continued in the possession of his successors till the death of Manfred, at the battle of Benevento, in 1268, when it fell under the dominion of Charles of Anjou, as well as the rest of the Neapolitan territory. Its subsequent history belongs to that of Naples. (*Rampoldi, Corografia dell' Italia; Swinburne's Travels in the Two Sicilies; Craven, Tour in the S. Prov. of Naples; Weimar Almanack*, 1838.)

APURE, a river of S. America, Columbia, one of the principal tributaries of the Oronoco, which see.

AQUAMABOE, a territory of W. Africa, part of the state of Dahomey, which see.

AQUAPIM, a territory of W. Africa, part of the empire of Ashantee, which see.

AQUILA, a city of the Neapolitan states, cap. prov. Abruzzo Ultra, on a hill at the foot of which flows the Alterno, lat. 42° 27′ N., long. 13° 28′ E. Pop. (1832), 9194: viz., 4511 males, 4683 females.* It is surrounded by walls, and ranks as a fortified place of the 4th class; is pretty well built; has a cathedral, and various churches, convents, and hospitals; is the seat of a bishopric, of a civil and criminal court, a chamber of finances, &c. A royal college, established at Sulmona in 1807, was transferred thither in 1816: it was soon after raised to the rank of a lyceum, differing little from a university, and is attended by about 400 pupils. There is also a secondary school, established in 1768, and various other seminaries. A handsome new theatre, built on the model of that of Vicenza, was opened in 1832. Excellent water, conveyed from the Monte San Giuliano, about 3 miles distant, by an aqueduct, constructed at a great expense, during the flourishing period of the city, is liberally distributed to some fine public fountains, as well as private houses. The town has manufactures of linen and wax; and a considerable trade in Saffron raised in its neighbourhood.

Aquila was founded in 1240; and rose in no long time to be one of the richest, most populous, and powerful cities in the kingdom. But the combined influence of misgovernment, pestilence, war, and earthquakes, from the latter of which it suffered severely in 1703 and 1706, have reduced it to its present state of decadence. Latterly, however, it has been improving. (*Del Re Descrizione delle Due Sicilie*, ii., p. 115–300.)

AQUILEIA, a small town of Austrian Italy, near the bottom of the Adriatic, 18 m. S.S.W. Gorizia, lat. 45° 45′ 22″ N., long. 13° 23′ E. Pop. circa 1500. It is surrounded by a wall and a fosse, and is connected by a canal with the port of Grado, the residence of a few fishermen. This is all that now remains of one of the principal cities of ancient Italy—its chief bulwark on its N.E. frontier, and the great emporium of its trade with the nations of Illyria and Pannonia! Ausonius assigned to it the ninth place among the great cities of the empire:

> Nona inter claras, Aquileia cieberis, urbes,
> Itala ad Illyricos objecta colonia montes,
> Mœnibus et portu celeberrima.
>
> *Claræ Urbes*, 7.

Aquileia withstood a siege by Maximinus; and in 452 it opposed a vigorous and gallant resistance to Attila; but that ferocious barbarian having carried it by assault, razed it to the ground, the destruction being so complete, that the succeeding generation could scarcely discover its site! The unhealthiness of its situation has caused the miscarriage of the attempts that have been made for its restoration. In 1751, two archbishoprics were formed out of the patriarchate of Aquileia. (*Cramer's Ancient Italy*, i., p. 129; *Gibbon*, cap. 35.)

ARABIA, an extensive peninsula, comprising the S.W. portion of the Asiatic continent, situated between the rest of Asia and Africa, and between 12° 22′ and 33° 45′ N. lat., and 32° 50′ and 58° 42′ E. long. It is bounded on the S. and E. by that part of the Indian ocean called the Arabian sea; on the N.E. by the gulfs of Oman and Persia; and on the W. the Arabic gulf, or Red sea, forms its boundary from the straits of Bab-el-Mandeb to the isthmus of Suez. The N. limit is less clearly defined; the desert in which Arabia terminates in this direction being conterminous with that of Syria, and no well-defined line of demarcation existing between them. The most natural boundary on this side appears to be a line drawn from the head of the Persian gulf to the most westerly point of that of Suez, coinciding very nearly with the 30th parallel of N. lat.; but it is usual to include in this country a considerable part of Irak Arabi, and the desert plains S. and E. of Syria and Palestine; and under this view, the N. boundary follows very nearly the course of the Euphrates. The countries contiguous to Arabia are, on the N. the Asiatic provinces of the Turkish empire; on the W. Egypt and Abyssinia; on the S. Adel, the most easterly portion of Africa; and on the N.E. Persia. On the E., except along the Persian gulf, the nearest land is Hindostan. Its *greatest* length from Suez to cape Ras-al-Hhad is 1690 m., and its *greatest* width from the straits of Bab-el-Mandeb to the town of Keham, on the Euphrates, 1400 m. Its area, measured on *D'Anville's* map, is about 1,100,000 sq. m. (Compare *D'Anville, Carte d'Asie*, with *Travels of Ali Bey*, ii., p. 9; *Map of the Coast of Arabia*, same work, ii., p. 27.)

Divisions, Ancient and Modern.—From the earliest period of authentic history, Arabia has been the connecting link between the E. and the W. world. It was the mart whence the Phœnicians drew the supplies of gold and silver, gems and pearls, spices and perfumes, with which they furnished the countries of Europe. And even before this more extensive intercourse existed—before Phœnicia was a nation, or her "traffickers princes," the Arabian caravan was seen upon the Nile, and on the borders of Palestine, laden with the most rare and precious products. (Genesis, ch. xxxvii.) That these were only partially, if at all, native products of Arabia, is sufficiently proved; but the W. nations, who received them from Arabia, looked at first no farther for their origin. Exaggerated notions were formed of the beauty of a land whence such precious luxuries were procured, and the term Ευδαιμων, *Felix*, or the Happy, became connected with its name. But when, in the course of time, the Greeks first, and then the Romans, came to this fancied paradise, they found the soil, wherever they essayed to enter the country, a burning sand or an unfruitful rock. The possibility of an erroneous theory was, however, seldom admitted by ancient inquirers. Arabia was still believed to be the Happy or Fortunate, but its blissful regions were supposed to be separated from the less favoured portions of the earth by an absolutely sterile zone or belt. All the country E. of Egypt had, indeed, been known, time immemorial, by the common name *Arabia*; and this designation being still retained, the inhospitable tracts upon the N. and W. received the distinctive epithet of Ερημη, *Deserta*, or the Desert. (*Herodotus, Thalia*, § 107–113; *Diodorus Siculus*, lib. ii., p. 150–167, lib. iii., p. 211–216; *Strabo*, lib. xvi., p. 767–781; *Pliny, Nat. Hist.*, lib. v., § 11.)

Ptolemy subsequently added a third division to Arabia, including the country between the Red and Dead seas, and between Palestine and the Euphrates: in other words, he gave to his Arabia the N. limit which, since his time, it has generally been considered as retaining. To this new district he gave the name of *Arabia Petræa*, from Πετρα, a town on the lesser Jordan, south of the Dead sea, and the capital of the Nabatheans. (See PETRA.) This division of the country by the Greco-Roman geographers was universally adopted, not only by their contemporaries, but by all the western nations in the middle ages. On the revival of learning, the great work of Ptolemy was taken as the text-book of geography, and his arrangements were universally adopted. Even Gibbon was deceived by them. "It is singular enough," he remarks, "that a country whose language and inhabitants have ever been the same, should scarcely retain a vestige of its old geography." (*Dec. and Fall*, v., chap. 50.) But he forgot that this "old geography" was the invention of foreign nations, possessing neither political power nor influence over the wandering Arab tribes, in almost total ignorance of the settled portion of the Arab people, and, consequently, without the means of making their divisions known among the natives, still less of causing them to be adopted. The fact remarked by Gibbon of the identity of the people and language in ancient and modern times, leads, indeed, irresistibly to the conclusion that an "*old geography*," of which the natives retain neither vestige nor recollection, never had an existence among them, and that the ancient *Arabic* divisions of this country are as identical as the people and the language with those existing in the present day. These native divisions are the following:

1. *Bar-el-tour-Sinai* (the Desert of mount Sinai), nearly identical with the *Arabia Petræa* of Ptolemy. It comprises the small peninsula between the gulfs of Suez and Akabah, and the country northward as far as the Dead sea. This is the region so celebrated in Sacred History as the scene of the wanderings of the Jewish people; but, though it may be gathered from the Mosaic account that it was then the residence of several warlike nations, it is, at present, nearly uninhabited. (*Niebuhr*, par. ii., p. 345.)

2. *El-Hedjaz*, or the *Land of Pilgrimage*, occupies a considerable portion of the coast of the Red sea. Its boundaries are E. *Nedsjed*, W. the *Red sea*, S. *Yemen*, and N. *Bar-el-tour-Sinai* and *Nedsjed*. This district acknowledges a sort of doubtful authority in the grand Signior as protector of the holy cities (Mecca and Medina); but those cities, and the whole southern part of Hedjaz, called *Beled-el-Harem* (Holy or Forbidden land) were, till within these few years, under the government of the sheriff of Mecca. The sheriff's power has, however, of late been much shaken; first by the Wahabees, a fanatical sect of Nedsjed, and more recently by Mehemet Ali, Pacha of Egypt. (*Niebuhr*, par. ii., p. 302; *Ali Bey*, ii., p. 29, et seq.; *Burckhardt's Travels in Arabia*, passim.)

3. *Nedsjed* constitutes the central part of the peninsula. It is the largest, but the least known, of all the divisions. It is bounded N. by the Syrian desert, E. by *Lachsa*, S. by *Yemen*, and W. by *Hedjaz*. (*Niebuhr*, par. ii., p. 296; *Burckhardt*, vol. ii., p. 396, et seq.)

4. *El-Hassa-Lachsa*, otherwise *Lachsa*, *Hadsjar*, or *Bahrein*, lies upon the Persian gulf. Its boundaries are, towards the N. the country of *Irak Arabi*, W. *Nedsjed*, S. *Oman*, and E. the Persian gulf. (*Niebuhr*, par. ii., p. 293.)

5. *Oman* is bounded N. by the Persian gulf and *Lachsa*,

* The population is generally set down in late works at between 13,000 and 14,000. This, however, is an error, and no doubt refers not to the town but to the *circondario* (arrondissement), which contains a considerable extent of country, and some small towns. Its population in 1832 was 14,689.

E. by the Indian ocean, W. and S. by vast sandy deserts (parts of *Nedejed* and *Hadramaut*), in the midst of which it seems to rise like a little knot of mountains out of an extensive sea. (*Niebuhr*, par. ii., p. 255.)

6. *Hadramaut* forms the S.E. division of Arabia, and is bounded N. and N.E. by the deserts of *Nedejed* and *Oman*, S. and S.E. by the Indian ocean, and W. by *Yemen*. (*Niebuhr*, par. ii., p. 245.)

7. *Yemen*, the southern part of the peninsula, has the Red sea on its W. side, the straits of Bab-el-Mandeb and the Indian ocean on the S., *Hadramaut* on the E., and *Nedejed* and *Hedjaz* N. (*Niebuhr*, par. ii., p. 160.)

Yemen and Hadramaut point out the situation, if not the extent, of the *Arabia Felix* of Strabo and Ptolemy. The inhabitants regard themselves as the chief of all the Arabian people, calling their country *Bellad-el-Ulm u Bellad-el-Din*, "The birthplace of the sciences and of religion." (*Niebuhr*, par. ii., p. 247.) But the *Arabia Felix* of Greek geography seems to have extended much farther N., comprising the whole of Hedjaz and Oman, together with the greater part of Lachsa, and a very considerable portion of Nedejed. (*Strabo*, lib. xvi., cap. 3, p. 765; *Ptolemy*, lib. vi., cap. 7, p. 112.) The *Arabia Deserta* included the N. parts of Nedejed and Lachsa. In Ptolemy's map this district is separated from the former by an imaginary range of mountains, running from the Persian gulf to another range, equally imaginary, supposed to form the boundary between *Arabia Felix* and *Arabia Petræa*. The position of this last-mentioned province has been previously pointed out.

Physical Features of the Country, Mountains, and Plains.—The name (*Nedejed*) of the central and largest division of Arabia, signifies high or elevated ground; and the whole peninsula, as far as at present explored, consists of an elevated table-land, with a general inclination towards the N. and E.; and surrounded by a belt of low land, varying in width from one or two days' journey, to a single mile or less. (*Niebuhr*, par. ii., p. 140, 296, &c.; *Burckhardt*, ii., p. 307, et seq.) This flat belt is called *Gaur* or *Tehama*, Arabic terms for a plain country; and the W. part of *Yemen*, on the Red sea, has received the latter name as a distinctive appellation. A range of mountains, a continuation of the Syrian Lebanon, runs S. from the borders of the Dead sea to Yemen; the face of which is much more steep and precipitous towards the W. than the E.; so that the great plain which commences immediately to the E. of these mountains is very considerably raised above the level of the sea. (*Burckhardt*, ii., p. 146.) The hills of Oman seem to form the E. shoulder of this table-land, and the plains of Lachsa the termination of its inclination towards the Persian gulf. (*Niebuhr*, ii., p. 255, 293.) This high plain is diversified with several considerable elevations, which cross its surface in every direction, shooting off like branches or spurs from the principal chain. Niebuhr expressly states (ii., p. 296,) that the portion of this plain, more particularly known by the name of *Nedejed*, is mountainous; and Burckhardt, in describing Derayeh, the capital of *Nedejed-el-Ared*, says, that it is situated in a valley, the outlets of which are so narrow that only one camel can pass at a time. (*Travels*, ii., p. 399.) The main chain, supporting this table-land on the W., increases in elevation as it extends towards the S.; and, although it has not been explored in the S.E. part of the peninsula, there can be little doubt that the same chain, after following the direction of the Red sea to Yemen and Hadramaut, is continued in a line, parallel to the Indian ocean, as far as Oman. Lord Valentia describes that part of the E. coast of Arabia, which he saw in his voyage from India to the Red sea, as a sandy beach with a chain of mountains in the distance (*Voyages and Travels*, ii., p. 12); and Niebuhr has no doubt that the hills of Oman form the N. termination of this chain (par. ii., p. 255). The elevations of the land are rather in masses than in peaks, and the few great eminences of the latter kind noticed by travellers, are referred to in terms which seem to imply that they are regarded as singularities. Thus, we are told that mount Shahak is seen, at a distance of two days' journey, rising like a tower in the midst of the plain, and that it forms a land-mark for the pilgrims travelling from Damascus to Mecca; but the notice which this mountain has attracted from all travellers along the Hadj road, leads to the inference that such land-marks are rare. (*Zach's Correspondence*, No. 18, p. 389.) Mounts Horeb and Sinai are, out of all comparison, the most celebrated in the world: they are connected with some of the most important events in sacred history; and are regarded with feelings of religious awe by Mohammedans as well as by Jews and Christians. The Sinai group is the last considerable elevation towards the N.W. of the mountains which support the table-land of the interior. This group fills the peninsula between the gulfs of Suez and Akabah. Mount Arafat, an eminence extremely sacred in Mohammedan estimation, at a short distance from Mecca, rises from the plain country of the table-land to an elevation of 150 or 200 feet. It forms the centre of a natural solitude, being situated in a plain about three quarters of a league in diameter, and surrounded by barren mountains. The composition of the Arabian mountains, towards the N. and W., is limestone rock, with granite towards the summits: but in the higher parts of the country the bare granite rises uncovered from its very base. (See *Burckhardt*, *Ali Bey*, and *Niebuhr*, passim.)

The Gaur or Tehama, from its regular inclination towards the sea, and the nature of its soil—sand with saline incrustations (*Niebuhr*, par. ii., p. 161; *Lord Valentia*, vol. ii., p. 359)—seems to have been under water at a comparatively recent period. At Mocha the soil for 28 feet in depth is wholly composed of marine productions; and at Okeila, close to the straits of Bab-el-Mandeb, where anciently there was a harbour in which a fleet could lie, there is not, at present, much more than a foot of water. (*Lord Valentia*, vol. ii., p. 361.) The town of Musa, formerly on the coast, is now several miles inland. This fact was remarked even in Pliny's time. "Nowhere," says he, "has the earth gained more, nor in so short a time, from the water." (*Nat. Hist.*, lib. vi., § 27.)

Rivers and Lakes.—There are no rivers, in the strict acceptation of the term, in Arabia. The most important streams noted on D'Anville's map are the Astan and the Falg, both falling into the Persian gulf; the Massora and the Poim emptying themselves into the Indian ocean; a nameless stream, falling into the same ocean on the confines of Yemen and Hadramaut; and the Meidam and Zebid in the S. part of Yemen. But these and every other stream of running water *known* to exist in this country, have more or less the character of occasional torrents. Niebuhr remarks it as a singularity, that the Massora and another small stream in Oman continued to run throughout the year; and he states, that in the Tehama of Yemen there are no rivers that retain their water during the entire summer. (*Des de l'Ar.*, par. ii., p. 255, 161, &c.) The few perennial streams are all reduced to insignificance during the dry season; but, under the influence of the periodical rains, these and the others often swell to an immense size, and sometimes make new channels for themselves, changing, in this way, the appearance of the coast, and leading to contradictory statements as to the number and embouchures of the different streams. (*Valentia*, ii., p. 360.)

The arid sands of the Tehama, unfavourable to the formation of rivers, are, of course, equally hostile to the accumulation of water in lakes. In fact, the dryness of the Arabian soil is proverbial; but the interior is only very partially known; and in the table-land of Nedejed lakes are supposed to exist, on the authority of Strabo, who affirms that he *saw them* (lib. xvi., p. 774); and also on that of eastern geographers, cited by Malte-Brun (*Géographie Universelle*, viii., p. 246).

Climate.—The tropic of Cancer divides Arabia into two not very unequal parts. It lies, therefore, partly in the torrid, and partly in the S. part of the N. temperate zone; but so many modifying circumstances exert an influence over its climate, that the mere latitude of its several parts is, perhaps, the least important element in determining the temperature, humidity, and salubrity of its atmosphere. In general, the climate is very similar to that of N. Africa. Lying under the tropic, it has, of course, its succession of dry and rainy seasons; and on the mountains of Yemen the showers regularly fall from the middle of June till the end of September. During the early part of the season the rains are most abundant, and at this time the sky is sometimes, but very rarely, covered by clouds for 24 hours together. During the dry season a cloud is scarcely ever seen. In Oman the rainy season begins in November, and continues till the middle of February. In the plain country on the coast, and in the Tehama of Yemen (though so close to the mountainous regions of regular showers), a whole year frequently passes without a drop of rain. (*Niebuhr*, par. i., p. 34, et seq.) In this respect is found striking physical resemblances between Africa and Arabia. In the latter, as in the former, the parched plains are denied the refreshment of falling showers, and owe what share of fertility they possess to the inundations consequent upon the saturation of the mountains.

The temperature of Arabia, like that of other countries, differs widely, according to the elevation of the surface, the nature of the soil, and the neighbourhood of the ocean. In general, the mountains of the S. Yemen and Hadramaut are the most habitable, and even the coolest parts of the peninsula; but the heat of the Tehama is excessive; and great extremes of temperature are experienced within very short distances. At Mocha, on the Red sea, the thermometer rises in summer to 96° Fahr.; while at Saana, in the mountains, it never exceeds 85°, and in this district *freezing* winter nights are not unfrequent. The inhabitants of Yemen live, consequently, under several different climates, and very different species of animals and vegetables flourish within its limits. (*Niebuhr*, par. i., p. 4.) From the borders of Hedjaz to the banks of the Euphrates the country is a vast plain,

without the slightest elevation, and wholly destitute of rivers or permanent springs. The soil is one mass of moving sand, without the slightest trace of town or village; and the dreary monotony of the scene is broken only by the appearance of a few thorny shrubs, which, taking vigorous root in the sand, supply the patient camel with the only food which he can find in these deserts. (*Yeoseph-el-Milky*, in *Zach's Correspondence*, No. 18.) This country, with the desert of Syria, seems to have formed the *Arabia Deserta* of Strabo and Ptolemy.

Another plain, of the same kind, and most probably even more extensive, called the *Desert of Akhaf*, lies between Yemen and Hadramaut, on the S. and W., and between Nedajed and Oman, on the N. and E. (*Niebuhr*, par. ii., p. 245–255.) These vast sandy deserts increase very greatly the heat of the atmosphere in their neighbourhood. The wind blowing over them, about the summer solstice, becomes so dry that paper and parchment exposed to its influence scorch and crack, as though placed in the mouth of an oven; and life, both animal and vegetable, perishes in the noxious blast. (*Ali Bey*, vol. ii., p. 46.) This is the wind known, in different and often very distant countries, by the names of the Simoom, Samiel, Sirocco, and Sorana; and which is always generated in every tropical country having extensive sandy deserts. Its grand seat is the vast desert of Sahara, in Africa; and next to it, perhaps, the deserts now mentioned. It comes from a different quarter in different parts of the peninsula, according to their position with respect to these deserts. Thus, at Mecca, the Simoom comes from the E.; in the neighbourhood of the Persian gulf and the Euphrates, from the W.; in Yemen and Hadramaut, from the N. and N.E. The chain of hills seems to shelter the Tehama of the Hedjaz from the influence of the Simoom from the Arabian desert, as the hottest wind known in this district comes from the African deserts across the Red sea, and is, consequently, very considerably cooled and mitigated in its violence.

It is only, however, during the intense summer heats that the Simoom is dreaded; and such is the general purity of the atmosphere, owing to the few exhalations from the dry soil, that both man and beast in Arabia are aware of the approach of the poisonous blast, from the sulphurous odour by which it is preceded. It is said, also, that the point of the heavens from which the Simoom is approaching is always marked by a peculiar colouring, easily distinguishable by an Arab eye. Thus forewarned, the Arab throws himself upon the ground, and the beasts hold down their heads; for it is found that this terrific blast has little or no power near the earth, perhaps because, blowing in a horizontal direction, it is broken by the inequalities of the ground, and also, perhaps, because the few slight exhalations forced from the arid soil by the extreme heat, have power to counteract its virulence. Those who are rash enough to face it are suddenly suffocated; and in the deserts, where the Simoom blows long and strongly, whole caravans have been buried beneath the burning sands, which then rise in waves as high and strong as those of a stormy ocean. (*Niebuhr*, par. i., p. 7, 8.)

Natural Productions.—The differences of soil and climate occasion much variety in the species and amount of the natural products of Arabia. Nothing can, perhaps, be more strongly contrasted than the vivid descriptions of the country by ancient and oriental writers, and the cold realities exhibited to the traveller or voyager who approaches its confines. Even on nearing the southern shore, the Arabia Felix, or terrestrial paradise of the ancients, the eye looks in vain for the beauty; nor is the smell gratified by the "Sabæan odours" which have been so vividly, but erroneously described. A wide, sandy beach, bounded in the distance by a range of mountains, dreary and unproductive, without a patch of verdure to relieve the eye, or a running stream to slake the thirst, or break the dull monotony of the view, constitutes the southern coast of Yemen. (*Valentia*, ii., p. 12.)

The fertile spots, however, like the oases of the African deserts, are so luxuriant and beautiful, as in some measure to warrant the hyperbolical praises bestowed on the peninsula. In consequence, too, of the various circumstances of elevation, aspect, temperature, and moisture, there is no country whose productions are more numerous and varied.

The sandy plains of the centre produce the same plants as N. Africa—the mesembryanthemum, aloe, euphorbium, stapela, and salsola; plants which answer a wise purpose in these wastes, by alleviating the thirst of the camel, during the painful journeys of the caravans.

The sea-coast, consisting for the most part of arid sands, produces, in general, the same plants as the central deserts; but wherever the Tehama is watered by rivulets descending from the mountains, or wherever the soil is subjected to occasional inundations, a very different scene is presented. Under these circumstances, a vegetation, luxuriant and diversified, is produced, the effect of which is the more striking, from the desolation with which it is surrounded. The valleys, too, in the mountains, exposed to the influence of the regular rains, and consequently abounding in rivulets, are the seats of an abundant vegetation. In such districts, the tamarind, cotton-tree, sugar-cane, banana, nutmeg, betel, and every variety of melons and pumpkins are *indigenous*; at all events they have grown there from the remotest antiquity (*Strabo*, lib. xvi., cap. 3, p. 704, et seq.; *Pliny*, *Nat. Hist.*, lib. xii., cap. 8, p. 362.; *Ib.*, lib. xii., cap. 10, p. 363.; *Ib.*, lib. xix., cap. 1, p. 4), and continue to flourish in greater luxuriance than in any other part of the world, except in the similar soil and under the similar climate of N. Africa. Arabia produces several kinds of hard wood, of which the agallochum seems to be the same with the sandal wood of the East India islands; and it may be regarded as the native home of the date tree, the cocoa, and the fan-leaved palm. Of other trees, there are the fig, orange, plantain, almond, apricot, acacia vera (producing the gum Arabic), quince, and vine. Among shrubs, the sensitive-plant, castor-oil plant, and senna (both used in medicine); the globe amaranth, white lily, and pancratium (all distinguished for their fragrance); the aloe, styrax, and sesamum are very abundant. But, notwithstanding this variety of wood, although there are some groves or thickets on the mountain side, Arabia possesses no forest, properly so called. The reason of this is obvious: the fertile, irrigated spots, small in extent, and scattered here and there, are surrounded by the sandy plain or granite rock, and, consequently, the formation of extensive woods becomes a matter of impossibility. (*Niebuhr*, par. i., p. 127–133.)

Of Arab trees, the most worthy of notice are the coffee tree, and the tree producing the balm of Mecca, called by the natives, *Abu Scham* (that is, the *odoriferous tree*). Both are natives of Yemen, the coffee plantations being found chiefly on the W. slopes of the mountains, in that division of the peninsula. It is said that the Arabs have always prohibited the exportation of the coffee plant; but it is a well-known fact that it was first introduced into the W. Indies from Arabia. The coffee of Yemen still, however, preserves its superiority, and fetches the highest price in the European markets. The balm of Mecca is the most fragrant and valuable of all the gum resins, but it is never met with pure out of Arabia, and there scarcely beyond the confines of Yemen. The merchants of Mocha convey it in great quantities to Medina, whence it is never exported for the purposes of external commerce till it has been considerably adulterated. (*Niebuhr*, par. i., p. 127.)

Among the natural productions is the singular substance called *Manna*, produced from a little thorny bush, which seems to be abundant in all the deserts and their neighbourhood, and exactly answers the description in Exodus xvi. and Numbers xi.

Wherever water is found, or can be procured, the labour of the Arabian agriculturist is well repaid. Maize, wheat, dhourrah, barley, and millet cover the mountain sides of Yemen and other fertile parts. Indigo, tobacco, *Uars*, a plant yielding a yellow dye; *Fuar*, an herb which produces a red colour; together with many species of garden fruits and vegetables, are cultivated; but, in order to insure success in the cultivation beyond the districts watered by the scanty rivulets and torrents, much labour is required. It is true that the agricultural implements are of a very simple and primitive construction, but it is not in the use of these that the great labour of Arabian agriculture exists. Channels and dikes have to be constructed to conduct the water to spots where none flows naturally, and to retain it there that it may fertilize them. Great reservoirs are formed, in which the abundant rains of the wet season are collected for future use. The coffee grounds and gardens on the mountain sides are supported by *walls*, to make their surface horizontal, and so prevent the escape of the moisture. Wells are dug at immense depths; and, in short, since it is upon the amount of irrigation that the productiveness of the soil depends, it is to the collection and just distribution of water that the cares of the cultivator are principally directed; and the nature of the Arabian climate and hydrography renders these cares in the highest degree laborious. (*Niebuhr*, par. i., p. 134–142.)

The fame of Arabia as the land of incense and perfumes is of very old date. But it was long since suspected, and is now well known, that the frankincense, myrrh, and similar products with which it supplied the ancient world, were not all of its own growth, but were principally brought to its ports from Africa and various E. countries. (*Niebuhr*, par. i., p. 126; *Valentia*, ii., p. 12.)

The camel is to the Arabian what the reindeer is to the Laplander. It has been justly called the "Ship of the Desert;" and without it the Arab could never cross the seas of sand that fence his country. There are two species of this useful animal; that used in Arabia and N. Africa has only one hump, while that found in Persia and Bokhara has two. The latter is frequently called the Bactrian camel,

and the Arabian species is sometimes called dromedary. This last name is, however, improperly applied, the Greek term δρομας (swift) being, most probably, unknown to the Arabians, while by the Greeks themselves it was applied to only one variety of Arabian camel, distinguished by its greater speed from those best adapted to carrying burdens. (*Diodorus Siculus*, lib. iii., p. 125.) Arabia is generally regarded as the native country of the horse; and there are, perhaps, no breeds to be compared with those trained by the Bedouins of the desert. The horses are of two kinds: the one called *Kadeschi*, that is, of an unknown race, are used for the purposes of labour, reside in the towns, and are not more esteemed than the horses of Europe. But the true Arab steed, the horse of the desert, is said to be descended from the breed of Solomon: this kind is called *Kochlani*, or horses of an ascertained race; and it is pretended that their genealogy has been preserved in the country for 2000 years. (*Niebuhr*, par. i., p. 142–144.) Horses are, however, by no means so numerous as has been supposed. In the settled districts the most common beasts of burden are oxen and camels (*Niebuhr*, passim); and among the Bedouins the mare is rather a mark of distinction than a substantive part of her master's wealth. In many tribes (and those among the richest) not more than one mare to six or seven tents can be found: in some of the W. districts there are many encampments without a single horse or mare among them; and when, in 1815, the S. tribes united against Mehemet Ali, out of an army of 25,000 men not more than 500 horsemen could be mustered. The Arab tribes richest in horses live without the limits of the peninsula, in the fertile plains of Mesopotamia, and in the plain country of Syria. Burckhardt thinks that the number of horses in Arabia does not exceed 50,000. (*Notes on Bedouins*, p. 40, 115, et seq., 246–249.)

The great cause of this scarcity is undoubtedly the difficulty of providing food for the animal, especially in the S. districts; but another cause, depending probably upon the first, is, that the Arabs almost uniformly ride their mares, and sell the horses to the town's-people. The horses that they reserve are merely for the purpose of breeding, and a gelding is rarely, if ever, seen in the desert. Although the Bedouin parts readily with the horses of his famous *Kochlani* breed, he rarely disposes of the mares until they become old, or are from some accident unfit for war; and even then he contracts with the buyer to receive the first filly foaled of any mare that he may sell, or to receive back the mare, the buyer retaining the filly. Sometimes the first two, three, or even four fillies are thus reserved to the seller; and this, in Arab phraseology, is called selling a half, a third, or a fourth of the mare's belly. It is very rarely, indeed, that a Bedouin will part with a *Kochlani* mare except under such reservation of right in her future offspring. (*Burckhardt's Notes on the Bedouins*, p. 117, 118, &c.) An Arab will sometimes take his mare a journey of several days, in order that she may breed by some celebrated horse; but, in general, the Bedouins are by no means so particular in this respect as Europeans, and consider the good qualities of the colt to depend rather upon the dam than the sire. They never, however, willingly mix the *Kochlani* with the *Kadeschi* breed; and if such mixture take place by accident, the colt is reckoned of the inferior race. In the towns, *Kadeschi* mares are coupled with *Kochlani* horses, but in this case, also, the offspring is accounted *Kadeschi*. (*Niebuhr*, par. i., p. 144.)

Kochlani horses are mostly small, seldom above 14 hands high, of a delicate but extremely graceful form, and have all some characteristic beauty which distinguishes their breed from every other. This breed is subdivided into almost innumerable families; for every mare distinguished for speed or beauty may give rise to a new breed called after her. They all, however, belong to five great divisions, named after the favourite mares of Mohammed, *Taneyse*, *Manekeye*, *Koheyl*, *Taklawye*, and *Dujlfe*.

The colt, when foaled, is not suffered to fall to the ground, but is received into the arms of attendants, and attended for a while as though it were a human infant. Witnesses are assembled, before whom the genealogy of the colt is drawn out, and suspended to the animal's neck.

A colt is not mounted till it is two years old, but from this time the saddle is rarely off its back; it becomes the intimate companion of its master, sharing all his comforts (such as they are), and also all his privations. Pasture in the rainy season — barley and wheat when the plains are scorched by the tropical sun—date-paste and dried clover when grain is scarce—form the variable diet of the Arab horse, in different districts and seasons. As long, too, as its master's camels can supply milk, it receives its share, and the Bedouin most commonly gives the fragments of his own meal to the mare on which he rides. It is, moreover, a common practice, more especially in Nedsjed, to give horses flesh, both raw and cooked, particularly before the commencement of a fatiguing journey. Like their masters, the Arab horses live all the year in the open air. With little grooming and attention to their health, they are seldom ill. Being constantly in the society of their masters, they become gentle, docile, and intelligent in a high degree; they are ridden without bits—generally, too, without stirrups; and instances of vice or ill-temper are almost unknown among them. (*Niebuhr*, par. i., p. 141–143; *Burckhardt*, *Notes on Bedouins*, p. 115–123, 246–256.)

The other domestic animals are oxen, generally of a humped kind, like those of Syria; sheep, one variety of which have extremely thick and broad tails; goats and asses, of which last there are two varieties—one not differing from those of Europe, the other large, courageous, and more desirable for a journey than even the horse. From these asses a breed of very valuable mules is procured. The buffalo, though common in Egypt, Syria, and on the banks of the Euphrates and Tigris, that is, all round the confines of Arabia, is not found within its limits; at least Niebuhr did not meet with it, and no other writer mentions the animal; except in one or two instances, when the humped Syrian ox seems to have been mistaken for the buffalo. The latter requires a moist pasture and a plentiful supply of water. Hence it is found on the banks of the Nile and the Orontes, though in the close neighbourhood of parched deserts; but the want of water in Arabia clearly renders that country unfit for its location.

Among the wild animals are the jackal, hyæna, several kinds of asses, the jerboa, wolf, fox, boar, and panther. Besides these, there are several kinds of antelopes; the goat runs wild among the mountains, and wild oxen and asses are to be met with in the plains. Domestic poultry is very plentiful in all the fertile districts, and the plains are filled with partridges, the woods with guinea fowl, and the mountain sides with pheasants. But the most celebrated bird is one of the thrush kind, called by the natives *Samarmog*, which comes in flocks every year from Persia, and commits great devastation among the flights of locusts. For this important service it is held in a degree of respect, amounting almost to adoration. The ostrich wanders in the sandy deserts, and is called by the Arabs *Thar-edjemmel*, that is, camel bird. It is certainly a remarkable circumstance, that in a country lying on both sides the tropic, there should be no great abundance of insects; yet this appears to be the case. Ali Bey, speaking of Hedjaz, says, "There are few flies, and no gnats or other insects." (*Travels*, ii., p. 45, 118.) The locust is, however, one of the scourges of Arabia, though even this pest seems to be less destructive here than in the neighbouring countries of Syria and Persia. The esculent locust is sold in the markets, and is esteemed a great delicacy. (*Bochart*, *Hierozoicon*, par. i., lib. iv., cap. 6, p. 46.) These destructive ravagers come to Arabia from different quarters: a S.W. wind brings them from the Libyan desert to the shores of Yemen and Hedjaz; a N.W. wind hurls them upon Oman and Lachsa, from Persia and Mesopotamia; and a wind from the N.E. frequently overwhelms Nedsjed with this plague from Syria. They seem, however, to be confined to their several localities, perhaps from inability to pass the interior deserts; for the W. flight, as it may be called, or that from the African shores, never passes the mountains of Yemen, and commonly retraces its route on the day following its first appearance. No part of the year seems to be peculiarly exposed to or exempted from this plague. Niebuhr noticed locust flights in the months of January, May, June, July, November, and December. In one of these, the Red sea, between Mocha and the opposite coast of Africa, was covered with their dead bodies.

Of the reptile tribes, land and sea turtles are very numerous; there are also several species of serpents, one of which, very small, and covered with white blotches, is extremely venomous, its bite being instantly mortal. The guaril, a large lizard, is said by Bochart, on the authority of Karwyni and Abdollatif, two native writers, to be equal in size and strength to the crocodile. (*Hierozoicon*, par. i., lib. iv., cap. 3, p. 1070.) All the coasts abound in fish; reefs of coral and madrepore extend along the shores of the Red sea, and the pearl oyster is abundant in the Persian gulf. (*Niebuhr*, par. i., p. 149–159.)

Minerals are scarce; but this may proceed from a want of industry or skill in working mines. The mountains, of an old formation, are precisely those in which the precious metals are found, and the unanimous voice of antiquity proclaims this country as the land of gold and gems, as well as of incense and perfumes. Niebuhr affirms, however, that no gold is found, and that only a small portion of silver is found mixed with lead in the mountains of Oman. There are some iron mines in the N. of Yemen, but the metal they yield is brittle and of little worth; and with regard to gems, it is now well known that the agate called *Mocha-stone* and the *Arabian cornelian* come from India; and there is nothing to contradict the presumption that the other gems for which Arabia was formerly distinguished, were derived

from the same source. The onyx, however, is found in Yemen, and an inferior emerald. The other minerals are basalt, blue alabaster, several kinds of spars and selenite. (*Niebuhr*, par. i., p. 123–125.)

Population, Manners, and Customs of Arabia.—The native Arab has always been an object of interest and curiosity to the rest of the world. Descended from the same stock with the Jews, he has preserved his race almost as unmixed, and traces up his genealogy to Abraham through Ishmael, with the same pride as his congenitor looks up to the same patriarch through his lawful but younger offspring Isaac. Through all the centuries which have passed over his head, he has preserved the character given to his infant ancestor in the wilderness. The desert has continued his home; he has been a man of war from his youth—"his hand against every man, and every man's hand against his."

The descendants of Ishmael were by no means, however, the first inhabitants of Arabia; and though the various eastern traditions on the subject are too numerous and too involved to be here stated, it seems pretty certain that the Arabs of the towns and those of the desert owed their origin to different ancestors—that the settled population on the coasts are descended from a more ancient, if not an aboriginal race, while the wild horseman and shepherd of the waste is the descendant of the discarded son of Abraham. Between these a marked and striking difference has existed throughout the historic period; and not only is this the case, but each class seems to have retained pretty nearly the same distinguishing features which marked it in the earliest times. The caravans from Mocha and Sanaa still convey the produce of the South to Turkey, Egypt, Syria, and Persia (*Niebuhr*, par. i., p. 126), as they did 2,000 years ago (*Pliny, Nat. Hist.*, lib. vi., cap. 28), though the Arab merchant be not so important a character in this commercial age, as when it could be said of him that, "he must, of necessity, be exceeding rich; for with him the Roman and the Parthian leave large sums of gold and silver for the products of his woods and seas, which he sells to them without buying anything in return." (*Pliny*, lib. vi., § 28.) The Bedouins, too, or *Scenite*, are described by Pliny as living in the *black hair-cloth* tents, under which they shelter themselves at present; and he expresses his astonishment at the fact, that, being so numerous a race, the half of them, at least, should live by plunder. (*Nat. Hist.* lib. vi., § 28.)

Though the younger race, the Bedouins account themselves the more noble; and the Arab is prouder of his rank than the native of any other country in the world. They have no titles of nobility, excepting such as refer to religious or political offices. The Bedouin has no idea of rank depending upon letters patent of a caliph or sultan; all men descended from the same ancestor are, in his estimation, equal in rank; and hence the preservation of their genealogies is a matter of extreme care. Among their great houses, those descended from the Prophet hold the first rank; then those whose ancestors diverged the latest from the common stock; the lowest place being seemingly assigned to those who trace their genealogy to Acc, the second son of Adnam, thus diverging from the Prophet's stock in the first accredited generation. (*Sale, Introd. Koran*, p. 9; *Niebuhr*, par. i., p. 9, 10.)

According to Niebuhr, the Bedouins are now the only true Arabs; the inhabitants of the cities and coasts being, in consequence of their commerce, so mixed with strangers, that they have lost much of their ancient manners and customs; whereas the Bedouins (*les vrais Arabes*) have always looked more to their liberties than their ease or riches, and continue to live in separate tribes under tents, preserving in the present day the same manners and customs which distinguished their forefathers in the most remote times. (Par. ii., p. 287.) Niebuhr enumerates above a hundred Bedouin tribes, each under its own particular sheikh or sheriff; these are not, however, all found within the limits of the peninsula, but extend over Syria, the plain country between the Euphrates and the Tigris, and even from the left bank of the latter river into Persia. There are, however, two classes of Bedouins; the *Ahl-el-Abaar* (true, noble Arabs), who live entirely by pasturage and plunder, and those tribes who, finding any portion of the country fitted for agriculture, bestow their labour on the ground, an occupation which the true Bedouin considers far beneath him. This second class of Arabs is called *Madan*, and it seems to hold an intermediate place between the Noble-Shepherd (*Ahl-el-Abaar*) and the peasant of other countries. Mr. Buckingham, who remarks this distinction in their occupations, does not, however, use the terms Ahl-el Abaar and Madan to distinguish them, but calls the first race *Khyali*, and the other *Fellaheen*. (*Travels*, p. 87.)

The Bedouin tribes who inhabit the open country between the Euphrates and Tigris extend as far north as Orfa and Diarbekr. They are under the nominal sovereignty of the Turkish pachas of Bagdad, Mousul, and Orfa; their sheikhs frequently receive the *Tajk*, or horse's tail, from the grand signor; but it appears that the bestowal and the acceptance of this mark of dignity is almost the only assertion on the one hand, or acknowledgment on the other, of supremacy or subordination that is ever attempted or conceded, except in occasional instances, when direct force has deposed a sheikh, and appointed another in his place, without in the slightest degree changing the relative position of the tribe and its so-called sovereign pacha.

The Bedouins of the Syrian desert are rather more closely connected with the pachas of Syria, inasmuch as the necessity of protecting the trade between Aleppo and Damascus on the W., and Bagdad and Balsora on the E., has caused the employment of the various Arab tribes as a kind of irregular soldiery, and the bestowal of the rank of emir on the reigning sheikh of the most powerful tribe for the time being. This emir sheikh (in consideration of his rank) is obliged to conduct the caravans in safety through the desert, and to hold in check any or all of the other tribes. "We may easily judge," says Niebuhr (*Des. de l'Ar.*, par. ii., p. 339), "that this is not done for nothing." In fact, if it happen, as it not unfrequently does, that the pacha is unable to fulfil his engagements with the sheikh, he is compelled to cede to him such towns and villages as border on his encampment, and thus to make him, in effect, the master of the settled as well as of the open country. The tribe of Anesse is the most considerable of all the Syrian Arabs. It has frequently been at war with the pachas of Damascus; and at such times the departure of the caravans from that city for Bagdad has been delayed, and the reason openly assigned that the Arabs of Syria were discontented with the pacha.

The Bedouins within the peninsula do not acknowledge a sovereignty of any kind, except in their native chiefs. They are very numerous in Nedsjed, and are scattered among the settled population in all the other provinces. The most powerful tribe of any in Arabia is, perhaps, that of Beni-Khaled; it inhabits that part of the desert which borders on the Persian gulf, and has under its dominion not only many smaller tribes, but also most of the towns and villages of Lachsa. The reigning sheikh passes a portion of each year in these towns, but by far the greater part is spent in the open country under tents.

The form of government among the Bedouins is strictly patriarchal, and their manner of living is that of the pastoral ages recorded in the Bible. The head of a tribe receives a submission from his subjects, similar to that which a father receives from his family; and in the East that submission is unbounded. There is, however, a check upon the abuse of power in the sovereign sheikh, which, though indirect, is by no means weak. Since every tribe consists of many branches, the various heads of these sub-tribes, as they may be called, form a powerful restraint upon the chief; and should he become unpopular, though direct opposition to his will is never attempted, the discontented branch not unfrequently leaves his encampment, and either forms itself into a new tribe, or, if not powerful enough for that, joins itself to the tents of some other powerful sheikh. Instances have been known in which a Bedouin chief has been entirely deserted, and thus the names of several tribes have vanished. As, however, the pride of tribe is strong in every Arab breast, this expedient is only resorted to in the last extreme; but the assumption of supremacy by some subordinate branch is frequent enough to render the continuance of the sovereignty of the tribe of Montefidaj in the same family since the days of Mohammed, a remarkable circumstance. The preservation of their herds being the first care of the Bedouins, a wandering life seems awarded to them by nature; the search for proper pasturage leads from place to place in their extensive country, according as the desert has become temporarily fruitful under the influence of the tropical rains, or has been burned up by the continued action of a tropical sun. Accustomed to live in a clear air, their sight and smell become extremely fine, insomuch that, on arriving at a spot which affords nourishment, however scantily, to plants or herbage, they can at once determine at what depth water is to be found, and, consequently, whether it be worth the labour of digging for. Accustomed to privations, the Bedouin is temperate from habit as well as from disposition, and can almost emulate the endurance of his camels, which, in the burning desert, live five days without drink.

Robbery is an honourable occupation among these wanderers, but the Arab boasts of being the most refined and civilized of thieves. His robberies are never attended with violence, except in the case of violent opposition; and, as he considers his country as sacred ground, he regards the plunder of the pilgrim caravan as the mere levying of tribute, or payment for permission to pass through it. If the right to this tribute be recognised, and the permission to pass through the country purchased, the bargain is never violated on the

part of the Bedouin; strict faith being one of the best points of his character, as his deadly spirit of revenge is, perhaps, the worst. This spirit is very easily excited; and, once aroused, descends frequently from generation to generation; the duty of pursuing the quarrels of his father being regarded as a sacred part of the Arab's inheritance. According to the Koran (chap. ii., p. 20), whoever sheds blood owes blood to the family of the slain; but the same law allows, and even recommends, a commutation, by way of fine. If this be not accepted, retaliation is *allowed* to the injured family; but as this usually exceeds the offence, new cause of hatred and revenge is given, till a single (perhaps accidental) murder *puts blood*, in Arab phraseology, between whole families forever. But the irascibility of the Arab requires no such serious offence as the death of a relative to rouse it into action. A slighting expression, or an insulting sarcasm, is sometimes sufficient to put blood between two families. "Your turban is filthy," is frequently answered by a deathblow; and instances are on record where, for an offence so slight, the offender has been pursued for years, and fallen, perhaps in old age, at last for the insult offered by him in his youth. Niebuhr reports, that a noble Arab being asked, scoffingly, if he were the father of the handsome wife of a person named, construed the question into a sneer upon his daughter's virtue. Being unarmed at the moment, the offender escaped; and the father spent years in vainly pursuing him, during which, however, he killed both the parents, and many relations of the scoffer, his slaves, his cattle, and reduced him to the verge of beggary. The offence was at last commuted by an enormous fine. (*Niebuhr*, par. i., p. 27, 28; *Burckhardt, Not. on Bed.*, 84–89, 177, 184, 209.)

A relief to this dark shade in the Arab's character is found in his hospitality. In many of the towns where the population is most unmixed, houses of entertainment are kept at the public expense, or at that of some rich individual, where the traveller is fed and sheltered without charge. But in the desert hospitality is a part of the Bedouin's nature; and though the influence of foreign manners has, upon the Hadj roads, considerably dimmed the lustre of this virtue, yet even there a helpless, *solitary* traveller is sure of finding relief, though the *assembled* Hadjis should crave in vain for assistance or mercy. In districts off the Hadj roads, that is, over much the greater portion of the desert, the Bedouin considers his property less as his own than as that of the casual stranger he may meet; however hungry, he shares his last morsel with the wayfarer; and sacrifices which he would not make for himself or his family, are made unhesitatingly for the wants of his guest. The inhabitants of the towns have fewer points of interest than the Bedouins. Niebuhr (par. ii., p. 327) says they have lost much of their distinctive character; and other travellers speak of them as having superadded the vices of civilized society to those of a savage state. "Superstitious, yet irreligious; performing all the *rites* of their faith, yet living in the practice of every vice, natural and unnatural. Hypocrites by profession, preferring a lie to the truth; even when not urged by motives of interest, deceit forms a part of their education from youth. Their governments are systems of extortion and tyranny; their traders are fraudulent, corrupt, and dishonest overreachers; the individuals of their communities are sunk into the lowest state of ignorance and debauchery." Such is the character given of the town Arabs by Lord Valentia (ii., 354, 355), and a similar picture is unwillingly exhibited by Niebuhr (par. ii., p. 180–190). Ali Bey, Burckhardt, and Buckingham, *passim*.

In prosperous times, the right of entertaining a guest is frequently disputed; and should a stranger reach the encampment unobserved, it is reckoned an affront if he pass the first tent on his right hand and enter another.

In many tribes the women are permitted to drink coffee with strangers; and in some, towards the S., the wife entertains a guest in the absence of her husband, and does the honours of the tent. To tell an Arab that he neglects his guest is the greatest insult that can be offered. (*Niebuhr*, par. i., p. 41–43; *Burckhardt's Not. on Bed.*, p. 160–102, 198–199.)

The superiority of the Bedouins appears to be admitted by the town residents; for the descendants of Mohammed resident at Mecca send their male children, eight days after birth, to the tents of the neighbouring Bedouins, where they remain till they are 8 or 10, and frequently 14 or 15 years old. All sheriffs (descendants of the Prophet), from the sovereign downwards, have been thus bred; and, as they usually take wives from the tents where they have been educated, they preserve the race and many of the customs of the Bedouins, in the midst of the mixed population by which they are surrounded. This custom is very ancient among the pure Arabs. Mohammed himself was educated in the Bedouin tribe of Beni Saad. (*Burckhardt's Travels*, vol. ii., p. 424–428.)

The Arabs are of a middle height, generally extremely thin, and, when either very young or far advanced in life, of a highly prepossessing appearance. The mild but expressive countenance of an Arab boy, and his dark, sparkling eye, are spoken of in terms of admiration by all travellers. As he reaches manhood, however, a very disadvantageous change takes place; his meager figure becomes still more attenuated, and seems as though it were parched and shrivelled up. The very splendour of the eye, buried between high cheek bones, apparently destitute of every covering except the tightened skin, is then rather a deformity. But in old age the Arab is truly venerable. The fine dark eye contrasts admirably with the long, white beard; and the emaciation, which in middle life seems to intimate premature decay, assimilates well with the closing scenes of existence. There are exceptions, however, to this general description. The Aeneze Bedouins are generally short, well formed, and by no means so thin as the majority of their countrymen. The lower orders in Mecca are generally stout. The Arab women, are stouter than the men, and larger limbed. The complexion of the Bedouins is tawny, but this is evidently the effect of their exposed life; an effect which the same exposure would produce upon the most N. people. At the time of birth the infant is fair, even of a livid whiteness; and Burckhardt, who, as a physician, saw the naked arms of a sheik's lady, states that her skin was as fair as that of any European. Lord Valentia makes the same remark regarding the wives and daughters of an Arab of Djidda (iii., 308). In the towns, the Arabs may be described as fair, especially in the mountain districts. But this remark must be understood as limited to those of pure descent; on the coasts, and in the towns of Mecca, Medina, &c., the prevailing colour is a sickly, yellowish brown, lighter or darker, according to the origin of the mother, who is in many, perhaps in most, cases an Abyssian slave. (*Niebuhr*, par. i., p. 41; *Ali Bey*, vol. ii., p. 103, 106; *Burckhardt*, i., p. 322; ii., p. 240; *Notes on Bedouins*, p. 29; *Valentia*, ii., p. 351.)

The Arabs, like other Eastern people, wear long dresses. A cotton shirt, over which the more wealthy wear a *kombar*, or long gown of silk or cotton stuff, and the poorer classes a woollen mantle, is the usual costume. The mantle is of various kinds; one, very thin, light, and white, is called *meeoumy*; a coarser and heavier kind, worn over the former, is called *abba*. In some cases, however, this last is a very splendid garment. It is usually striped white and brown; but the rich Arab frequently clothes himself in a black *abba*, interwoven with gold, in preference to the *kombar* or Turkish gown. The abba is not used in the W. districts, Yemen and Hedjaz. In the towns, large cotton drawers are worn by the men; but these rarely form a part of the Bedouin's dress, among whom any covering for the feet or legs is almost unknown. Though they walk and ride barefoot, they greatly value yellow boots and red shoes; but more as articles of ornament than use. A very rude kind of sandal is worn by the lower orders in the settled parts of the country, and the more wealthy inhabitants of the same districts use a slipper of yellow or red leather, sometimes very elaborately worked, brought from Egypt or Turkey. The head-dress is a turban, varying in form, size, and material, according to the taste or wealth of the wearer. Among those who would pass for men of superior learning and attainments the turban is ridiculously large. The wealthy classes wear shawls, wrought with gold and silver, on their heads; and certain colours are restricted to certain families, as green to the descendants of Mohammed, black to the houses of Abbas, &c.

The women's dress is a gown or shift of most ample dimensions, which in the tents, and among the middle and poorer classes in the towns, is of cotton; but the more wealthy of the townswomen use silk. Over this is worn a robe of Indian cotton; and this, with a handkerchief on the head, and sometimes very full trousers, completes the ordinary in-door dress of an Arab female. The women enjoy more liberty in Arabia than in any other Mohammedan country, but still the veil is indispensable in the streets. A cloak or scarf of blue and white striped linen is worn with much grace, the arrangement and placing of which is an important part of the tactics of Arab coquetry.

Rings, principally of silver, are worn in the ears and noses of the women; and tatooing of the face, arms, breast, and ankles is very common with both sexes; as is also painting, not to assist but to disguise nature, the face and hands being frequently daubed over with black, blue, and yellow, the first colour being esteemed a beauty on the *eyelids*, the last on the *teeth*. (*Niebuhr*, par. i., p. 54–61; *Burckhardt's Travels*, vol. i., p. 334–340; *Notes on Bedouins*, p. 26–29, 131–133; *Ali Bey*, vol. ii., p. 105, 106.)

The Arabs are proverbially abstemious. Even the wealthy classes drink little else than water, and live principally (next to dates) upon a coarse bread made of dhourrah, steeped in camel's milk, and saturated with butter.

There is no want of animal food, but very little is consu-

med. The butchers in the towns on the Red sea are foreigners, and depend entirely on the influx of strangers. Among the Bedouins, if a man of rank arrive at an encampment, a kid or lamb is killed, and, being boiled, is served up in a paste made of dried wheat, camel's milk, butter, and the fat of the animal. Sometimes, but very rarely, a camel is killed, and on such occasions the whole tribe meet together at the repast. In the S. districts, the Bedouins occasionally eat horse flesh. This is not, however, a matter of choice. It sometimes occurs, especially in the interior of the desert, or in times of scarcity, that not a single measure of corn can be found among a whole tribe. It is only under such circumstances of necessity that the Bedouin has recourse to a diet of milk and flesh alone; and there are many tribes (especially in the N., and near the larger towns) who, like the settled population, scarcely know the taste of animal food. Besides the *aysch*, the dish already described, rice, boiled with camel's milk, is a common article of food, as also dhourrah bread, butter, and dates, blended together into a paste; there are also many preparations of various vegetables, among which the *kemmaye*, or desert-plant, of the truffle kind, is a great favourite with the Bedouins; but wherever dates grow or can be procured, that fruit constitutes the chief diet of both tent and town.

The date-palm flourishes where most other vegetation withers, and is peculiarly abundant in the sands of Arabia. The fruit continues in season about two months, or from the end of June to the end of August; and during this period the new fruit forms a part, in some cases the whole, of the daily food of the Arabs. When the dates are fully ripe, they are gathered, and pressed into a hard, solid paste or cake. This paste, which is called *adjoue*, is in lumps of about 2 cwts. each. The *adjoue* forms a part of the daily food of all people for the remainder of the year, and thus the date-palm is to Arabia what the bread corns are to European nations. *Adjoue* is an article both of export and import, considerable quantities being taken to Hindostan, while the kind most esteemed in the Hedjaz is imported from the Persian gulf.

Arab cookery is extremely *friant*, more so than even the Italian; but no oil is used for culinary purposes, except in frying fish. Butter is their universal sauce, and of it the consumption is immense; their vegetable dishes all float in butter; with it they work their *adjoue* into a proper consistency; dried corn, or bread crumbs, boiled in butter, is a common breakfast with all classes, and in the desert the *kemmayes* are prepared for use in the same manner. In short, butter may be said to be to the Arab what the potato is to the Irishman: it forms an indispensable part of his diet; and, besides the various forms in which it is taken with other articles, it is a common practice with both Bedouins and townspeople to drink a coffee-cup full of butter every morning; the former, and the lower orders of the latter, adding another half cup, which—to the disgust of strangers—they *snuff* up their nostrils! Arab butter is made from the milk of sheep and goats, that of camel's not being used for that purpose. The home supply is not nearly sufficient for the consumption, and butter consequently forms an important article of importation. It is brought from the opposite coast of Africa, chiefly from Souakin, Massouah, and upper Egypt. Sallads are unknown. Coffee is used to a great extent, though scarcely so much as might be expected; and tobacco is smoked universally by young and old.

The Arabs feed sitting, or, rather, reclining on the ground; they use neither knife nor fork, but divide and take up the food with their fingers. This practice, notwithstanding what has been said in its extenuation (see *Niebuhr*, par. i., p. 47), is very disgusting to a European. The hands are carefully washed *before* eating, but (among the Bedouins, at least) rarely after. The common hour of breakfast is ten in the morning; of dinner, sunset: and at these two, which are the only meals, they eat heartily. The women feed apart from the men; and, in the desert, their repast consists of the remains of that of the men. (*Niebuhr*, par. i., p. 45–52; *Burckhardt's Notes on Bedouins*, p. 32–36, 135–138; *Travels*, i., p. 47–56; *Lord Valentia*, ii., p. 351.) The Arabs are healthy, and instances of longevity are more frequent among them than most E. nations. The diseases to which they are most subject are, an induration and obstruction of the stomach—said to be caused by the camel's milk which they drink—and leprosy. Like the Jews, they regard the latter as a visitation from heaven; and believe that, once confirmed in a family, it can never be eradicated: it is considered as disgraceful in the highest degree, and the unfortunate leper is completely shut out from society. The other diseases to which the Arabs are chiefly exposed are, the small-pox, fevers, ophthalmia, and worms. The method of treatment is, in all cases, extremely simple: but few internal medicines are administered, and those chiefly aperient simples. In slight cases of disorder, or, as a prevention, they rub the body with oil (sometimes of a very offensive kind) or butter. In severe cases they sear the parts affected with red-hot iron; and Niebuhr, who saw this severe remedy applied to a boy who complained of the cholic, remarks, that "if he did not complain again of his first suffering, it probably was because the remedy was so much more painful." Disorders of the teeth are very rare, and among the Bedouins unknown. The women suffer little in childbirth; and such is the general health of the people, that the profession of medicine is unprofitable, and at a low ebb. Some surgeons can set a limb, but these are principally Jews. Chronic disorders are but little known; and acute diseases either yield to the rough treatment, before described, or carry off the patient. As the Bedouin, from his mode of life, is more exposed to casualties than the townsman, instances of long life are less frequent in the desert than in the settled districts. (*Niebuhr*, par. i., p. 114–122; *Burckhardt, Notes on Bed.*, p. 59–56; *Valentia*, ii., 350.) All household duties and menial offices devolve upon the women. This arrangement falls heavier on the Bedouin females than on those of the town, the latter having merely to attend their husbands within doors; and where slaves are kept, this is little more than superintendence. But the Bedouin women perform all the laborious out-door occupations, fetching water from the wells, driving the flocks to the pastures, and bringing them back to the tents at night; while the men, during their stay in the encampment, spend their entire time in utter listlessness, or, at best, in playing at a sort of draughts. This indolence within doors is a part of the Arab character. A merchant or shopkeeper in the towns, returning from his daily avocations, undresses himself, changes his shirt, and, with no other covering, sits for hours upon his carpet, in the projection of his latticed window. The women, according to Ali Bey, are also frequently seen at the front windows, unveiled, and sometimes entirely undressed (*Travels*, vol. ii., p. 105): but the usual apartments of the females are in the back part of the house.

The parental character is highly respected; though the Arab children, both in the towns and in the desert, have more freedom than in any other E. country. The Bedouin child runs naked, in the open country, round his father's tent; and at Mecca, Djidda, and other towns, the children, even of the better classes, are allowed to play in the streets, as soon as they can walk, nearly in the same primitive state. But, within doors, the strictest decorum is observed, a boy never presuming to eat in his father's presence, unless expressly invited. It would seem, however, that this is little better than mere ceremony; for, when emancipated from his father's authority, the young Arab pays him little deference, and instances are not uncommon where the old man, having fallen into poverty, is left by his, perhaps wealthy, son to struggle with distress, or to seek for assistance at the hands of strangers. An old Bedouin is sometimes supported by the charity of the whole tribe; and the daily quarrels between the father and his adult sons form one of the most revolting features in the Bedouin character. On the other hand, however, it should be stated that the Arab, young or old, invariably treats his *mother* with the most respectful attention. The fact is the more remarkable as contrasted with the little estimation in which the female parent is held in other E. countries; and as combined with the fact that, in Arabia, the facility of divorce (see *Lewe, &c.*) tends naturally to loosen every tie that connects families. (*Niebuhr*, par. i., p. 44, 45; *Burckhardt's Travels*, i., p. 340; *Notes on Bed.*, p. 65, 66, 199–203.) The Arab has a grave deportment, but a lively imagination: he is a stranger to gaiety, in the European sense of the word, but the silent reserve of most other E. nations is equally unknown: he delights in public meetings—especially on occasions of weddings, births, and the like; his language is animated and picturesque; he is intuitively a poet and orator, and is extravagantly fond of music. In a word, the demeanour of the Arab may be characterised as a serious cheerfulness, equally removed from boisterous mirth on the one hand, and dull apathy on the other. One of the chief amusements is listening to the recitations or songs of poets, by profession, who travel from town to town, or from encampment to encampment, after the fashion of the bards and minstrels of Gothic Europe, accompanying their verses, usually in praise of some native hero, with the *nebaba*, a kind of guitar. Niebuhr affirms (*Voyage en Arabie*, ii., p. 134), that it is reckoned scandalous in people of credit to practise music; and Burckhardt (*Notes on Bedouins*, p. 143) states that, in most districts, slaves only perform before company. This contempt for instrumental music does not, however, extend to vocal performances: songs, or chanted poems, form the great delight of the Arabs. Love odes, closely resembling the similar productions of the Troubadours and Provencals of the middle ages, are in every mouth. Dancing is reckoned disgraceful in a man, but a woman piques herself upon nothing more than skill in that art. Their ordinary amusements, beyond those now mentioned, are of a sedentary and indolent kind. The military, indeed, and the young Bedouins, practise the Djireed, and other warlike sports; but unless particularly excited, the

Arab, both of the town and desert, employs his leisure in smoking, or in playing games of chance—of which chess, draughts, and cards are the principal. The cards in use are similar to those of the Chinese, which are much more numerous than those of Europe; and the games, also, are more intricate and involved. The Mohammedan law prohibits playing for money, but this prohibition is not always attended to. (*Niebuhr, Voyage en Arabie*, tom. i., p. 141–152; *Burckhardt, Notes on Bed.*, p. 203; *Travels*, i., 377; *Lord Valentia*, vol. ii., p. 308.) All public occasions are festivals to the Arabs. The poorest will make his marriage a gala day; but the greatest family festival is that of the circumcision of an infant: on such occasions the greatest efforts are made to give a handsome entertainment. In the desert it is usually so arranged that all who have families perform the ceremony on the same day, which is consequently one of great festivity. The religious festivals and the saints' days—which are very numerous—are also days of sport and rejoicing. On such occasions, the town Arabs affect great splendour in appearance, and a person would rather be thought a thief than allow one of his equals to exceed him in finery. The Bedouin, also, on such occasions, loads his wife with gold and silk, but seems little careful as to what appearance he may make. Ali Bey affirms that the people of Mecca are the dullest and most melancholy he ever saw; that their marriages and births are unaccompanied by rejoicings, and that the arrival of the Hadj is the only thing that rouses them from their lethargy; and that it is rather an incentive to avarice than pleasure. (*Ali Bey*, ii., p. 103, 111; *Burckhardt*, i., p. 338; *Notes on Bed.*, p. 50, 51, 147, 148.) Mohammed found the slave-trade so firmly established in Arabia, that he made no effort to abolish it; and throughout the peninsula there are a great number of black slaves, Africans, or the descendants of Africans, or mixed races, besides a great number of free blacks, the offspring of emancipated negroes. The great slave dealers are the Yemen and Muscat merchants, who annually import fresh supplies from the coast of Africa. In the towns, especially those of the Hedjaz, every man, almost, keeps an Abyssinian mistress, whom it is reckoned shameful to sell; and whom, if she bears him a child, he generally marries. This accounts for the swarthy complexion of the people of Hedjaz. The male slaves and the females, not Abyssinian, are usually employed in domestic duties. The Bedouins never cohabit with their female slaves; but after a few years service they give them their freedom, and marry them to some of their own complexion. The offspring of these marriages are free, so that a vast number of these black naturalized Arabs are spread over the country. The emancipated slave possesses all the rights of a free Arab, but no Bedouin, male or female, will intermarry with the race, so that they remain a distinct people, discriminated by their colour from all around them. They have, however, lost much of the negro appearance, especially the woolly hair and thick lip, but the form of the head still bears witness to their origin. Greek and Syrian slaves are found commonly enough in the bazars; but they are not regularly supplied. A native Arab is by birth a freeman; and though, in most cases, the condition of the mother fixes that of her offspring, there is no difference between a man's children by his Arab wives and those by his Abyssinian slave. Instances of harsh and cruel masters occur (*Ali Bey*, ii., p. 103), but, generally, slaves are considered as part of the owner's family: the younger ones are instructed with their owner's children, from whom, indeed, they are distinguished only by a very slight difference of treatment, and the performance of some menial offices. They are protected by legal provisions; and upon a just ground of complaint against his master, the Cadi will order a slave to be sold. Servility is no bar to official dignities; indeed, the doias, or governors of towns, are not unfrequently selected from slaves, for the express reason that they belong to that class; being supposed to be more strictly bound to their masters' interest than free Arabs of noble blood. (*Burckhardt*, i., p. 342, 343; *Notes on Bed.*, 103, 104; *Ali Bey*, ii., p. 45, 103; *Niebuhr, Des. de l'Ar.*, par. i., p. 91; *Lord Valentia*, vol. ii., p. 298, 299.)

Arabia, if united under one, or even a few governments, would possess many of the elements of political power. The nature of its soil and climate has always proved a formidable obstruction to foreign invaders, while the conquests of the immediate successors of Mohammed bear witness to the effect that the combined operation of its military energies is capable of producing. Split as the country is into some hundreds of petty sovereignties, this effect is little likely to be repeated. Though every Bedouin is by birth a soldier, dreams of conquest, beyond the plunder of a camp or caravan, rarely disturb his imagination; and though the princes of the settled districts surround themselves with regular troops, they employ them rather to avert internal treachery than to make any attempt at foreign aggrandizement. Still, however, the military power of the Arabs is considerable. In 1815, the princes opposed Mehemet Ali with an army of 25,000 men; and in 1803, the Wahabee chief marched against the same potentate at the head of 45,000 (*Burckhardt's Notes*, p. 248; *Ali Bey, Travels*, vol. ii., p. 115); and though unable to prevent the establishment of the Egyptian power in the Hedjaz, they delayed it for some years, during which they more than once defeated the troops of the Pacha, and failed at last, more, as it would appear, from want of concert in their operations than from want of force. It should be remarked, too, that Mehemet Ali seems fully satisfied with the possession of the sea ports of the Hedjaz, and the holy cities. During twenty-four years he has made no attempt to extend his conquests, but has sought to conciliate his neighbours and his new subjects, by enacting laws equally favourable to both. The sultan sheriff of the Hedjaz, previously to the Egyptian conquest, maintained a guard of 1000 men at Djidda, and probably 3000 or 4000 more in the other towns of the Hedjaz: this army is still maintained. The iman of Yemen has an army of 4000 or 5000 men, and the iman of Muscat one of about 1000. The smaller settled states have also their military forces, but no return of their amounts can be obtained. As before observed, every Bedouin is bred a soldier; but a very great difference exists between his sense of duty to his sheikh when called upon to attend him in a predatory expedition, and when called out for the purposes of national warfare—such, for instance, as a contest between two hostile and powerful tribes. On the latter occasions, the hostile sheikhs have sometimes marched each at the head of 5000 men, while in the desultory plundering expeditions fifty or sixty men frequently compose the whole force. There is a great difference, too, in the conduct of the Bedouins in these cases. Those who have encountered him in his robber character, stigmatize him as cowardly; and it appears that if he fail to effect his purpose by surprise, he generally declines attacking even a far inferior force; but in his open contests with the foe of his tribe, no soldier is braver; though, even here, warfare is carried on at a less cost of human life than in most other countries. (*Burckhardt's Notes on Bed.*, p. 76–84, 165–177.)

The Bedouin attends his chief much in the fashion that the feudal vassal attended his liege lord during the middle ages in Europe. He arms, equips, and clothes himself; and trusts for pay to his share of booty. The Wahabee chief, who is essentially a Bedouin, has, indeed, kept on foot a large body of mercenary troops; but this system is in its infancy in the desert, and it is doubtful whether it will survive the present generation. The Wahabee power, since 1815, has evidently been on the decline. In the settled states, on the contrary, the soldiers are all mercenaries, their pay being, in general, 2½ dollars per month, in addition to food, arms, and clothing. This accounts for the different appearance made by an army of Bedouins, and one belonging to the states of Yemen, Muscat, Hedjaz, &c. The former present a motley appearance as to arms and equipment; the latter have the same arms and uniform. The Bedouins use long lances, sabres, and short crooked knives; and shorter lances, for the footmen. Clubs are very common, where lances (which are never of home manufacture) cannot be procured; and the Bedouins have several kinds, some wholly of wood, some laden with iron, and others wholly composed of the latter material. Matchlocks are in great request, but not very plentiful; though, when possessed of one, the Bedouin is an almost unerring marksman. He has not yet learned to use the musket, and if he get one, he converts it into a matchlock. The pistol is a favourite weapon.

The soldiers of the settled states are armed with matchlocks, and the long crooked knife, called *jambee*. The horsemen carry the long lance, but the shorter one is almost unknown out of the desert. The Arabs have no skill in working heavy artillery; cannon are never used in the field, and the few pieces mounted in the citadels are served by Turks.

A shield, 18 in. in diameter, covered with ox or hippopotamus hide, is a very common piece of defensive armour; in addition to which, coats of mail are worn whenever they can be procured. An iron cap, without a feather, iron gloves, and sometimes greaves for the legs, complete the costume of the mailed Arab. This mode of equipment is, however, chiefly confined to the Bedouins. Of all the arms in use, only the jambee, the club, and the target, are of home manufacture; the lances come from Syria and Persia, the sabres *professedly* from Damascus, the matchlock from Egypt, Turkey, and Europe, and the coats of mail, principally, from Syria.

It is a common practice for all Arabs, except merchants and learned professors, to go armed. The jambee is the usual weapon. (*Niebuhr*, par. ii., p. 184–190; *Burckhardt's Notes*, 30–32, 134, 135, 248; *Travels*, vol. i., p. 338, 339; *Ali Bey*, ii., p. 109–115; *Lord Valentia*, ii., p. 348; iii., p. 339.)

Agriculture.—The nature of the soil restricts the pursuits of the agriculturist to particular localities, and his return varies materially in different parts of the peninsula. In

Oman, the better sort of wheat, even when the season has been peculiarly rainy, will not return more than 10 for one; nor the dhourrah (a coarse kind of barley) more than 12 for one; while in the most fertile parts of Yemen, wheat is said to yield sometimes as much as 50 times the seed, and the return for the dhourrah, it is affirmed, amounts to 150, 200, and sometimes even 400 for one. But statements like these, being liable to extreme exaggeration, must be received with considerable skepticism; though, as the dhourrah yields, in this district, two and even three crops in the year, the accounts of its extreme productiveness are not so very extravagant as, at first sight, they seem to be. (*Niebuhr, Des. de l'Ar.*, par. i., 135.)

The Tehama of Yemen, whenever its arid soil is naturally, or can be artificially irrigated, is plentifully sown with dhourrah. The plough is dragged in every direction over the field, till the earth is well broken and completely mixed. The sower follows the plough, and casts the seed into the furrow, as it is formed, the return of the plough covering the grain. In about eight weeks the dhourrah is fit for the reaper; but as the farmer wishes the corn to be extremely ripe and dry before it is gathered, it remains standing a week or two longer, and then is pulled up by the roots. As, by this process, a considerable quantity of the dry seed is shed, the plough is again passed over the ground, and, in about ten weeks, a second crop is produced, which, being gathered in the same way as the first, is, as before stated, not unfrequently followed by a third.

The plough is of the rudest description, and even this cannot be used on the mountain side; the latter being tilled by means of an iron hoe, or, rather, pickaxe. These, with tools of primitive construction for cutting channels in the fields and gardens, and for forming banks or dikes to preserve the water, complete the scanty list of agricultural implements. When the corn is to be thrashed, the Arabs place it in two rows, ear to ear: a large stone is then drawn over it by two oxen, so that the grain is rather crushed than beaten out of the husks. A *water*-mill would be an anomaly in a country where there are hardly any streams; but, with the exception of one or two, lately introduced into the Hedjaz by the Egyptians, there are no wind-mills in Arabia. The corn, when ready to be ground, is placed between two stones, of which the uppermost, if small, is turned by the hand; if large, it is worked by an ox or ass. (*Niebuhr*, par. ii., p. 189.)

But, notwithstanding this rude state of agriculture, such is the fertility of the S. parts of Arabia, that they not only supply corn for their own consumption, but for that of the greater part of the other districts, and of the wandering tribes of the desert. The Hedjaz is, however, almost wholly dependant on supplies from Egypt. (*Ld. Valentia*, iii., 395, et seq.; *Ali Bey*, ii., 46, 101, *&c.*; *Nieb.*, par. ii., 309–307.)

With the exception of the Meedan tribes, none of the Bedouins meddle with tillage; while the business of the dairy and pasturage are almost equally unknown among the settled population. The Bedouin depends upon the Arab of the towns and villages for his corn and clothing; the latter upon the former for his cattle and part of his butter. In the division of rural labour, the pastoral portion thus falls to the Bedouin. He is a shepherd, though a warlike one; and now, as in the days of Abraham, he counts his wealth, not by his silver or gold (though of them he is by no means negligent), but by the number of his flocks and herds, and especially his camels. The same number of these animals, which would in one part of the desert constitute their proprietor a rich man, in another would mark him as comparatively poor. The tribes of poor Bedouins are those who inhabit the mountainous country, where the camels find little food, and are not very prolific. Among these, the possessor of ten camels is reckoned wealthy, while in the plains of Nedsjed, some sheikhs have as many as 300, and no one with less than 30 or 40 is reckoned in easy circumstances. In the fertile parts of Nedsjed, are some of the best pastures in the world, and the camels bred there are preferred by the town Arabs. These plains also produce the finest horses, and with them the town population is supplied. The wealth of the Bedouin depends, however, upon many contingencies: not only is he liable to be stripped by some more powerful tribe, but disease among his herds, or profuse hospitality, frequently reduce him to poverty. His finest pastures, also, sometimes fail, depending as they do upon the rainy season, and being unprovided with independent means of irrigation. Should the rain fail, herbage also fails, and the Bedouin never looks for more than three or four successive years of plenty, and considers himself fortunate if he pass ten without encountering absolute famine. (*Burckhardt, Notes on the Bedouins and Wahabys*, p. 39–42, 136–141; *Travels*, vol. ii., p. 400–402.)

Manufactures.—These are at a lower ebb in Arabia than in perhaps any other semi-civilized country. Among the Bedouins, two or three blacksmiths, and a few saddlers, are the only artists: they are not members of the tribe for which they labour, but natives of the neighbouring towns and villages. The Bedouins regard them as an inferior race, and would feel degraded were any individual of their tribe to give his daughter in marriage to one of them. It is curious, however, that while they thus regard the service of their horses (their greatest pride) as a menial occupation, they should themselves unscrupulously perform other works, which appear to us quite of as low a character. The businesses of dyeing and tanning are performed wholly by the men. The Bedouin women weave the coverings of tents and the bags for holding provisions, of the hair of goats and camels, but the manufacture of tent-covers is confined to the mountainous regions, where goats abound, their hair being exclusively used for that purpose. (*Pliny, Nat. Hist.*, lib. vi., cap. 28, p. 142.) The Arab loom is a very primitive machine. Spinning is performed by the *men*, being the only domestic occupation which they do not spurn. (*Burckhardt's Notes on Bed.*, p. 37–39, 138.)

These are all the arts or manufactures practised among the Bedouins; and the standard seems scarcely higher in the towns. It is true that gold and silver ornaments are manufactured in Yemen; but by Jews and Banian Indians. Even the money which is coined in that district (and there is none coined in any other), is the work of the former; and the only watch-maker who ever settled in the country, was a Turk. Of machinery, there is next to none. Some rude sorts of arms are made in Yemen, as the crooked knife, *jambea*, and a very inferior matchlock. There are also, in Yemen, several looms for the manufacture of coarse linen; and this, like the hair and wool-weaving among the Bedouins, forms by far the most important of all their industrial occupations. Some woollen cloths are also woven; but this manufacture is much less extensive than the former. There is, or was, a glass-house at Mocha. (*Niebuhr*, par. ii., p. 188–190.) In Djidda, out of 234 shops, Burckhardt enumerates only twelve in which anything is *made*: the others are all places of sale, and chiefly for articles of food or luxury. The twelve manufactures are, four tailors, five sandal-makers (all Egyptians), two turners, and one watch-maker, who, like his fellow craftsmen, formerly residing in Yemen, is a Turk. These, with a few blacksmiths, silversmiths, and carpenters (mostly Egyptians), constitute all the artisans of Djidda. (*Burckhardt's Travels*, vol. i., p. 47–84.) In the holiest of the holy cities, Mecca, not a man can be found capable of forging a lock or key. The slippers and sandals in common use, are brought from Egypt and Constantinople; and the only attempts at manufactures are confined to the construction of rude matchlocks, *jambeas*, and lance-heads, together with vessels of copper and tin, in which the pilgrims carry away the water of the holy well, *zemzem*. (*Burckhardt's Travels*, i., 343; *Ali Bey*, ii., 99, 100.) In Oman, the only manufactures are sashes and turbans of silk or cotton, the *abba*, or Arab cloak of wool or camel's hair, a coarse kind of cotton canvass, arms of a very rude description, earthen jars, called *murtabas*, and gunpowder. (*Frazier's Journey into Khorassan*, p. 18.)

At Suez, Hodeida, Mocha, and Muscat, some of the vessels are constructed in which the Arabs carry on their coasting and Indian trade. Till within these few years, ship-building was carried on at Djidda also (*Ali Bey*, ii., 45); but though it be still a very important shipping-station, no vessels of any kind are now built at it, and it is with difficulty that means are found of even repairing a ship or boat. (*Burckhardt's Travels*, i., 43.) The want of wood, in Arabia, lays the shipwright under peculiar disadvantages. The timber used in Suez is felled in the woods of Asia Minor, conveyed up the Nile to Cairo, and thence, overland, to its place of destination. When ships were built at Djidda, the timber came by the same route; and it may be presumed that its farther transit, by the Red sea, from Suez rendered it too costly. In Mocha and Hodeida a part of the timber is procured from the mountain-sides of Yemen, but the greater portion is imported from the coast of Africa. (*Burckhardt's Travels*, i., 42–49.)

The ships of the Arabs, excepting those of Muscat, which are of a very superior description, are extremely rude and simple. Those called dows are the largest, and are the only ones that perform the voyage to India. (*Burckhardt's Travels*, i., 43.)

The unskilfulness of the Arab seamen, with the clumsy nature of their dows, render shipwrecks of very frequent occurrence. Ali Bey was wrecked on his voyage from Suez to Djidda, and again on his return from Djidda to Suez (*Travels*, ii., 34, 164); and he affirms, that not a year passes without several vessels being totally lost, and many more, more or less injured; so that ships are always being built or repaired, without increasing the actual number employed in the coasting trade. (ii., 45.) That number is, however, considerable; the ships belonging to Djidda only amount to 250; and it is estimated that about as many belong respectively to Suez, Hodeida, and Mocha. (*Burck. Trav.*, i., 42; *Ali Bey*, ii., 45.) Many of these ships are purchased at Bombay and Muscat; the vessels of the latter being very superior to

times of the Red sea, and their navigators much before the sailors of Yemen in energy and skill. (*See* MUSCAT.)

The best houses of the Arabs are built of stone, or, if upon the coast, of madrepore and coral. This latter material is of such a nature that it rapidly decomposes when exposed to the weather. In other parts they use a sun-burnt brick with little or no lime, so that constant care is necessary to prevent the introduction of moisture, the tropical rains bringing with them sure destruction to the neglected buildings of an Arab town, quickly reducing them to a heap of rubbish; and as the wooden materials very soon vanish in a country where wood is extremely scarce, the very ruins of many cities, formerly celebrated for their magnificence and grandeur, may now be sought for in vain. Even in towns that are populous, and stirring with activity, many houses are falling rapidly to decay; and while no part is old, many parts are dilapidated and ruinous: yet an Arab town, on the first approach to it, appears handsome and picturesque; the houses, like those all over the East, are flat-roofed, and among them rise, here and there, the dome-covered tombs, called *kobas*, which, with the tapering minarets of the mosques, give to the whole outline an air of variety and elegance. Every good house exhibits a series of gaudy lattices to its windows; and many of them are ornamented with fanciful designs in white stucco. Most of the gateways have pointed arches; and the general character of the ornamental architecture is not very dissimilar to the Gothic. The mosques are square buildings, or rather parallelograms, without much external beauty, except their tall and slender minarets, which always appear light and graceful; but their interior frequently displays much skilful workmanship. The great mosque at Mecca contains more than 500 columns and pilasters of very great beauty. The houses of the poorer classes are of the most wretched description. Huts composed of wicker work or date-tree leaves, covered on the inside with mats, and, sometimes, on the outside with a little clay; huddled together, and hardly sufficient to afford a shelter from the weather. These circumstances, with the filth collected in the unpaved streets, and never removed, impress the mind of a European with a sense of utter desolation and misery.

No remains of the fine Saracenic architecture of the middle ages are found in Arabia; singular as it may appear, that a people who have left the traces of their skill in this art in every land, from Mesopotamia to Spain, should possess no trace of it in their native country. The perishable nature of building materials in Arabia *may* account for this fact; for even the holy mosque at Mecca has undergone so many repairs that it may be regarded as a modern structure; but it is much more probable that, while the Arab conquerors caught the love of arts and sciences from the enervated, but refined, nations subdued by them in their headlong career of conquest, those arts and sciences did not find their way into the peninsula; and that architecture, like the rest, never flourished within its limits.

The Arabs use no levels in their buildings, consequently their floors are very uneven; and, notwithstanding the heat of their climate, they have a very bad, or, rather, *no* idea of ventilation. The large ventilators, placed on the house-tops in Egypt, and which diffuse a current of air through all the lower apartments, are totally unknown. In many places the windows are composed of transparent stone, built into the walls, and, consequently, incapable of opening. (*Burckhardt's Travels*, i., 17–22, 153–155, 185–242; ii., 150, 220, *&c.*; *Ali Bey*, ii., 20, 42, 94–104, 161–174; *Lord Valentia*, ii., 345–348; *Fraser*, 7, 8.)

Commerce.—Owing to the situation of Arabia, nearly surrounded by the sea, and occupying, as it were, a central position between Europe, Asia, and Africa, it has always enjoyed a considerable trade, which, in later ages, has been materially promoted by the resort of pilgrims to the holy cities. The hadjis, indeed, are expressly authorized by the prophet to combine commercial pursuits with the performance of a religious duty (*Koran*, chap. ii., *Sale*); and a great amount of business is, consequently, transacted at Mecca, during the period that the pilgrims remain in that city. With the exception of coffee, and a few other articles of inferior importance, Arabia has but little native produce to export. Its trade, therefore, is, and always has been, principally one of transit. Great quantities of commodities are annually brought to Djidda, Mecca, Muscat, and its other entrepôts, from Turkey, *&c.*, partly by caravans, but principally by ships: such parts of these as are not wanted for home consumption, being distributed among the pilgrims and merchants, are by them conveyed away by sea or land, as the case may be. The great centres of Arabian trade are Djidda, Mocha, and Muscat. The first is the port of Mecca, and also the principal channel through which the regular trade between the Hedjaz and Egypt is carried on; the former being principally dependent upon the latter for its supplies of corn. Since the zeal for pilgrimage has begun to abate in the Mohammedan world, the trade of Arabia has considerably decreased; but it is still carried on to a greater extent than would readily be supposed, considering the limited amount of its population and productions. Mocha is the principal seat of the coffee trade, though Loheia has of late years made some powerful attempts at rivalry; and Muscat has recently risen to very considerable eminence as a sea-port and seat of the carrying trade, particularly with India and the countries round the Persian gulf. (*Burckhardt's Travels*, i., 29–61; *Ali Bey*, ii., 101–107; *Fraser*, 16; *Lord Valentia*, ii., 370; *Niebuhr*, par. ii., p. 193. See also, DJIDDA, MOCHA, MUSCAT, *&c.*)

Laws, Crimes, and Punishments.—The laws of Arabia are those of a primitive people under a patriarchal government. The civil laws, founded upon the Koran, are administered by cadis, distinguished by their experience in the customs of the nation, but to whom a knowledge of the arts of *reading* and *writing* is not always indispensable. It should be observed, however, that the Arab judges are of two kinds; the *Cadi-el-orfias* (judge of customary laws), and the *Cadi-el-sheryas* (judge of written law), the latter being more common in what are called the Turkish towns (that is, in towns governed by Turkish law), than in those where the unmixed customs of Arabia exist. Written pleadings are not, however, unknown, even in pure Arab towns; but precedents (in some cases, perhaps, reduced to a rude form of codification) seem to form the principal, if not the only guide, to an Arab judge's decision. The sovereign, whether he be monarch of a state, or sheikh of a Bedouin tribe, is only president of the tribunal of justice; he cannot decide a case, either civil or criminal; every one must be referred to the proper tribunal; and the sovereign possesses no power of reversing its decision. But this protection from despotic power is, in the towns, merely apparent; for, as the sovereign names the cadis and dismisses them at pleasure, they regard themselves simply as his officers, and never dream of pronouncing a sentence of which he disapproves. Among the Bedouins, however, the office of cadi is elective, and the sheikh has no influence in the appointment. (*Nieb.*, par. ii., p. 180, *&c.*; *Burck.*, *Notes on Bed.*, p. 68, *&c.*)

Capital punishments are very rare; being inflicted only for blasphemy, and conjugal infidelity in woman. The blasphemer is hanged; the unchaste wife, if her guilt be unequivocally proved, has her throat cut; and, by an unheard-of refinement of atrocity, her father or brother is compelled to be her executioner. This detestable barbarity is, however, rarely perpetrated; for the marriage tie being, on the part of the husband, of very easy dissolution, he generally prefers sending his offending spouse back to her family, merely assigning as a reason that she does not suit him. (*Niebuhr*, par. i., p. 21; *Burckhardt*, *Notes on Bed.*, p. 63.) Corporal punishments are almost unknown. The immemorial usage is to award a pecuniary fine, whatever may be the nature of the crime. Every offence has its ascertained mulct, even to murder; but, in this case, the friends of the deceased are not compelled to take the compensation, being, by the law of *Thar*, or blood revenge, allowed to take the life of the homicide, or that of any of his relations within the fourth degree. If, however, the fine be accepted, the Koran expressly provides for the safety of the murderer. (*Koran*, chap. ii., p. 21; *Niebuhr*, par. i., p. 28–31; *Burckhardt's Notes on Bed.*, p. 84–89.) Insulting expressions, acts of violence, however slight, and the infliction of wounds, have each their respective tariff of fines; and it sometimes happens that, in the course of a quarrel, mutual offences having been committed, the cadi's sentence is a curious specimen of striking a balance. Burckhardt (*Notes on Bed.*, p. 71) affords an instance of this. "Bokhyt called Djolan a *dog*. Djolan returned the insult by a blow upon Bokhyt's arm; then Bokhyt cut Djolan's shoulder with a knife. Bokhyt owes to Djolan, therefore,

For the insulting expression . . .	1 sheep.
For wounding him in the shoulder . .	3 camels.

Djolan owes to Bokhyt,

For the blow upon the arm . . .	1 camel.

Remain due to Djolan, 2 camels and 1 sheep."

The killing of a watch-dog is paid for by placing in the earth a stick as long as the dog, from tail to snout, and this stick the offender is obliged to cover with wheat, as a satisfaction to the owner.

The decisions of the cadis are generally founded upon the amount of testimony before them; but, if there be no witnesses, the defendant is called upon to expurgate himself by oath. The judicial oaths vary in sanctity and solemnity; and if the accused swear, by the one proposed, to his innocence, he is considered as acquitted. An ordeal, not very dissimilar to that formerly prevailing in Europe, exists in Arabia. It consists of heating an iron spoon red-hot, and calling on the accused party to lick it. If he escaps without injury, he is accounted innocent; if otherwise, guilty. Burckhardt is orthodox enough to declare, that persons have been known to lick the *heshaa* (red-hot spoon) twenty times, with perfect impunity! (*Not. on Bed.*, p. 69.)

Though robbers be accounted anything but infamous, those detected in the fact are very severely punished. In this case, the robber is kept in close confinement (among the Bedouins, in a hole dug in the earth), and very scantily fed, till he fix the terms of ransom with his captor, or till he contrive to make his escape. This is a strictly legal method of proceeding; the right of detention being lodged, by custom, in the person of the captor; and even the mode of treatment is so well ascertained, that it is scarcely ever departed from.

Among the Bedouins, the customs of *Wasy* and *Dakheil* have all the force of law in other countries; by the first, an Arab family binds itself to be the protector of another, and this obligation, once undertaken, descends through all the generations of both. There is no Arab, from the lowest to the highest, but has his *wasy*, or guardian; and the duty of protection inferred from this character, is among the most sacred recognised in Arabia.

By the law of *dakheil*, a person in actual danger, who can touch another, or even anything with which that other is in contact, or can hit him by spitting or throwing a stone at him, at the same time exclaiming, *Ana dakheilak*, "I am thy protected," acquires a right to the protection which he seeks, and which is always accorded to the fullest extent. Even a detected thief, if he can touch any one in his captor's tent (except the captor himself), becomes safe; for which reason he is bound hand and foot, and beaten, till he agrees to renounce the *dakheil* for that day. It is for this reason, too, that he is subsequently buried alive, as it were; for should he become the *dakheil* of any one, his right to freedom is immediately allowed, and he is treated, in every respect, like a newly-arrived guest in the tent of his late enemy. There is only one offender to whom the privilege of *dakheil* is refused, namely, the thief released upon the responsibility of some third party, if he should, when at liberty, refuse to satisfy his bail. Under such circumstances, he is proclaimed *traitor*, and loses all the privileges in question; in fact, becomes outlawed. The *dakheil* does not apply to a homicide under the *thar*. (*Burckhardt, Notes on Bed.*, p. 74, 75, 89–100, 183.)

Though polygamy be allowed by the Mohammedan law, in practice it is by no means general. Few men, of moderate fortunes, have more than one wife; and many, even of the highest rank, similarly confine themselves.—(*Niebuhr*, par. i., p. 65; *Burckhardt, Not. on Bed.*, p. 61.) On the other hand, the nature of the marriage ceremony, and the facility of divorce, renders *changes* of wives of very common occurrence. In the towns, an agreement before the cadi—in the desert, the slaughter of a lamb in the tent of the bride's father, completes the contract, which is broken quite as readily as it is formed. The husband having said, before witnesses, *ent talek* (thou art divorced), and sent the woman back to her family, both parties are considered free; the husband from the maintenance of his wife, the wife to form a a new connexion. In these cases, the woman's portion is returned; and, among the Bedouins, the husband adds to it a she-camel. The custom of divorce is, however, much more prevalent in the tents than in the towns. In the latter, it is always considered indecorous, and implying dishonour in the woman; but in the desert a wife may have been divorced three or four times, and yet be free from any stain or imputation on her character. Polygamy, however, is much more common in the towns than among the Bedouins.

If a man leave a widow, his brother generally offers to marry her; but this is entirely a law of custom, and not binding on either party. A man has, however, an exclusive right to the hand of his cousin; and, although he cannot be compelled to marry her, his renunciation of his right is necessary to enable her to marry another. Marriages are consummated at a very early age; it being reckoned discreditable in a man, and almost infamous in a woman, to lead a life of celibacy. (*Burckhardt's Notes on Bed.*, p. 61–66; *Niebuhr*, par. i., p. 63–67.)

A curious custom, connected with the laws of marriage and divorce, prevails in the Hedjaz. No unmarried woman is, by the Mohammedan law, allowed to visit the holy temple; but as many rich old widows, or women whose husbands have died on the road, arrive with every hadj: a number of men are established at Djidda, and other frontier towns of the *Beled-el-Harem*, whose business it is to facilitate the progress of these widowed females through the sacred territory. The *muhallil* (as one of these men is called) marries the lady legally before the cadi, accompanies her to Mecca, Arrafat, and all the sacred places; and, on the termination of the pilgrimage, pronounces the *ent talek*, or sentence of divorce. Should he, however, refuse to do this, the law cannot compel him; but he would be prevented from any longer exercising his calling, which, though not very creditable, is so lucrative, that only two instances are recorded of such temporary marriages having become permanent. (*Burckhardt's Travels*, i., 359.)

The law of inheritance is very simple as regards property. The effects of a deceased father are shared among his children, the portion of a male being double that of a female. The succession to power is clearly ascertained. If a sheikh or sovereign die, his successor is usually taken from among his sons; but it does not seem that any *one* has a well established right in preference to the others. In Yemen, it would appear that the imam is succeeded by his eldest living son, even to the exclusion of the children of an elder one deceased. (*Niebuhr*, par. ii., p. 179; *Burckhardt, Notes on Bed.*, p. 68, 75; *Lord Valentia*, vol. ii., p. 389.)

Religion.—Antecedent to the earliest records, the city of Mecca had been sacred ground; and its holy temple, the *kaaba*, identified in the minds of the Arabs with every sacred feeling. The legends with respect to it, to which it is unnecessary more particularly to allude, show that the religion of the early Arabs was, to a considerable extent, mixed up with that of the Hebrews. They acknowledged one supreme God, regarding, however, the sun, moon, planets, and stars as inferior and subordinate intelligences. This religion has been called SABIANISM, either from SABI, a supposed son of Seth, or, as is more probable, from the word SABA, signifying the Host of Heaven. The supreme God was called *Allah Taala* (Most High God), the subordinate deities, *Al-Slahat* (the Powers). It was these titles (one particular, the other general) that led Herodotus to affirm that the Arabians worshipped only two gods, namely, *Urotalt* and *Alilat*; the former of whom he identifies with the Bacchus (Διονυσος) of the Greeks, the latter with *Urania*, the muse of astronomy. (*Herodotus, Thalia*, § 8: *Al-Firouz, Shahrestan et alii in Pococke*, p. 110, 138, 143, 284; *D'Herbelot*, p. 725, 726, &c.) The Sabian religion can scarcely be deemed irrational, when professed by a rude people, inhabiting an open country, under a clear sky; who must have connected the changes of the seasons, and the returns of the periodic rains and droughts, that rendered their plains alternately fertile and sterile, with the revolutions of the heavenly bodies. But the Arabs also worshipped angels (*Koran*, chap. liii. and lxxi.); and their images, which last they believed to be inspired by the supreme Divinity with life and intelligence. This sort of idolatry having been once introduced, gradually spread; and in the sixth century, and long before, the number of these deities was very great, each tribe having chosen one to be its peculiar intercessor with the Supreme Being; and 360 were enshrined in the kaaba, as tutelary guardians of the days of the Arab year. (*Al-Janaub, Shahrestan et alii in Pococke*, 90, et seq.; *Sale, Intro. Koran*, 14–22; *Burckhardt's Travels*, i., p. 299, &c.)

The Arabs seem, indeed, to have admitted, without hesitation, all deities; and thus, in the sixth century, a figure of the Virgin Mary, with the infant Jesus, was sculptured on one of the principal pillars of the kaaba as an object of adoration. (*El Arraky*, quoted by *Burckhardt, Travels*, i., p. 300.) It is most probable that this indiscriminate adoption of the objects of veneration of all sects, was intended to render the sacred city sacred to all men, and thus to increase the resort of pilgrims.

After the destruction of Jerusalem, by Titus, A.D. 70, many Jews fled into Arabia. These exiles made many proselytes among the natives, whole tribes embracing the Hebrew faith; so that, in a century or two, the Jewish Arabs became a very powerful section of the whole people. A similar cause, the persecution early in the third century of the Christian era, drove many Christians to Arabia, whose zeal, unchecked by former sufferings, led them to preach their doctrines in their new homes, and that with such success that in a short time they had made a very great progress in the country.

The faith of the Persian Magi, or the religion of Zoroaster, had, at a very early period, found its way into the peninsula; had been embraced with avidity by many tribes; and thus, in the middle of the sixth century, the population of Arabia was divided, perhaps not very unequally, into Sabians, Jews, Christians, and Magians. (*Shahrestan et alii in Pococke*, 140, et seq.; *Sale, Intro. Koran*, 21–24.)

Such was the state of religion in Arabia at the birth of Mohammed; an epoch which may be regarded as the commencement of one of the most extraordinary revolutions that history has to record. It occurred at Mecca, in the month of May, A.D. 571 (*Dr. Prideaux, Hist. Meh.*, 6), or 570 (*Abul-Feda, Vit. Moh.*, 49). This founder of a new religion, and of a political power, which, even in his lifetime, extended over his native country, and which, under his successors, threatened to embrace the empire of the world, traced his genealogy in a direct line through eleven descents from Koreish, the founder of the powerful tribe that bore his name. Koreish again was affirmed to be the tenth in direct descent from Adnan; and Adnan the third, seventh, or eighth (which is doubtful) from Ishmael, the son of Abraham. (*Abul-Feda, Vit. Moh.*, cap. ii., p. 6, 7.)

The future Prophet sprung, therefore, from the noblest tribe of the Ishmaelitish Arabs, and his grandfather was, at

the time of his birth, sovereign of Mecca, and guardian of the Kaaba; consequently, from the sacredness of his territory, and the holiness of his office, a prince of great power and influence. (*Abul-Feda*, cap. vi., p. 13; *Al-Firawz et aliis in Pococke*, p. 51; *Eochelensis Chron. or Hist. Ar.*, par. i., cap. iii., p. 139, et seq.)

Yet, notwithstanding his high connexions, Mohammed's early life was passed in comparative poverty. His father, a younger son of the sovereign of Mecca, dying before Mohammed was two years old, the latter, and his mother, were left with no other provision than five camels and a female slave. To his grandfather, Abdol-Motalleb, in the first instance, and subsequently to his uncle, Abu-Taleb, the future Prophet was, therefore, indebted for his infant protection; and this guardianship was exercised with the greatest kindness, the uncle especially (for Abdol-Motalleb died when Mohammed was only eight years old), continuing the firm friend of his ward, throughout his life, and protecting him in the dangers and difficulties which beset his first attempts to disseminate his doctrines. Under the auspices of his uncle, Mohammed began life as a merchant, accompanying a trading caravan to Syria, in his thirteenth year. Subsequently, and at a very early age, Abu-Taleb recommended him as a factor to Khadija, a rich widow, to whom his skill in commerce, or his other accomplishments, so far endeared him, that, in a short time, he exchanged the name of servant for that of husband; raising himself by this alliance to an equality with the richest, if not the most powerful men of Mecca. At the time of his marriage he was twenty-five, and his wife forty years of age. (*Abul-Feda*, caps. iv. and v., p. 10 and 12.) It would be useless now to attempt to discover the proximate cause that led Mohammed to attack a system of idolatry, of which his own family were at the head. It was not, however, as some have surmised, a sudden outbreak of enthusiasm; for, after his marriage, he continued to live in all the privacy compatible with the station of a rich and highly-connected individual for thirteen years. At the termination of this period, he withdrew from society, resorted to a cave in the neighbourhood of Mecca, where, for two years, he gave out that he was in daily communication with the Divinity. At the end of this time, being then forty years of age, he assumed the character of a prophet, sent by the Almighty to establish a new religion; or, if we may take his own words, to restore the ancient one, professed by Adam, Noah, Abraham, the Prophets, and Jesus Christ; by destroying the gross idolatries of his countrymen, and weeding out the corruptions and superstitions by which, as he alleged, the Jews and Christians had deformed the beautiful simplicity of the true faith. (*Abul-Feda*, cap. vii., p. 14–17; *Abul-Pharagius*, p. 102; *El-Macin, Hist. Sar.*, lib. i., cap. i., p. 13, &c.)

His first convert was his wife Khadija, of whose merits, in this and other instances, he always entertained the highest sense, uniformly speaking of her with an affection bordering upon reverence; and placing her, after her death, among the only *four* perfect women the world had ever seen. The other three were Miriam, the sister of Moses and Aaron, the Virgin Mary, and his own daughter Fatima. (*Abul-Feda*, caps. vii. and viii., p. 16, 17.) The progress of the new sect was at first very slow. It is usually stated, that nine converts only were made in the first three years; but this is scarcely consistent with the fact that, in the fourth, Mohammed felt himself strong enough to abandon his private preaching, and to proclaim his doctrines publicly. (*Abul-Feda*, cap. viii., p. 19; *Koran*, cap. xxvi. and xxvii.; *Abul-Pharagius*, p. 102, &c.)

Nothing can well exceed the simplicity of the Mohammedan doctrines, as delivered by the founder and his immediate successors; and as they are imbodied in the 114 chapters of the Koran: The unity of God; the divine mission of Mohammed; the stated observance of prayer; the giving of alms; the observance of an annual fast; and the pilgrimage to Mecca; comprise, under five heads, the principal points, whether doctrinal or practical, which were to be enforced. The resurrection of the body was proclaimed, and a future state, in which men will receive the reward of their good actions and obedience to the law of the Prophet, or be subjected to a *purifying* punishment for their evil deeds and infidelity. The *final* admission of all believers to a state of bliss, is an article of Mohammedan faith. (*Koran*, passim, especially chapters ii., iii., iv., v., and cxii.; *Roland's Moham. Theol.*, p. 20, &c.) The supposed divine legation of Mohammed is the principal novelty introduced. The stated prayers were only adaptations of customs already existing among the Sabians, Jews, Christians, and Magians; the annual fast was a very ancient practice among the old Arabs; and the only change effected by Mohammed in its observance, was, by prohibiting the intercalation of a month in the lunar year, to make the sacred season fixed instead of ambulatory. (*Koran*, chap. ix.) The pilgrimage to Mecca was, as has been shown, a practice followed from the very earliest times; and the rewards and punishments in another life were adopted, but with much adulteration, from the Christian doctrines. The grossly sensual character of Mohammed's paradise, is, in fact, the great blemish in his religious system; and has had a most debasing and degrading influence over the countries where it has acquired an ascendency.

The new religion being in most parts little more than an adaptation of various parts of the religions previously existing in Arabia, was well fitted to attract all by the respect it professed for the peculiar tenets of each, excepting the idolatrous worship of the Sabians. Accordingly, Mohammed was heard with patience by the people of Mecca, till he denounced the idols of the Kaaba. This, however, raised so strong a feeling against him, that his ruin was prevented, and his life preserved, only by the firm friendship of his uncle, Abu-Taleb, who, although unconvinced by the preaching of his nephew, protected him against his enemies. In the sixth year of his mission, the persecutions to which he was exposed became so severe, that many of his followers sought, by his permission, refuge in other lands, chiefly in Abyssinia; where they became the first instruments for planting the new faith in Africa. This event is called, by Eastern writers, THE FIRST HEJIRA or flight. (*Abul-Feda*, caps. ix., x., xi., p. 21–27; *Ebnol-Athir, Al-Firawz et aliis in Pococke*, p. 177, et seq.)

The protection of Abu-Taleb, though it preserved Mohammed from personal danger, could not prevent a very strong manifestation of hostility, in which Abu-Taleb himself and all his family were sharers. The other Koreishites bound themselves to hold no communion with the family of Hashem, the great grandfather of Mohammed; and to give the greater force to their act, it was reduced to writing, and laid up in the Kaaba. At the end of three years, however, Mohammed, having, no doubt, previously concerted his measures, proclaimed, that God had sent a worm to eat out every word in the parchment except his own holy name; and the writing being, on inspection, found to be destroyed, the league was put an end to; and Mohammed's reputation considerably increased. In the same year, being the tenth of his mission, Abu-Taleb and Khadija died; and their deaths were by far the greatest blow which Mohammed experienced during his career. In the Mussulman calendar, this year is commemorated as the *year of mourning*. (*Abul-Feda*, caps. x., xiv., p. 26–29; *El-Macin*, lib. i., cap. i., p. 4.) The death of Abu-Taleb removed the only check to the virulent enmity of the Koreishites; and a stranger having succeeded to the sovereignty of Mecca, after a troubled residence of three years—marked, however, by the accession of many proselytes—Mohammed, on the invitation of a deputation from Medina, fled to that city; and instantly, as if by magic, the proscribed and condemned exile became a powerful, and, as it soon appeared, an all but invincible monarch. The flight from Mecca to Medina, the second Hejira, or HEGIRA, *par excellence*, is the epoch from which the Mussulmans date their æra. It occurred in the fifty-third year of Mohammed's age, and thirteenth of his mission; and coincides with the 16th July, A.D. 622.—(*Abul-Feda*, cap. xxi., xxiii., p. 40–50; *Ebn Ishak, in Sale*, p. 48; *El-Macin*, lib. i., cap. i., p. 4; *D'Herbelot*, p. 444, 445.) Down to this point, Mohammed had propagated his religion by means of persuasion only: throughout eighty-five chapters of the Koran, published at Mecca, there is nothing said of a compulsory power being given to the Prophet: on the contrary, he exhorts his disciples to bear with patience the evils inflicted by unbelievers, declaring he has no authority to compel any one to embrace his religion.—(*See*, in particular, chaps. vii. to xxiii.; xxv. to xxxii., &c.) But his doctrines breathe a very different spirit after his establishment in regal and sacerdotal power at Medina. The eighteen chapters of the Koran, published at that city, declare, that since man had perversely rejected the missions of Abraham, Moses, the Prophets, Christ, and even the mild pleadings of Mohammed himself, God had now commanded him to extirpate idolatry from the earth, and to bring all mankind into submission to his will. (*See*, in particular, chaps. iii., iv., v., viii., ix., &c.) The sword, however, was first drawn against Mohammed, and not by him. Abu-Sophian, the new sovereign of Mecca, led an army, of 900 or 1000 men, against the supposititious Prophet, who, with a force of only 319 enthusiasts, met his enemies in the valley of Beder, near Medina, and gained a complete victory, with the loss of only forty men; who were immediately canonized, as the first martyrs in the cause of God and his Prophet. (*Abul-Feda*, cap. xxvii., p. 56–60; *El-Macin*, lib. i., cap. i., p. 5.)

From this time the progress of Mohammed was, if not a continued triumph—for he sustained some defeats—an example of the most rapid success upon record. During the next six years he fought twenty-seven battles, exclusive of those fought by his generals, in which he was not personally present; and, at the end of that period, he entered Mecca in triumph, on the 20th Ramadan, in the 8th Hejira, or De-

cember 31, A.D. 629. The conquest of Mecca may be regarded as the final establishment of Mohammedanism in Arabia. The few contests that followed were merely the last struggles of an expiring opposition; and were mostly terminated by Mohammed's generals, while the Prophet himself was employed in destroying the idols in and round the Kaaba, and in sending embassies, inviting the Arabs to embrace his faith, which invitations were now attended with complete success. The following year, the 9th Hejira, is called, by Eastern writers, the year of embassies: missions from all parts of Arabia poured in, bringing the adhesion of the various tribes to the now triumphant faith; and the victorious founder of the new religion made a solemn pilgrimage to the temple of the Kaaba, to return thanks to Heaven for his success, and the final overthrow of idolatry.—(*Abul-Feda*, caps. xxviii.–lx., p. 61–139; *El-Macin*, lib. i., p. 5–10.)

All Arabia was now united in one faith; but Mohammed did not live long to enjoy his triumph. Some years previously, or in the 7th Hejira, A.D. 628, he was poisoned by a Jewess of Chaibar, who, on his entering that town in triumph, offered him some eggs, previously drugged, professedly to test the reality of his divine knowledge. (*Abul-Feda*, cap. xlv., p. 92.) Henceforward his strength declined; but his death was caused by a fever,* which having, at intervals, deprived him of his reason, terminated his existence in the space of fourteen days, on the 12th of the 1st month, Rebizah, in the 11th Hejira (6th June, 632), in his 63d, or according to some authorities, 65th year. He was buried at Medina; and the Mohammedan doctors differ as to which is the most sacred—Mecca, which gave birth to their Apostle, or Medina, which received him in his flight, and contains his mortal remains. (*El-Macin*, lib. i., p. 10; *Abul-Feda*, caps. lxi.–lxiv., p. 132–142; *Ockley's Hist. Sar.*, i., 1.)

During Khadija's life, Mohammed abstained entirely from the right of polygamy; after her death he took nine wives, alleging, of course, that a special revelation authorised him in exceeding the number four, to which his law restricted his followers! By Khadija, he had four sons and as many daughters; and by an Egyptian concubine he had a fifth son; all his other wives being barren. His five sons died in infancy, and of his daughters, Fatima only, who was married to her cousin Ali, survived her father. From Ali and Fatima a numerous and illustrious progeny descended, the ancestors of the numerous existing Sheriffs, or *Sons of the Prophet*. (*Abul-Feda*, caps. lxvii., lxviii., p. 146–151.)

Mohammed died in the midst of preparations to carry his spiritual faith and temporal power into other countries. His death scarcely, however, suspended the completion of his great designs: a momentary state of confusion was followed by the election of Abu-Becre, father-in-law of Mohammed, to the office of supreme head of the Mussulman religion and power, under the title of "Khalif," or "Successor of the Prophet." Under his reign, and that of his two successors, the Arab arms were carried triumphantly into all the neighbouring countries; and, by the 20th year of the Hejira, or within less than ten years from the death of Mohammed, the conquest of Syria, Persia, and Egypt, was completed. In the 13th year of the Hejira, Damascus was taken; in the 16th, Jerusalem; in the 17th Antioch; in the 19th, Ispahan; and in the 20th, Alexandria. (*El-Macin*, lib. i., cap. ii., p. 16–38; *Abul-Pharagius*, p. 108–117; *Ockley*, i., p. 1–391.)

The khalifate continued elective for four successive elections; the last, who held the power by public suffrage, being Ali, the cousin and son-in-law of Mohammed. This FIRST BELIEVER had been thus long passed by in consequence of his refusing to hold as sacred anything not contained in the Koran, or the immediate traditions of the prophet. (*Abul-Pharagius*, p. 115.) From this circumstance arose the division of the Mohammedans into two great sects, the SONNITES and the SCHIITES. The latter, the disciples of Ali, whom they denominate the *vicar of God*, receiving only those doctrines which he admitted to be sacred; while their adversaries (the orthodox Mussulmans) hold, at least in *equal* reverence, the 7275 *Sonna*, or oral laws, which, within the first 200 years of Mohammedanism, had grown into respect and veneration. (*D'Herbelot*, arts. *Bokhari*, *Hadith*, and *Sonnah*, p. 208, 416, and 807.)

Ali fell by the hand of an assassin, after a troubled reign of five years; and Moawijah, son of Abu-Sophian, the greatest enemy of Mohammed, usurped the throne; and, what is more remarkable, had the power or art to make the khalifate hereditary in his own family. His descendants are called the Ommiyade race of khalifs, from Ommiyah, the grandfather of Abu-Sophian; and they possessed the regal and sacerdotal power through fourteen generations, and for nearly 100 years. (*El-Macin*, lib. i., caps. v. and vi., p. 38–49; *Abul-Pharagius*, p. 117–123; *Ockley*, ii., p. 1–108.)

Under the sway of this family the whole of Africa was subdued; and so far colonised by tribes of Bedouins that it has ever since remained, in language, manners, and religion, essentially an Arab country. The Oxus (Jihon) was very early crossed; the shepherd tribes of Turks and Tartars brought under the triumphant faith of the Arabian prophet; and, within eighty years from Mohammed's death, the sceptre of his representative extended over all the countries between the Indus and the Atlantic, and (eastward of the Mediterranean) from the Indian ocean to the steppes of Central Asia. (*El-Macin*, lib. i., caps. vii.–xiii., p. 49–77; *Abul-Pharagius*, p. 123–126.)

Spain was the last and most remote of the conquests of the khalifs. It was subdued in the beginning of the 8th century; Roderic, the Gothic king, being defeated and slain in the battle of Xeres, July 19, A.D. 711. Subsequently to this, though the Arabs were for a short time masters of the S. of France, they made no farther impression on Europe; and, in the year 732, they were completely defeated by Charles Martel, and driven beyond the Pyrenees, which barrier they never recrossed. (*Abul-Casim*, vol. i., chaps. iv.–ix., p. 26–111; *Roderic Ximenes*, *Hist. Ar.*, caps. xi.–xiv., p. 10–13.)

The Ommiyade khalifs were, in the 133d Hejira (A.D. 750), superseded by the descendants of Abbas, one of the uncles of Mohammed. The Ommiyade dynasty had never received the cheerful submission of the prophet's family; and, after a lengthened struggle, the last Ommiyade khalif was completely defeated in Mesopotamia, and again in Egypt, where he was slain. Abul-Abas-Saffa, and the princes, his descendants, are known in history as the Abbaside khalifs. (*El-Macin*, lib. i., cap. xxi.; lib. ii., cap. i., p. 95–100; *Abul-Pharagius*, p. 137, 138.)

The seat of government had, in the meanwhile, been removed from Medina to Damascus, and from the latter to Bagdad. It was in this new seat of empire that the Arab claim to literary and scientific eminence was first raised. It was here that the splendid courts of Haroun al-Raschid, and his sons, Al-Mansour and Motassem, were held. It was here that, under their patronage, the Greek sages and philosophers were translated, that the native Arab genius raised its head, and carried the sciences, physical and metaphysical, together with the useful arts, to a point of grandeur unknown in former times. The names alone of the Saracen philosophers, mathematicians, astronomers, physicians, botanists, chemists, and architects, who illustrated this period of Arab history, would fill a volume. Of chemistry they may be called the *inventors*; and although, in astronomy, they did not presume to depart from the Ptolomean hypothesis, they carried out the views of the Alexandrian philosopher, and attained results marvellous for their accuracy, when the erroneous nature of the data on which they were founded is considered. To the astronomical tables of Bagdad, Cordova, and Samarcand, subsequent observers owe a large debt of gratitude; and many of the common terms in modern astronomy, and most of the names applied to the fixed stars, attest the source whence Europe drew the elements of astronomical science. The Arabs, if they did not invent, at least were the great improvers of algebra* (the name sufficiently attests its origin), which placed in the hands of the analyst an instrument of vast and apparently unlimited power. Perhaps, however, the most important invention we owe to the Arabs is that of the arithmetical characters, now in common use, which banished at once and forever the cumbrous and unwieldy notation of the Romans. In medicine, the Arabs were pre-eminently great: and the magnificent remains of their public and private buildings, in Syria, Egypt, and Spain, evince their skill in architecture. The Arab court of Bagdad was, in fact, the centre of the knowledge and refinement of the period in which it existed; and, by a singular contrast, that period corresponded with the darkest and most degraded portion of European history. (*Abul-Pharagius*, p. 150, et seq.; *D'Herbelot*, p. 430, 545, &c.)

The khalifate shared the fate of all gigantic empires, especially of such as rise suddenly to immense power. It fell by its own unwieldiness. Spain first, and then Egypt and Africa, effected their independence. The wild Turk and Tartar tribes, among whom the Mohammedan faith had been imperfectly introduced, became dangerous neighbours to their nominal sovereigns; and, in their decreasing power, the khalifs had recourse to the desperate expedient of forming from these wild warriors a body of mercenary troops to guard their frontiers, and protect their persons. The result

* The epilepsy, or falling sickness, to which he is said to have been subject, is nowhere so much as hinted at by the native writers. It is strongly insisted on by Prideaux (*Life of Mah.*, p. 20), and by Hottinger (*Hist. Or.*, lib. i., cap. 5); but their authorities are wholly Latin; namely, Ximenes, Theophanes, Zonaras, &c.

* This science was, certainly, originally discovered by Diophantus of Alexandria, but its power, as an instrument of analysis, lay dormant and unknown, till developed by the ingenuity of the Arab mathematicians. The first systematic work on this subject came from the court of the Khalif Al-Mamoon, and from the pen of the Arab, Mohammed-Ben-Musa. (*Abul-Pharagius*, p. 183–186.)

was identical with that which attended a similar experiment among the Romans. In a few generations the servants became the masters; and though, as in the parallel case of Rome, the destruction of this overgrown empire occupied some centuries, yet piece by piece it crumbled away, till, in the 656th Hejira (A.D. 1258), a Tartar army, having captured Bagdad, put an end to the nominal existence of the khalifate, all real power having, long before, passed into the hands of the Turkish sultans of Asia-Minor. (*Abul-Feda, Annales Muslemici*, ii., p. 173–259, 309, 405; iii., 295–583, 633; iv., 27, 315, 555; v., 181–343; *Abul-Pharagius*, 136–174, 198–200, 318; *El-Macin*, lib. ii., xxii., xxxi., 97–163; lib. iii., xii., 214, et seq.)

The foreign conquests of the Arabs made no change in the political state of the peninsula. The heads of tribes still governed their subjects, as they had governed them from time immemorial; acknowledging, in the distant khalif, no more than a general head of the Arab people, and the sacred chief of the prophet's faith. As the downfall of the khalifate was unattended by any shock to Mohammedanism, merely transferring the office of "Commander of the Faithful" from the khalif of Bagdad to the Turkish sultan, it may be easily imagined that the Arabs had little difficulty in changing the objects of their veneration. Their holy cities were visited as before, and by larger caravans, as their faith was more diffused. Though they sent forth a host of conquerors, who subdued more countries in a shorter time than almost any by whom they had been preceded, their country escaped the fate of most victorious nations—that of being conquered in turn. Two revolutions only are recorded as having shaken Arabia since the æra of Mohammed; and both of them, like his, were of native growth, and of a religious character.

A tribe of fanatics, under the influence of a leader named Earmath, attempted, in the 297th Hejira (A.D. 890), to effect a change in the ceremonial part of Mohammed's institutions, by rescinding the prohibition of wine, and preventing the pilgrimages to the holy cities: slaughter and desolation marked the progress of the sect for more than sixty years; but, finally, it vanished, leaving no record of its existence, but the memory of its cruelties and enormities. (*Abul-Feda, An. Mus.*, ii., 267 et seq.; *D'Herbelot*, p. 256.)

The other revolution had its rise in the beginning of the last century. Addul-Waheb, a native of Nedsjed, proclaimed himself a prophet sent from God, to reform the abuses which, in the lapse of years, had crept into the pure doctrines of Mohammed. The Koran, in the creed of Waheb, is the only rule of life, and the Mussulman traditions are entirely rejected. God is to be worshipped in the strictest unity, and every species of adoration paid to Mohammed, or any other created being, is denounced as idolatrous. Simplicity, or, rather, asceticism, seems to be the distinguishing characteristic of the new sect: they acknowledge no saints; they bury their dead without pomp or ceremony: their clothes and houses are as plain as possible; their mosques have no ornaments whatever; and they interdict the use of coffee, tobacco, and opium.

The Wahabee doctrine, so called from its founder, found a protector in Ebn Saoud, a Bedouin sheikh of Nedsjed. The preacher was proclaimed supreme spiritual head, the soldier, prince, and general of the new worship; extermination was threatened to all opposers, and, for awhile, the progress of the Wahabees was a continued triumph. Mecca was subdued in 1802, Medina in 1804; and it seemed as though a repetition of Mohammed's victorious career was about to be enacted by the sons of the first establisher and supporter of the new sect. But in 1813 Mehemet Ali drove them from the western coast, and restored the holy cities to the nominal protection of the Porte. Since that time, the progress of the Wahabees appears to be at a stand; and though they are still strong in Nedsjed, there is reason to believe that their power is on the decline, and that their numbers are decreasing. (*Niebuhr*, par. ii., p. 298–302; *Histoire de Wahabis*, par M. A. L., Paris, 1810, passim; *Burckhardt's Notes on Bedouins and Wah.*, passim.)

Schools and Education.—The learning which gave celebrity to the court of Bagdad in the middle ages does not appear ever to have been naturalized in Arabia. Before the æra of Mohammed, ignorance (that is, ignorance of written learning) was so far from being accounted disgraceful, that we learn from the Koran (chap. xxix.) that Mohammed, though of the royal house of Hedjaz, could neither read nor write; and in the present day, judges are frequently illiterate. (*Burckhardt's Notes on Bed.*, 68.) It cannot, therefore, be supposed that education in Arabia is either very good or widely diffused. According to Niebuhr (*Des de l'Ar.*, par. i., p. 91) "the Arab princes by no means encourage science; and throughout the East, you meet few who merit the title of learned."

Public provision is, however, made for the education of youth; and a teacher for the children and young slaves is no uncommon part of the domestic establishment of distinguished families; so that, in the cities, the greater part of the population can read and write—attainments which are also found commonly enough among the sheikhs of tribes in the neighbourhood of the settled districts.

To almost every mosque there is (or *was*) attached a school, where the poorer children may be taught gratuitously; besides which, there are in every great town more or fewer private establishments where the children of the middle classes are received. The education is of a limited kind, comprising little more than reading, writing, the simple rules of arithmetic, and the doctrines of the Mohammedan religion. School-houses, like the shops, are open to the street, so that the whole process of education is conducted in public; and, to prevent the distraction incident to such a situation, the readers and repeaters speak in the highest possible key, and accompany their delivery with violent gesticulations.

Besides these, there are in many of the greater towns schools of a higher character; colleges, in fact, in which the higher sciences—mathematics, astronomy, astrology, and medicine are taught. In the Imanat of Yemen (which is but a small part of the district so called) there are two of these colleges. One of the chief studies in them is the ancient Arabic, now a dead language; for their learned men are expected to understand clearly, not only the Koran in its original tongue, but also all the ancient commentators, of whom the number is very considerable. Candidates for offices, civil or ecclesiastical, are said to undergo a very rigorous public examination as to their literary and scientific attainments; but this is mere pretence, the most illiterate persons being frequently appointed to the highest posts, while the best instructed get a precarious living as scribes, teachers, and public reciters or poets. Hence the wish to acquire a high degree of scholastic knowledge is very weak in the majority of Arabs; and the profession of teacher is far from respectable or lucrative. In many of the towns, the public schools are falling to decay; and those qualified to conduct them prefer wandering over the country like the bards and troubadours of the middle ages, as poets and orators; in which characters, as the reciters or singers of the glories of the nation, they are welcomed and rewarded alike by the sheriffs and sheikhs. There is no public provision whatever for female education; and, among the Bedouins, whole tribes can neither read nor write. A very great obstacle to the advancement of education in Arabia is the prejudice of the natives against printing. From the nature of the Arabic characters, interlacing each other, and frequently placed vertically, they appear handsomer, when well written, than when printed. There was, not a few years ago, and perhaps there is not at present, a single printing-press in the country. (*Niebuhr*, par. i., p. 91–96; par. ii., p. 188; *Ali Bey*, ii., 100; *Burckhardt's Notes on Bed.*, 42, et seq.)

Political Divisions.—Sources of Revenue.—Without reckoning the Bedouin tribes, the number of which can hardly be ascertained, the settled parts of Arabia are divided into a great many independent governments: hence states, also, not unfrequently spring up. The political divisions of this country are therefore very uncertain, but at present they may be regarded as consisting of—1st. Fourteen or fifteen states, upon the S.S.W. coasts; 2d. A much greater number upon the shores of the Persian gulf; 3d. The half-settled Bedouin tribes on the N. part of that gulf; 4th. The dominions of the Wahabee chief, Abdallah, in Nedsjed; 5th. The Hedjaz and Bahr-el-Tour-Sinai, on the W. and N.W. of all these. The last are the only parts that own a foreign master. The descendants of Mohammed continued to reign in the Hedjaz from this time down to a late epoch; acknowledging, however, the supremacy, first, of the court of Bagdad, and afterward of the Turkish sultan, as head of the Mohammedan faith; ministers of the paramount power residing at the sanctuary in the holy cities. While the Turkish government retained its strength, this connexion was acknowledged and respected in the Hedjaz; but in the latter part of last century, the sheriffs renounced their nominal allegiance, attacked the Turkish pachas, and finally expelled them. Scarcely, however, was this effected, when the Wahabees subdued the whole of the Holy Land, and held it till 1813–14; when Mehêmet Ali, pacha of Egypt, nominally restored the holy cities to the protection of the Porte, but virtually made himself master of the Hedjaz; which he has since retained, and governed at discretion. The desert of Sinai has always belonged, more or less, to Egypt. (*Burckhardt's Travels*, passim; *Notes on Wahabees*, 321–420; *Lord Valentia*, iii., 325–397.)

Taxes in the settled portions of Arabia are pretty uniform. A tenth of the productions of the land is paid to the sovereign, and this not unfrequently in kind. (*Fraser*, p. 15.) In Yemen, however, this tax appears to be compounded for by the payment of a fixed sum annually (*Niebuhr*, par. ii., p. 183); and with regard to the town population, this method must necessarily be general. The tithe upon land is the

only legal fixed impost which the subjects of the native Arab princes are called upon to pay. But a far more productive source of revenue is found in the customs and duties upon merchandise. The iman of Muscat lays ½ per cent. upon all goods passing up the Persian gulf in Arab bottoms; and this small duty is so productive that it yields from 110,000 to 160,000 dollars annually. (*Fraser*, p. 16.) In Yemen, the iman levies 3 per cent. upon the coffee carried from his dominions beyond the straits of *Bab-el-Mandeb*, and 7 per cent. upon all that is sent up the Red sea; and the sultan sheriff of Mecca—or, rather, his present master, Mehemet Ali—takes 6 per cent. more in the port of Djidda. (*Lord Valentia*, ii., 368, 369.) The large quantities of goods that are constantly passing from India, Abyssinia, Egypt, Syria, &c., to all the trading towns of Arabia, have also their stated rates of duties; and the income derived from them is so great, that Mehemet Ali cheaply purchased his popularity in his new dominions by foregoing the settled tithe which had formerly been paid in them. One of his first acts was a declaration, that the inhabitants of the Hedjaz should be wholly free from taxes. (*Burckhardt's Notes on Bed.*, p. 306.) The city of Medina was said to be impost free, even before this period. (*Ali Bey*, ii., 127.)

Certain articles of commerce are monopolies in the hands of the governments; as salt in the Hedjaz, and the same article and sulphur, in Oman. (*Burckhardt's Travels*, i., p. 65; *Fraser*, 16.) Besides which, the sovereign is frequently possessed of large landed property in private right, which he lets out precisely like any other landlord; and in certain cases, as in those of the imans of Muscat and Yemen, he is also the most considerable merchant in his own dominions. (*Niebuhr*, par. ii., p. 182–184; *Fraser*, 16.)

These are all legitimate sources of revenue; but the evil in this and all other Mohammedan countries is, that the governments, being despotic, practise and tolerate all sorts of extortion. Before the conquest of the Hedjaz by the Egyptians, it was customary for the sultan sheriff of Mecca to fill the prisons with persons upon charges of disaffection to his person, that they might purchase their lives and liberties by large fines. (*Burckhart's Travels*, i., p. 416.) In Yemen the dolas receive the taxes and customs of the towns, pay the troops, the judges, and other public functionaries, and transmit the balance to Sanaa, the seat of government. In this arrangement, the iman squeezes all he can from the dola; and the latter, whose nominal income is very trifling, resorts to any means, however infamous, of realizing a large income for himself. The chief sufferers in these transactions are the Indian and other foreign merchants. When Lord Valentia was at Mocha, the dola used to confine the Banians and Jews in a close room, and fumigate them with sulphur till they purchased their release at the price he chose to stipulate! (*Niebuhr*, par. ii., p. 183; *Lord Valentia*, ii., p. 353.) The collection of the customs, too, is attended with considerable fraud; and it is in the power of the officer to favour his friends, and oppress strangers, without incurring any responsibility. These abuses have, however, been considerably modified in the Hedjaz since the establishment of the Egyptian power. (*Lord Valentia*, iii., p. 325; *Burckhardt's Travels*, i., p. 89, 417.)

The Bedouins pay no taxes, except the tribute exacted by the Wahabee chief. The sheikhs derive no income from their tribes: their only source of revenue, beyond their private property, consists of the tribute collected from the villages in their neighbourhood, and from the caravans that cross the desert. Formerly, the Bedouins in the neighbourhood of Mecca paid a nominal impost to the sultan sheriff, but this was given up by Mehemet Ali. The Bedouin sheikhs have, however, few or none of those expenses to sustain which fall upon the sovereigns of the settled districts. The tribes are the sheikh's soldiers, and receive no pay; and the emoluments of the kadis depend upon the cases brought before them; being paid, according to the value of the property in dispute, by the party in whose favour they decide. (*Niebuhr*, par. ii., p. 327–333; *Burckhardt's Notes on Bedouins and Wahabees*, p. 67–69, 306.)

The tribute exacted by the Wahabee chief, wherever his power extends, consists of the *alms*; the giving of which is a fundamental law of the Mohammedan religion, but the payment of which had been always left to every man's conscience, till the Wahabee chiefs compelled their subjects and tributaries to deliver them for distribution into their hands. The Mohammedan law had minutely fixed the proportion of these alms to the property of the donor, and to that law the Wahabees have rigorously adhered. For five camels they exact one sheep for tribute; 200 camels pay four camels of four years old: and between these extremes the rates vary in every possible variety. For herds no tribute is exacted under 30 heads, for which a calf of two years is paid; 129 heads pay four oxen and three cows. For sheep, one is claimed for all numbers between 40 and 120; three for all between 120 and 400; for 400, four are taken, and after this, one sheep for every hundred in the flock. For all horses above five, a sequin per head is paid, or 2½ per cent. on the value of the beasts. For money, all sums above 200 *dirhems* (about £130) in silver, or 20 *miscals* (about £160) in gold, pay 2½ per cent. *Burckhardt's Notes on Bed.*, p. 305; *D'Ohsson, Tableau Général de l'Empire Othoman*, ii., 412–418.) The Wahabee chiefs divided this tribute into two parts; appropriating that derived from the Bedouins to their own use, and that from the towns to the public service. They have also introduced some changes in the collection of the tithe of produce, which have materially relieved the cultivator. Where water was abundant, they continued to draw the tenth; but where it is deficient, they have reduced the tax to a twentieth part. Merchants in the Wahabee country pay 2½ per cent. upon their property yearly, stating its amount upon oath. (*Burckhardt's Notes on Bed.*, p. 306.)

Arabia has been supposed to contain from 12,000,000 to 14,000,000 inhab., though this is probably beyond the mark. The nomadic habits of the greater part of its population, and the number of petty states into which the settled pop. is divided, and the little that is known with respect to most of them, renders it impossible to assign either their limits or their population. According to Balbi, the imamat of Yemen, or Yemen Proper, and the imamat of Muscat, on the coast of Omar, have respectively,

Imamat of Yemen.	*Imamat of Muscat.*
Superficial extent, 58,000 sq. m.	Superficial extent, 52,000 sq. m.
Pop. 2,500,000.	Pop. 1,600,000.
Revenue, 495,000*l.* sterl.	Revenue, 165,000*l.* sterl.
Army, 6000 men.	Army, 1000 men.
	Navy, 1 ship, 3 frigates, 20 inferior vessels.
Density of pop., 47 per sq. m.	Density of pop., 31 per sq. m.

The Hedjaz has been very well surveyed, especially by Ali Bey and Burckhardt, but its varying population, owing to the influx and efflux of pilgrims, together with the crowd of traders who are constantly passing between its shores and distant countries, renders it difficult, if not impossible, to assign its real numbers with any tolerable accuracy. Probably, however, it is more densely peopled than either Yemen or Muscat.

The states of Yemen, as enumerated by Niebuhr, are the following:

1. Yemen Proper.	8. Sahan.
2. Aden.	9. Nedajiren.
3. Kankeban.	10. Kachran.
4. Haschid-u-Bekel.	11. Dajof.
5. Abu-Arish.	12. South Khaulan.
6. 'Beled-el-Kobail.	13. Nehm.
7. North Khaulan.	14. Jaffa.

There are, also, a great many little states upon the Persian gulf; and Hadramaut consists of insignificant sovereignties, mostly of not greater extent than a mile or two round the town where the chief resides. (*Niebuhr*, par. ii., p. 160–245, 267–292, *&c.*)

ARABKIR, a town of Asiatic Turkey, pachalik of Sivas, cap. sanjiack, 7 m. N. Euphrates, and 60 m. N.N.E Malatia, lat. 39° 5′ N., long. 39° E. It is said to be well built.

ARACAN, a country of Asia, called by the natives *Rakhaing*, extending along the W. coast of the great E. peninsula of S. Asia, acquired from the Birmese, by the British, in 1824. It lies between 15° 53′ (cape Negrais) and 21° 30′ N. lat., and 92° 20′ and 94° 14′ E. long.; having N. the river Nauf, which separates it from Chittagong, E. the Yeomandong mountains, dividing it from the Birmese dominions, and W. the Indian ocean; the two latter boundaries meeting at an acute angle at cape Negrais, its S. extremity: length N. to S., about 500 m.; breadth, at its N. end, 90 m.; but thence southward continually decreasing; area, 16,250 sq. geog. m. (*Pemberton*); pop. said to be about 230,000 only, whereas, in 1795, it was estimated, but probably much beyond the mark, at 2,600,000. (*Pemberton's Report on the E. Frontier of British India*, 8vo, Calcutta, 1835, p. 83, 84; *Captain Laws*, in the *Geographical Journal*, i., 175.)

The Yeomandong, or Anoo-pectoo-moo mountains are a branch from those that bound S. the vale of Assam; and form the E. boundary of both Aracan and Chittagong. Their heights vary from 2000 to 8000 feet; Table mountain, in 21° N. lat., and 93° E. long., is 8340 feet above the level of the sea. Near lat. 20° they take a sudden turn E. for about a degree; but in general their direction is N. to S.; they are covered with forests, and have numerous passes, the chief being those of Khyounzah and Goa in the Birmese, and Tongo, Talak, and Aeng, in the British dominions. They are, in almost every case, mere narrow footpaths. (*Ritter, Erdk.*, vol. i., p. 308; *Pemberton*, p. 99.)

The country, generally, is diversified with hill and vale; but on the N. border and the sea shore there are low and marshy tracts. The rivers run mostly in a S.W. direction, and are frequently navigable for trading vessels of some magnitude; the largest is the Aracan (properly Kuladyne), which rises in the Birmese dominions, near 23° N. lat., and

discharges itself in 20° 15′ by several mouths; on one of its minor branches is situated the town of Aracan, accessible to vessels of 250 tons burden. The other principal streams are the Naaf, Aeng, Miou, and Sandoway rivers, all in some degree navigable. (*Hamilton's Descr. of Hindostan*, vol. iv., p. 391; *Pemberton*, p. 7, 8.)

The coast, in the central part of Aracan especially, contains many good harbours, is much indented by creeks, and studded with islands and rocks, which render the mouth of the Aracan river somewhat dangerous to approach in the S. W. monsoon: during the rest of the year, however, the water is smooth, and there are good anchorages all along the coast, in from 6 to 20 fathoms, with a muddy bottom. (*Geogr. Journal*, i., 175; *Hamilton*, p. 389, 391.)

The principal islands are Cheduba, Ramree, and Akyab, between the rivers Kuladyne and Miou. They are usually separated from the main land by narrow channels, and partake of the same natural aspect. (*Ritter, Erdk.*, vol. iv., p. 308.)

The climate is decidedly unhealthy, except in a few spots, as Kyouk-Phyoo, on the N. side of Ramree, and especially hostile to Europeans, who are attacked by intermittent fevers, and other effects of malaria. During the Birmese war the troops died in great numbers from these causes. The country is inundated by heavy rains during the S.W. monsoon, which begins in May and ends in October. In 1832, from June to October, 196 inches of rain had fallen; during the other portion of the year it is often enveloped in heavy fogs; and violent showers sometimes occur in December, February, and April. In 1832, the maximum height of the thermometer in July was 89° Fahr., in August 94°; the minimum in both months 77°. (*Ritter, Erdk.*, p. 317; *Geogr. Journal*, i., 175.)

The abundance of forests which cover the mountains have hitherto been insurmountable obstacles towards any knowledge of their geology. The primitive rocks that have been seen are mostly slate. The lower hills consist chiefly of sandstone, with a stiff clay occasionally intermixed; on every part of the coast coral and shell-lime are abundant. A low alluvial soil extends over the whole of the country from the foot of the mountains to the sea.

Little systematic information has been collected as to the products of the country. Salt is largely produced in the creeks, &c.; its export has latterly increased very rapidly, and is now (1837) estimated at about 250,000 maunds. Gold and silver are said to be met with; jungles of mangrove crowd the banks of the rivers; firs are common N. of the Aracan river; teak, bamboo, *red jarul*, toon, &c., are found in the forests, and since the British occupation have been used for ship-building; the sugar-cane, cocoa, palm, indigo, cotton, rice, red pepper, cucumber, melon, plantain, mango, jacko, orange, and other fruits are indigenous; elephants, cattle, birds of many kinds, fish, silkworms, and bees are found in great plenty. (*Hamilton's Descr.*, vol. ii., p. 800; *Ritter, Erdk.*, p. 319; *Pemberton*, p. 14.)

About 11,677 doons, each doon 6·35 acres, or 115 sq. m., are cultivated with rice; miscellaneous culture occupies about 8 sq. m. more; there being thus not 1-133d part of the whole country brought into tillage: the lands round Aracan are the best. Next to rice, indigo and cotton are the chief objects of culture; the chief farmers are Mussulmans, the Mugh tribes subsisting generally by hunting and fishing. The houses are bamboo huts, raised on posts four feet from the ground, to preserve them during the inundations, built often in thick jungles, or along the sides of rivers, and surrounded by small patches of indigo, cotton, tobacco, and fruit; even in the principal towns the houses are not of a more substantial material. Since the British occupation, articles of civilized life have been largely introduced into the markets; the imports consist of Indian and European goods, and betel nut; the exports, of rice, paddy, wood, salt, oil, buffalo hides and horns, elephants' teeth, sugar, cotton, tobacco, silk, wax, &c. The exports from Akyab, the chief port, during seven months of the year 1833, were of the value of 93,800 rupees: the chief trade is with Bengal and Chittagong. The public revenue, which has been progressively improving since the British occupation, amounted in 1836-37 to 525,000 rupees; but is as yet hardly sufficient to pay the government expenses. British Aracan extends as far S. as 17° 52′ N. lat., and is governed by three civil functionaries, one placed over each of the three provinces of Akyab, Ramree, and Sandoway; and all under the superintendence of the British governor at Chittagong. The troops employed by the government are only eight companies of sepoys; viz., two at Akyab, two at Sandoway, and the other four at Kyouk Phyoo, the chief military station, and where also a part of the flotilla used in the late war is laid up. The inhab. are 1-10th Birmese, 3-10th Mohammedans and Indians, and the remainder *Yekein* or *Yikein*, as they call themselves, the Mughs of the Europeans. The latter are of middle height, with a broad face, high and prominent cheek bones, the nose flat, and the eyes like those of the Chinese: they are cunning, and addicted to stealing but not to falsehood. Their language and religion resemble those of the Birmese; the latter, however (that of Boodh), they do not adhere to very strictly, since they do not abstain from animal food; Guadma is a celebrated idol among them, and they take as their vulgar æra the period at which he introduced Buddhism into Aracan; the present year, 1838, is with them 1200. There are two or three priests in every village, who occupy themselves chiefly in the tuition of the children in schools, which are voluntarily supported and open to all. The Aracanese are by no means uneducated; almost all of them can read and write; the latter they practise with a chalk pencil on a paper made from the bark of a tree: their records are kept on palm-leaf, lacquered in japan or red upon a gilt ground. The people are fond of finery; the dress of the women is a red binder wrapped closely round them, over this a robe reaching to the knee, and the petticoat fastened loosely on one side all down, so that in walking, the whole of one limb is exposed. Women are not kept secluded, but enjoy as much liberty as the other sex. Slavery in all its forms is tolerated. Marriages are arranged by the parents of the parties; solemnized by feasts, and ratified by the married couple eating out of one dish. If they separate at a future time at the wish of the husband, he must take upon himself all his wife's debts; if such a determination originate with the latter, she takes them upon herself, but can demand 25 rupees from her husband. If a man be in want of money, he may pawn his wife; but if she become pregnant in consequence, he can claim her again, and the contract to pay becomes null and void. The dead are either buried or burned.

This country has been very greatly improved since it came into the possession of the British, previously to which it was in the worst possible state. The bands of robbers by which it was infested have been extirpated; and the habits of the bulk of the people materially improved. With one exception, there was no instance of dacoity (robbery) in the principal district of the prov. of Akyab during the two years ending with 1837. (*Moulmein Chronicle.*) The introduction of tranquillity and commerce has awakened a spirit of industry, and rendered the people cultivators, salt-manufacturers, and traders. Akyab is daily becoming of more and more importance. (*Paton's Hist. and Statis. Sketch, Asiatic Researches*, vol. xvi.; *Pemberton; Ritter*, vol. iv., p. 325; *Lawe*, in the *Royal Geogr. Journal*, i., 177.)

Before 1783, Aracan was independent, though often ravaged by the Moghuls and Peguans: in that year it was conquered by the Birmese, and governed by their viceroys, whose oppressions depopulated the country, causing many of the inhabitants to fly to Chittagong and Tiperah, where they settled; and others to become jungle-robbers. A revolt broke out in 1811, and the violation of the British frontier by the Birmese, both then and subsequently, was the cause of the Birmese war of 1824; which ended in the cession of Aracan to the British.

Aracan, a town and cap. of the above prov., on an inferior branch of the Kuladyne river, which is here crossed by several lofty wooden bridges, 50 m. N.E. Akyab, lat. 20° 44′ N., long. 93° 26′ E. Pop. (1835) from 8000 to 10,000. It forms an irregular square, walled on all sides except the N.E., where it touches a shallow lake. As a fortress, however, it is worthless, being commanded by various hills in the neighbourhood. S. of the principal street, which runs E. and W., are the ruins of an ancient palace and fort, the latter surrounded by a triple enclosure of stone patched up with brick. There are many pagodas, both in the town and on the heights around it. Next to Akyab it has the best market in the prov. for British manufactures and the silks of Pegu, and its river is navigable for boats at high tide; but its consequence has been gradually diminishing since Akyab began to rise into importance. Aracan was taken in 1783 by the Birmese, who captured much booty, including a large brazen image of Guadma, held in the highest veneration, and other idols. (*Pemberton's Report, &c.*, p. 89; *Hamilton's Hindost.*, vol. ii., p. 804.)

ARAD, a town of the Austrian empire, on both sides of the Maros; that part which is on the N. bank, or Old Arad, being in Hungary, and the other, or New Arad, in the Bannat, 27 m. N. Temeswar, lat. 46° 9′ 56″ N., long. 21° 18′ 3″ E. Pop. of both parts near 18,000.

New Arad is strongly fortified; and Old Arad is the residence of a Greek bishop. The most opulent inhabitants are the Jews, who are also very numerous. "They are greatly favoured, being allowed exclusive monopolies of tobacco, corn, and other commodities." (*Walsh.*) The town is the entrepôt of the products of a large tract of country, which are here embarked on the Maros, and sent by the river to the Danube, and thence to Germany, Hungary, the Black sea, &c. On a weekly market day, Dr. Walsh found the streets choked up with cars and carts, of which he was assured there were no fewer than 7000 in the town! filled with produce, principally for shipment. On inquiry, he

found the prices of different articles to be, wheat 9s. a quarter; wine 2½d. a bottle; delicious Hungarian wine at the tavern, 10d. per do.; beef, 1½d. per lb.; mutton, 1¾d. do., &c. (*Walsh's Journey from Constantinople to England*, p. 316.)

ARAFAT (MOUNT), a hill of Arabia, 15 m. S.E. of Mecca, consisting of a granite rock about 150 feet high, a principal object of the Mohammedan pilgrimages to that city.

ARAGON, one of the ancient divisions of Spain, formerly a separate kingdom, comprising the provinces of Zaragoza, Huesca, and Teruel, lying between 40° and 42° 53′ N. lat., and 46° E. and 2° 7′ W. long., having N. the Pyrenees, which divide it from France; E., Catalonia; S., Valencia; and W., Navarre and Castile; length, N. to S., 215 m.; breadth, 65 to 135 m.; area, 14,692 sq. m.; pop. (1833) 734,685. It is a basin every where surrounded, except on the E., by mountain ranges; on the N. offsets from the Pyrenees extend into the prov. as far S. as lat. 42° 10′, inclosing many picturesque and fertile valleys; the Sierra Moncayo Cuença, Molina and Albarracin separates it from Castile, and those of Morella from Valencia. Another distinct chain runs parallel to the latter through the S. part of Aragon, from N.W. to S.E.: between the Sierra and this chain is the valley of the Xiloca; and between this latter chain and the Pyrenees is the extensive plain intersected by the Ebro. This, which is not only the largest of the Aragonese rivers, but the largest river which has its embouchure on the E. coast of Spain, runs through the prov. in a S. easterly direction, dividing it into two nearly equal parts. Exclusive of the Ebro, there are a great number of other rivers, mostly its affluents, having their sources in the mountain-ranges that bound on either side the central plain: as the Gallego, Cinca, and Segre, from the N., the Xiloca, Guerva, Aguas, St. Martin, Guadaloupe, and Alguas, from the S.: the Tagus and the Guadalaviar have, also, their origin in this region. Salt is every where abundant, and gold, silver, copper, iron, lead, nitre, alum, &c., are met with, but the mines are mostly neglected. The mine of rock salt at Remolinous, near Alagon, is, however, extensively wrought, furnishing supplies not only for the prov., but also for Catalonia and other parts of the kingdom. Climate temperate and warm in the valleys and plains, but on the Pyrenees the snow is often found five or six feet deep in June, and violent storms occur in winter. The country is, however, universally healthy. The soil of the plains is, in general, fertile, and well adapted to the growth of most products of temperate climates Though agriculture be very defective, more corn and wine are produced than are required for home-consumption; and there are also large supplies of fine fruits, with legumes, flax, hemp, oil, saffron, liquorice, madder, esparto, barilla, &c. Previously to the late war with France, the stock of sheep in the prov. was supposed to exceed 2,000,000; and though it must have been much reduced during that contest, there was, according to Miñano, previously to the present civil war, an annual export of 250,000 arrobas of wool. Horned cattle are scarce. Wolves and bears are met with in the mountainous districts; game is plentiful, and the rivers abound with excellent fish, especially eels and trout. The manufactures are confined to common woollen and other cloths, cordage, and hempen articles, gunpowder, with soap, vinegar, brandy, paper, hats, earthen-ware, and leather. The manufacture of silk in the capital and other towns has greatly diminished. Aragon is divided into 13 districts or gobiernos: its chief cities are Zaragoza, Huesca, Calatayud, and Teruel. The first is an archbishopric; there are six bishoprics and two universities. Several roads cross the prov., passing to all the great towns; and the imperial canal, from Tudela to Zaragoza, 10 ft. in depth and 70 ft. wide, commenced in 1529 by Charles V., and completed to its present extent in 1672, serves the double purpose of promoting trade and navigation. The Aragonese are strong, and well built; not so active as the Catalonians, but industrious, brave, and honest. They are intelligent, and desirous of knowledge, but proud, sullen, and extremely opposed to foreign interference with their government. The original harsh Aragonese dialect has now become intermixed with the Castilian. The male peasantry wear a waistcoat and a round jacket over it, drawn together by a thong, and a large round hat, or sometimes two, to work in during the heats of summer. The dress of the women is odd and grotesque; it consists partly of two woollen corsets, and three or four thick petticoats one over another, the whole weighing a quarter of a cwt. Under the Romans Aragon was included in Celtiberia; in A.D. 470 it was overrun by the Goths, and in 714 by the Moors. After the expulsion of the latter, it was governed by its own kings till the marriage of Ferdinand with Isabella of Castile in the 14th century.

The gov. of Aragon, previously to the junction of its crown with that of Castile, and for some time afterward, though monarchical in form, was in principle essentially republican. The kings, who were long elective, retained little more than the shadow of power; it being really vested in the cortes or parliament. This supreme assembly was composed of four different *arms* or members; the nobility of the first rank, the equestrian order or second rank, the representatives of cities and towns, and the ecclesiastics. No law could pass without the assent of every arm; and without permission of the cortes, no tax could be imposed, no war declared, no peace concluded, nor money coined or altered. The power of reviewing the proceedings of the inferior courts, the privilege of inspecting every department of administration, and the right of redressing all grievances, belonged to the cortes; to which, however, those aggrieved did not address themselves in the humble tone of supplicants, but demanded its interference as due to them as freemen. This sovereign court was held during several centuries every year; but from the beginning of the 14th century was convoked only once in two years; the session continued forty days, and the king could neither prorogue nor dissolve the assembly, after it had met, without its own consent.

Not satisfied with having erected such formidable barriers against the encroachments of the royal prerogative, the Aragonese, by an institution peculiar to themselves, elected a *justiza*, or supreme judge, as the protector of the people and the controller of the prince. The person of the justiza was sacred, and his power and jurisdiction almost unbounded; he was the supreme interpreter of the laws, and not only inferior judges, but the kings themselves were bound to consult him in every difficult case, and to receive his responses with implicit deference. An appeal lay to him from the royal as well as the baronial judges, and even when no appeal was made, he could interpose by his own authority, prohibit the ordinary judge from proceeding, take immediate cognizance of the cause himself, and remove the party accused to the prison of the *manifestacion*, to which no person had access but by his permission. His power was exerted with no less vigour and effect in superintending the administration of government, than in regulating the court of justice. It was the prerogative of the justiza to inspect the conduct of the king. He reviewed all the royal proclamations and patents, and declared whether they were agreeable to law, and ought to be carried into execution. He, by his sole authority, could exclude any of the king's ministers from the conduct of affairs, and call them to answer for their mal-administration. He himself was accountable to the cortes only for the manner in which he discharged the duties of his high office, and performed functions of the greatest importance that could be committed to a subject. The Aragonese were so solicitous that their monarchs should know and feel their dependance on their subjects, that even in swearing allegiance to their sovereign, the justiza thus addressed him in their name, "We, who are each of us as good, and who are altogether more powerful than you, promise obedience to your government, if you maintain our rights and liberties, but not otherwise." Conformably to this oath, it was expressly declared in their constitution, that if the king should violate his compact with them, it was lawful for the Aragonese to disclaim him, and elect another sovereign, even though a heathen, in his room.

Aragon, while a separate kingdom, was the most powerful of the peninsular states. It comprised, exclusive of Aragon Proper, Navarre, Catalonia, Valencia, the Balearic Isles, and Sardinia. The marriage of Ferdinand with the heiress of Castile, the conquest of Granada by their united forces, with the possessions they inherited or acquired in other parts of Europe and in the New World, by giving the sovereigns extrinsic, and, as it were, foreign resources, rendered them in a great measure independent of the supplies voted by the cortes, at the same time that it enabled them gradually to subvert their authority. The establishment of the Inquisition was also a great blow to the liberal institutions of Aragon and other parts of the peninsula, which were finally suppressed during the reign of the bloody and tyrannical bigot Philip II.—(*Miñano, Antillon, Schatz, Allg. Erdk.*, xviii., 314–317; *Robertson, Hist. Charles V.*, *Introd.*, sect. iii.)

ARAGONA, a town of Sicily, Val di Girgenti, 7 m. N. Girgenti, on a hill. Pop. 5850. It is ill built and dirty, but is worthy of notice for its castle (containing a fine gallery of pictures), its antiquities, and for having in its vicinity the mud volcano of Maccaluba. This consists of numerous little hillocks, with craters on a kind of truncated cone of argillaceous barren soil, ½ m. in circuit, elevated about 200 feet above the surrounding arid plain. These craters are continually in action, making a hollow, rumbling noise, and throwing up a fine, cold mud, mixed with water, a little petroleum and salt, and occasionally bubbles of air with a sulphurous taint. Sometimes reports like the discharge of artillery are heard, and slight local earthquakes, till an eruption takes place by the ejection of mud and stones to the height of from 30 to 60 feet, the ordinary height of the spouts being only from a few inches to 2 or 3 feet. (For a

further account of this singular phenomenon, see *Smyth's Sicily*, p. 212.)

ARAICHE (EL), see LARACHE.

ARAL (SEA OF), an inland sea or lake of Asia, in independent Tartary, between 42° and 46° 12′ N. lat., and 54½° and 61° 15′ E. long., being about 300 m. in length from S.W. to N.E., and from about 100 to nearly 250 m. in breadth; so that, with the exception of the Caspian, it is by far the most extensive inland sea of the Old World. It has a great number of islands, particularly towards the S., and is generally so shallow, that it can be safely navigated only by flat-bottomed boats. Its waters are salt, and its coasts generally low and sandy, the country around consisting mostly of vast arid steppes. It is well supplied with fish, of which sturgeons are the most valuable; seals are also met with. The sea of Aral receives, besides smaller streams, the waters of two great rivers, the Sir or Sihoun (the *Jaxartes* of the ancients), and the Amoo or Jihoun (the *Oxus* of the ancients). But, notwithstanding it has no outlet, the prevalent opinion is, that the supply of water brought to it, and also to the Caspian sea, is unequal to what is carried off by evaporation, and that their level and surface are being gradually diminished. The extraordinary difference between the level of the Caspian and the sea of Aral, and the level of the Black sea (see CASPIAN SEA), as well as the nature of the soil in their vicinity, the traditional and historical statements with respect to their boundaries, and the opinions of the most eminent naturalists, all lead to the belief that they once extended over a much larger tract of country, and most probably made part of one great inland sea. (For farther details, see CASPIAN SEA.)

ARAMON, a town of France, dep. Gard, cap. cant. on the Rhone, 16 m. E. Nismes. Pop. 2502.

ARANDA DE DUERO, a town of Spain, on the Duero, 48 m. S. Burgos. Pop. 3500.

ARANJUEZ. (*Ara Jovis.*) A town of Spain, new Castile, in a fertile and well-watered valley on the left bank of the Tagus, immediately above where it is joined by the Xarama, 28 m. S.S.E. Madrid, and 22 m. E.N.E. Toledo. Lat. 40° 1′ N., long. 3° 37′ 30″ W. Pop. 4500, unless the court be there, when it used to amount to 8000 or 10,000. It derives its entire celebrity from its royal palace, commenced by Philip II., and enlarged and embellished by several of his successors, particularly Charles IV., who added the fine gardens and groves along the banks of the Tagus, and a small but elegant pleasure house, the *Casa del Labrador*. The palace is a handsome square building, with a fine marble staircase, containing many fine sculptures, and (as well as the church and monasteries of the town) paintings of the Spanish and Italian masters, especially of Raphael Mengs. The town is built after the Dutch model; having broad and well-paved streets, houses uniform and painted, fine promenades, a square adorned with many handsome edifices, &c. The court used to occupy this palace from Easter till the end of June; but in July and August the situation is accounted unhealthy.

These statements apply, however, rather to the former than the present state of Aranjuez. The palace and gardens suffered severely during the late war with France. In 1808, the park and pleasure grounds were split into patches, and applied to agricultural purposes.

> Another age has seen the golden ear
> Embrown the slope, and nod on the parterre,
> Deep harvests bury all that pride had plann'd,
> And laughing Ceres reassume the land.

At first the cultivators obtained very large returns, and the population of the town and its vicinity rapidly augmented. But this extraordinary productiveness, the result of the improved state of the lands, speedily disappeared under the scourge of continual cropping; and it is doubtful whether they yield more at this moment than they did previously to their being broken up. (*Miñano, Schutz, &c.*)

ARARAT (Turkish *Agher Dagh*, Armenian *Macis*), a famous mountain of Armenia, on the confines of the Russian, Turkish, and Persian empires, its principal summit being about 35 m. S. Erivan, lat. 39° 30′ N., long. 44° 25′ E. Its base E. and N.E. is washed by the Araxes, from the low plain of which it rises most majestically to an immense height. It forms the termination in this direction of a range of mountains connected with the Caucasian chain; but these, though elevated, seem, in comparison with Ararat, so low, as to strengthen the impression of sublimity and greatness made by contemplating it singly from the plains to the E. It consists of two enormous conical masses, one much higher than the other, but the lowest ascending far within the line of perpetual congelation. Repeated efforts had been made at different times to reach its summit, but this Herculean task was not effected till 1830, when Professor Parrot, of Dorpat, accomplished, by dint of extraordinary perseverance and energy, what had previously been reckoned all but impossible. He determined the altitude of the highest peak to be 16,900 French, or 17,930 Eng. feet above the level of the sea, being about 4760 feet higher than Mont Blanc. The summit is described as a circular plain of limited dimensions, united by a gentle descent to the less elevated peak towards the E. The whole of the upper region of the mountain, from the height of 12,750 feet, is covered with perpetual snow and ice; and not unfrequently avalanches precipitate themselves down its sides with tremendous noise and fury.

On one of the sides of the principal cone is a chasm or cleft of prodigious depth, having much the appearance of the crater of a volcano. Tournefort says, that its precipices are blackened as if by smoke, but that nothing issues from it except torrents of muddy water; but the mountain presents many appearances of volcanic action, and Dr. Reinegge affirms that he has seen fire and smoke issue from this chasm for three days together.

Ararat is not only an object of superior interest from its mass and height, but still more from the associations with which it is connected. It is believed to be the Ararat of Scripture, on whose summit the ark rested. (Genesis, viii., 4.) And certainly it would be difficult anywhere to find a mountain that seems better entitled to the honour of serving as a stepping-stone "*à Noé pour descendre du ciel en terre avec le reste de toutes les créatures.*" (*Tournefort, Voyage du Levant*, ii., p. 360, &c.; *Missionary Researches in Armenia*, p. 267, and *Introd.*; *Kinneir's Persian Empire*, p. 396.)

ARAS (an. *Araxes*), a river of Asia, which has its source in the mountain land of Armenia, 28 m. S. Erzeroum. It flows E. past the N. base of mount Ararat, then S.E. to Curdasht, and N.E. to Djrat, where it falls into the Kur, 50 m. in a direct line from the embouchure of the latter in the Caspian sea. Its entire course may be estimated at 490 m. Notwithstanding its rapid current, it is in many places fordable.

ARAUCANIA. The territory known under this name is situated to the S. of Chili, and comprises the country lying between 37° and 39° 50′ S. lat., and 70° and 75° 20′ W. long. On the N. it is bounded by the river Biobio, which divides it from Chili; on the S. by the Valdivia or Calacalla; on the E. by the Andes; and on the W. by the Pacific ocean.

The Araucanians divide their country into four Butalmapus or tetrarchies, viz.:

1. Langenimapu, *i. e.*, the maritime country.
2. Leipunmapu, *i. e.*, the plain country.
3. Inapiremapu, *i. e.*, the country at the foot of the Andes.
4. Piremapu, *i. e.*, the Andes country.

Each tetrarchy is governed by a Toqui or tetrarch, and is subdivided into nine Allaregues or provinces, at the head of each of which is an Apo-Ulmen. Each prov. is again subdivided into nine Regues or districts, severally presided over by an Ulmen. This division existed before the arrival of the Spaniards, and is supposed to be of great antiquity.

The dignity of Apo-Ulmen and Ulmen are hereditary in the male line. In case, however, of failure, a successor is chosen by the people, and their choice is afterward confirmed by the Toqui or generalissimo. The succession is thenceforward perpetuated in the family of the individual newly chosen. The ensign of an Apo-Ulmen is a staff, with a silver globe at one end, and a silver ring in the centre. That of an Ulmen resembles the foregoing, with the exception only of the ring, which is peculiar to the former. The ensign of the Toqui's authority is a battle-axe.

The form of government comprises a mixture of democracy and aristocracy.

The natives proper of Araucania belong to the race of the Moluches, and the name of Araucanians has been given them by the Spaniards. Their range of information is extremely limited, and though Spanish writers affirm that they have some notion of geometry, and are sufficiently acquainted with astronomy to distinguish the stars by particular names, the credibility of their account is much to be questioned.

The industry of the country is confined to a little agriculture. The Arucanians cultivate a few fruits, and make a kind of cider. Their principal wealth consists of their flocks and herds, and they possess a great number of horses of the Spanish breed, as well as oxen, guanacos, and vicuñas. The oxen and guanacos yield them a plentiful subsistence, and the wool of the vicuñas supplies them with various articles of clothing.

The Araucanians have a sort of criminal code, and the crimes which seem to be regarded as the most heinous by them are murder, adultery, robbery, and witchcraft. The latter is visited with immediate death. (*Wimmer neuestes Gemälde von Amerika*, vol. iv., p. 312; *Wien*, 1833.) Their religion consists in the belief of the existence of a Supreme Being, besides that of many lesser deities, and also in the immortality of the soul. (*Stein's Handbuch der Geographie*, vol. iii., p. 752; *Leipzig*, 1834.) The Araucanians maintain no standing force, but every male is inured to the use of

arms, and being naturally a warlike people, it needs no compulsion to rally them in defence of their country. None of the aboriginal race of S. America have resisted with so much obstinacy and such determined bravery all the attempts of Europeans to reduce them to a state of subjection, and to the present time their efforts have been successful, and they remain independent. They are extremely proud of having maintained their independence, and call themselves the unconquered people. They have derived from the Spaniards the knowledge and the use of cavalry in battle, and their skill in this mode of warfare is scarcely to be surpassed.

The Araucanians inter their dead in square pits, with the body in a sitting posture, placing at the side of the deceased his arms and drinking-cup if a male, and her domestic implements if a female. In the grave they also place the skeleton of a horse, interred in honour of the deceased. (*Tableau civil et moral-des Araucans*; *Annales des Voyages*, vol. xvi., p. 100.)

The clothing of the men consists of trousers reaching to the ankle of woollen stuff, and a smock of the same materials, usually white, over which is thrown a piece of cloth 2 yards wide, and 2¼ long, with a hole in the centre for the purpose of admitting the head. This garment is styled a Poncho. Their hat is of a conical shape. The dress worn by the women is a long white tunic, and a black upper garment fastened round the hips with a girdle, together with a small mantle called an Ichilla. The favourite colour is blue, having a greenish hue. The latter wear no head-dress, and go bare-footed. They are fond of displaying a quantity of rings upon their fingers, and ornament their arms and necks with strings of beads. Every woman is obliged to present her husband annually with a Poncho of her own making, and daily with a dish cooked by herself. (*Wimmer*, vol. iv., p. 313.) Both the men and women are exceedingly hardy, and capable of enduring great fatigue. The children go naked till their tenth or eleventh year.

A tribe called Cunchi, inhabits the country between Valdivia and the gulf of Guayatica; and another, known by the name of the Hinlichi, that between the archipelago of Chonos and the gulf of Pennas.

The reader who may desire more extensive information upon the subject of the Araucanians, is referred to *Poeppig's Reise nach Chili und auf die Amazonenstroeme*, 2 vols., 4to, *Leipzig*, 1835–6. This intelligent traveller, who resided in these latitudes from 1827 to 1832 in pursuit of scientific knowledge, gives the most recent, and perhaps the only authentic account of this people, and his book is replete with information. The glowing pictures of the civilization of the Araucanians, drawn by Molina in his *Compendio de la Historia de Chili*, &c., and by other Spanish writers, who have hitherto been looked up to as authorities upon this subject, are clearly proved by Dr. Poeppig to be much exaggerated. The warlike deeds of the Araucanians have been made the subject of a poem by the celebrated Ercilla, the prince of Spanish epic poets. Although many of the descriptions contained in the Araucana may be considered as overcharged, they are, nevertheless, the result of the author's own observation, as he was an active party in the wars carried on between the Spaniards and this people.

ARAURE, a town of S. America, rep. Venezuela, dep. Orinoco, on the Acarigua, 65 m. N.E. Truxillo.

ARBE, or ARBA, a small island in the gulf of Quarnero in the Adriatic, separated by the narrow channel of Morlacca from the coast of Croatia. Pop. 4100. It produces corn, figs, and excellent wine; and has salt lakes. Its capital, of the same name, is situated on a bay on its S. coast.

ARBELA, or ARBIL, a town of Turkey in Asia, pachalick Bagdad, between the greater and lesser Zab, on the high road from Bagdad to Mozul, lat. 36° 11′ N., long. 44° E. This was formerly a large city, the cap. of the prov. of Adiabene, and is renowned in history for the final and decisive victory obtained in its vicinity, anno 331 B.C., by Alexander the Great over Darius, which was speedily followed by the death of the latter, and the total subversion of the Persian empire. But, under its present barbarian masters, Arbela has sadly declined from its former greatness, and is now an inconsiderable mud town, with about 3000 inhabitants. Part of it is built on an artificial mound, 150 feet in height, formerly surmounted by a castle. (*Niebuhr's Voyage in Arabia*, ii., p. 278; *Kinneir's Persia*, p. 300; *Rich's Travels*, ii., p. 16.)

ARBOGA, an inland town of Sweden, prefect. Westeras, on the navigable river Ulvison, which falls into the lake Mælar, near the point where the former is joined by the canal of Arboga, proceeding from lake Hielmar, 160 m. W. Stockholm. Pop. 1500. It is the entrepôt for the iron, copper, &c., of the surrounding country, has a considerable transit trade, and has been the seat of several diets.

ARBOIS, a town of France, dep. Jura, cap. cant., on the Cusance, half-way between Salins and Poligny. Pop. 7131. It is a handsome, well-built town, situated in a valley surrounded by hills and vineyards, which produce excellent white wines. It has a royal college and a tribunal of original jurisdiction, with fabrics of earthenware, rape seed, oil, and paper; tanneries, and flatting-mills. Pichegru was a native of this town; and after the Restoration of 1815, a bronze statute was erected to him in one of its squares. We have not learned whether it still exists.

ARCADIA, the classical name of central Peloponnesus, now an inl. nomarchy of mod. Greece, Morea, of which it occupies the high table-land, between lat. 37° 15′ and near 38° N., long. 21° 44′ to 22° 35′ E., having N. Achaia, E. Argolis, W. Elis, and S. Messenia and Laconia: length and breadth about 40 m. each. Area, 1600 sq. m. Pop. doubtful. It is intersected by hill-ridges in various directions, and on the N. a lofty mountain range renders its access difficult. It contains several plains of tolerable extent, as that of Tripolizza, 25 m. long, and from 1 to 8 m. broad, with those of Londari, Mantinea, Tegea, &c. Its chief streams are the Ronfia (*Alpheus*) the largest river of the Morea, and its tributaries, the Dogana, Ladon, &c.: its lakes are insignificant in size, but the Stymphalus, of classic fame, is among them. Arcadia has many geographical features in common with Bœotia: it is copiously watered, but its valleys are often quite encased by hills, and having no good outlet, the waters are but partly carried off by subterraneous channels, leaving stagnant marshes, which deteriorate the air. Arcadia, from its elevation, is much colder than the rest of the Morea; its climate is even rigorous. Much of it is uncultivated or given up to pasture, cattle-feeding being by far the most important rural occupation, the Arcadian shepherds roving about with their flocks, in families of 12 or 15 persons, living in tents, and changing their locality as fresh pastures are required. Some of the plains contain many vineyards; that of Heræa was said by Pliny and others to produce a wine that made "men mad, and women fruitful:" a sweetish red wine is still made at that place, with more flavour and body than almost any other in the Morea. The Arcadians are strong and laborious, but all the operations of agriculture devolve upon the women: the men devote themselves to tending cattle, or performing necessary journeys on business. The decline of the culture and population of Arcadia dates from a very remote period. Strabo refers it, or at least the conversion of the corn lands into pasture, to the æra of the foundation of Megalopolis, to settle in which city many of the smaller towns and villages were abandoned. Forests, however, have not apparently much increased; and that of Pelagus, in the plain of Pallantium (Tripolizza), has wholly disappeared. Arcadia presents, in many places, most beautiful scenery; as, for instance, the valley of Megalopolis. (See *Leake, Morea*.) The plane, fir, chestnut, oak, ilex, wild-pear, lentisk, &c., are the most common trees; deer and game are plentiful; wild boars, wolves, bears, &c., common only in the N. Arcadia, is divided into four eparchies—Tripolizza, Londari, Karitena, and Andruzzena, are its chief towns. It contains the remains of the cities of Phigaleia, Megalopolis, Pallantium, &c., besides many other interesting ruins. (*Leake, Travels in Morea*, 1830.)

ARCADIA, t., Wayne co., N. Y., 5 m. W. Lyons, 190 W.N.W. Albany. The village is situated on the Erie canal, and contains one Baptist church, two stores, besides several groceries, 100 dwellings, and about 500 inhabitants. The town contains fourteen stores, one flouring-mill, one grist-mill, fourteen saw mills, one printing-office, one weekly newspaper, two academies, 46 students, twenty-two schools, 646 scholars. Pop. 4980.

ARC-EN-BARROIS, a town of France, depart. Haute Marné, cap. cant. on the Aujon, 13 m. S.W. Chaumont. Pop. 1526.

ARCHANGEL, or ARKHANGHELSK, a government of Russia in Europe, occupying the whole country from the Ourai mountains on the E. to the grand duchy of Finland on the W., and from the frontiers of Voïogda and Olonetz on the S. to the Arctic ocean and the White sea on the N. It includes, also, Nova Zembla, and some other large islands in the Arctic sea. The estimates of the area differ considerably, but it is believed, exclusive of the islands, to exceed 250,000 sq. m., or more than double the size of Great Britain and Ireland! But the largest portion by far of this vast territory is condemned to perpetual sterility. The part of it within the Arctic circle consists principally of an almost boundless expanse of sandy and mossy plains, having ice, even in the middle of summer, always a little below the surface. The country on this side the Arctic circle consists, also, of immense plains, partly occupied with forests that cover more than half the entire extent of the prov.: partly, but in a very inferior degree, by low pasture grounds; and partly with lakes, morasses, &c. Principal towns, Archangel, Onega, Dwina, Mezen, and Petchora. Pop. not ascertained exactly, but does not certainly exceed from 220,000 to 250,000. Owing to the severity and variableness of the climate, corn crops cannot be depended upon; and,

in consequence, even in the southern district, where the land is most fertile, they are but little attended to; though considerable quantities of hemp and flax are raised. The principal wealth of the government consists in its immense and apparently inexhaustible forests; but fishing and hunting are the chief employments. The rein-deer is the domestic animal of the Laplanders and Samoyedes, the former occupying the N.W. and the latter the N.E., parts of the government. Among the tribes now mentioned, dried fish occupies the place of bread; and in the more S. districts, the inner barks of trees, and certain species of moss, are intermixed with meal, or substituted for it in the making of bread. Horses and cattle diminutive, and but little attention is paid to their treatment. The district of Kholmogor, on the Dwina, a little below Archangel, where the pasture is exceedingly good, must, however, be excepted from this remark. A breed of Dutch cattle, imported into this district by Catherine II., and distributed among the inhabitants, still preserves its superiority; and the calves of these cattle, being well fed, furnish the delicate white veal so much esteemed at Petersburgh. (*Tooke's Russian Empire*, iii., p. 89.) Ship and boat building, and the preparation of pitch and tar, are carried on to a considerable extent. A good deal of coarse linen is made by the peasantry of Archangel, and of the contiguous districts; and they also manufacture a good deal of cordage and immense quantities of mats, with leather, tallow, turpentine, potash, &c. The population, though originally Finnish, is now essentially Russian. The Samoyedes, who are almost at the bottom of the scale of civilization, though spread over an immense surface, do not exceed 6000 or 7000 individuals. They are exempted from the Obrock and from compulsory military service, paying only the issaak or tribute imposed on Asiatics. The Laplanders, who are a little more advanced, do not amount to 2000 individuals. They are subject to the capitation tax.

ARCHANGEL, the cap. of the above government, and the principal city and port of trade in the N. of Russia, on the right bank of the Dwina, about 34 m. above where it falls into the White sea, lat. 64° 32′ 8″ N., long. 40° 33′ E. Pop. in 1830, including that of the small dependant village of Solombolsk, 24,339. It is almost entirely built of wood, and has been materially improved since the fire of 1793. The principal building is the Gostinoi dwor, or bazar, for the exhibition and sale of merchandise, and its protection against fire. It is of stone, and of great extent. The marine hospital also deserves to be noticed. Archangel is the residence of a general and civil governor, and of an archbishop. There is an ecclesiastimal seminary with nine professors, a gymnasium, a school of commerce and navigation, and some other educational establishments. Notwithstanding its high N. latitude, and the lengthened period during which it is annually inaccessible, it has a pretty extensive commerce. It owes this to its situation on the Dwina, one of the most important rivers of Russia, and which has been united by canals with the Wolga on the one hand, and the Neva on the other. The greater part of the articles of export are brought by this channel, mostly from a considerable distance, some even from Siberia. The principal are corn, flax, and hemp, timber, iron, linseed; vast quantities of mats, potash, tallow, tar, pitch, train-oil, canvass and coarse linen, furs, cordage, &c. The exports vary materially in different years, principally according to the demand for corn in this and other foreign countries. In 1831 their total value was 14,750,756 roubles; whereas in 1834, when little corn was exported, they only amounted to 8,464,626 roubles. The value of the imports, which consist principally of colonial produce, spices, salt, woollens, cottons, hardware, &c., is always much less than that of the exports. In 1831, it amounted to 1,155,872 roubles; and in 1834, to only 659,555 do. The exports being bulky articles, employ a great number of ships, varying from 300 to 500. The harbour is at the island of Soloenbolsk, about 1 m. below the town; and the ships are principally loaded direct from the prams, rafts, &c. that bring the produce down the river. There is a bar at the mouth of the river with from 13 to 14½ feet water; and vessels drawing more than this must, of course, partly load and unload by means of lighters in the roads. There is a government dock-yard, with slips for building ships, about 12 m. below the town, where also are situated warehouses belonging to merchants of the city. A fishing company was established here in 1803. Exclusive of the ship and boat building, and the manufacture of cordage and canvass referred to in the preceding article, there is here a sugar refinery, several breweries, &c.

The entrance to the Dwina, where Archangel was soon after built, was discovered by the famous Richard Chancellour, the companion of Sir Hugh Willoughby in his voyage of discovery, in 1554; and from that period down to the foundation of Petersburg, it was the only port in the empire accessible to foreigners. (*Schnitzler, La Russie, &c.* p. 620; *Oddy's European Commerce*, p. 94; *Russian Officiel Accounts, &c.*)

ARCHER, p. t., Harrison co., O. 122 m. E. by N. Columbus, 202 W. It has five schools, 230 scholars. Pop. 1019.

ARCHIDONA, a town of Spain, 34 m. N. Malaga. Pop. 5000.

ARCHIPELAGO, a term applied to such tracts of sea as are interspersed with numerous and contiguous islands; but it is especially applied to the islands in the Ægean sea, or that part of the Mediterranean lying between Asia Minor and Greece.

ARCHIPELAGO (EASTERN). This, the most extensive archipelago with which we are acquainted, comprises a vast number of islands, some of which, as Borneo, Java, Sumatra, Celebes, &c., are of very large dimensions. It lies within the tropics between 95° and 135° E. long., and 11° S. and 19° N. lat., having N.W. and N. the Chinese sea; N.E. and E. the Pacific; and S. and S.W. the Indian ocean. It is divided by Mr. Crawfurd into the following five divisions, each distinguished by peculiarities of situation, climate, and products.

1st Div. From long. 95° to 116°, including Sumatra, Java, Bali, Lombok, Madura, Bangka, Billiton, the Malay peninsula and the W. and larger portion of Borneo. The soil of this division is good, and suited to the production of most kinds of vegetable food. Rice is the chief subsistence of the inhabitants, who are the most civilized of the archipelago.

2d Div. From long. 116° to 124°, includes Celebes, Sumbawa, Flores, Sandal-wood, Timor, and the E. part of Borneo to 3° N. lat. The soil is inferior to the former; rice is not so abundantly produced, and sago partly supplies its place.

3d Div. From long. 124° to 130°; lat. 10° S. to 2° N. includes Ceram, Booro, Gilolo, Timor-lant, the Arcoe I. and Papua. The climate differs from that of most of the other divisions: the E. monsoon is rainy and boisterous, the W. dry and temperate; the plants and animals of the 1st and 2d divisions disappear, and others take their place, peculiar to this region of the world, as the clove, nutmeg, &c. Very little rice is grown; sago forms the chief food: the natives are greatly inferior to those of all the other divisions in civilization.

4th Div. From long. 116° to 128°, and lat. 4° to 10° N. includes Mindanao, the Sooloo I., Palawan, and the N.E. part of Borneo. Products of all the former divisions are found here; but the clove and nutmeg are very inferior. Rice is consumed, but sago is the principal article of food; the natives are above those of the 3d division in civilization.

5th Div. From 10° to 19° N. lat. includes the remainder of the Philippines, and is the only portion within the limits of the hurricanes. The soil is fertile in rice, tobacco, and the sugar-cane, but not in the pepper of the 1st, nor the fine species of the 3d divisions. The manners, institutions, and language of the inhabitants differ from those of all the other divisions.

The E. archipelago is mountainous, and its principal mountains, which are often isolated, have all a volcanic character. It is very generally covered with deep forests of stupendous trees. The number of grassy plains is very small, and there are no arid sandy deserts. It is distinguished from all other clusters of islands by its periodical winds, and peculiar natural products, one of which, sago, "is such as man nowhere else subsists upon" as a chief article of food. Gold is found in almost every part, but especially in Borneo and Sumatra, the total yearly produce being estimated at 155,000 oz. Silver is believed to be native, tin is very plentiful in Bangka; and there are also iron and copper; diamonds are found in Borneo; sulphur pretty generally, and salt from springs, especially in Java. Palms, bamboos, and ratans are universal; the most remarkable of these trees is the sago palm (*Metrexylon sago*), one of the smallest of its tribe, seldom reaching to more than 30 feet in height, and growing only where the E. is the boisterous monsoon, a region extending W. to Celebes and Borneo, N. to Mindanao, S. to Timor, and E. to Papua: Ceram is its chief seat, and there large forests of it are found. The edible farina is the central pith, which varies considerably in different trees, as to the time required for its attaining proper maturity. At the age of perhaps 15 years the tree is cut down, and may yield 500 or 600 lbs. pith, but the average is about 300 lbs.; this is ground into powder, clarified, and made into cakes, kept dry for use: it is eaten by the natives in the form of pottage. Sago grows well only in marshy places: "a good sago-plantation or forest is a bog knee-deep." A farina of an inferior kind is supplied by the *gemuti* (Borassus gomutus), another palm peculiar to this part of the world, which grows in the E. island in the valleys of hilly tracts, and yields also toddy, and a fibrous epidermis used in the cordage of the native shipping. Teak is abundant in Java, and the banana grows commonly in the greatest perfection; the orange and lemon tribe, shaddock, pomegranate, pine-apple, guava, tamarind, jack-fruit, mango, &c., are plentiful; and several fine fruits, as the *champandak*, *mangostein*, and *durian*, are confined to the archipela-

go. The latter is esteemed by the natives before all other fruits; it is as large as a pumpkin, its seeds being enveloped in a rich white pulp, the edible portion; and, although repulsive at first by a strong smell, a taste for it once acquired, is lasting. The copal tree is found in Palawan, and others yielding resins are plentiful; the palma christi, cocoa-nut, and sesamum yield oil, as well as a large and handsome tree called *kanari*, peculiar to the E. islands; benzoin, catechu, camphor, olibanum, are the gums naturally produced, and the pterocarpus, yielding dragon's-blood, grows in Sumatra and Borneo. Ebony, toon, sandal-wood, in Timor and the adjacent islands, sapan-wood, lignum-aloes, &c. are found; and indigo, annotto, safflower, and turmeric in nearly all the islands. The clove and nutmeg flourish in Amboyna and the Moluccas, black pepper in Sumatra, and ginger and cassia pretty generally; cubeba, cajeput (*melaleuca cajuputi*), and sassafras, in various parts, areca in all, as well as the *ancher* or poison tree: the *ehstik*, wrongly called *upas*, is confined to Java. The sugar-cane, cotton, tobacco, capsicums, onions, cucumbers, and the sweet potato in the W. are common articles of culture: many kinds of pulse are grown as articles of food; millet is but seldom cultivated, but maize, which is next in importance here to rice, flourishes everywhere. The natives generally are very fond of flowers; those of the archipelago are mostly yellow or red; blue is rare among them; lotuses and other aquatic plants are profusely numerous. European flowers and other vegetables transplanted thither, in general soon lose their perfume and excellence; and the same is the case with those from America, which, like the pine-apple, &c., are treated with indifference by the natives. The buffalo and ox, being both of remarkably large and fine breeds, are used in agriculture; elephants are found in the Malay peninsula and Sumatra only.

The argus pheasant and bird of paradise are the most remarkable birds; the latter is exceedingly abundant in Papua, the Arcoe, and other E. isl. The edible birds'-nests, so much valued by the Chinese, are built in caves, most commonly on the sea-shore, by a species of swallow (*Hirundo esculenta*). Tortoises are numerous in the E.: the shores, especially in the W., profusely abound with fine fish, as the pomfret, calcap, soles, &c.; the whale fishery of the S. seas is reputed worth upward of £1,000,000 per ann.; sharks, whose fins are important articles of export to China, pearl oysters, cowries or gigantic cockles, are common; and the *Holothuria*, or sea slug, is fished for on coral reefs from one end of the archipelago to the other. The lac insect exists in most of the forests, especially in Sumatra and the Malay penins.; and bees are very numerous in the E., but they have never been domesticated.

Native Tribes.—The inhab. are of two distinct races, differing widely in conformation; one having a fair or brown complexion, while the other is black. The former inhabit chiefly the W., the latter the whole of the archip., but become more prevalent as we go farther eastward. The fair or brown tribes are short, squat, and robust, 5 ft. 2 in. being the greatest height commonly of the men, and 4 ft. 11 in. of the women. Their lower limbs are large and heavy, but not ill-formed, the bosoms of the women rather small than large in proportion to their size, and the arms and limbs of both sexes are round and fleshy, rather than muscular. Face round, mouth wide, teeth remarkably fine, chin square, angles of lower jaw very prominent, cheek-bones high (cheeks therefore hollow); nose not very prominent, but never flat; eyes small and black; hair on the head long, lank, harsh, and generally black; elsewhere very scanty. This race is superior in appearance to the other, but less good-looking than most Asiatic nations. The black or Papuan race is a kind of dwarf African negro, never more than 5 ft. in height; spare and puny, with a projecting belly and buttocks, which are much lower than the African's; complexion sooty, nose and under-lip projecting very much from the face; hair woolly, in small tufts, and each hair with a spiral twist. For undersized people, the inhabitants of the archip. are strong and athletic, though not agile, nor, like some Asiatic nations, fond of practising and exhibiting feats to show the flexibility of their bodies. They have a singular strength of constitution and ability to recover speedily from bodily accidents and resist inflammatory disorders: childbirth is a function very easily performed among them. Their most prevalent diseases are remittent and intermittent fevers, worms, smallpox, and other cutaneous disorders; and as medicine is in a very low state, many perish miserably. Although so unclean as to wear what clothes they have till they drop from them, and otherwise very dirty in their homes and habits, they are temperate and abstemious, and not devoted to intoxicating liquors, although they universally use betel, areca, and tobacco, and would consume much opium were the price not so high. They are good-tempered, brave, humane, hospitable, and neither bigoted nor perfidious, but very revengeful; and under certain circumstances, such as great oppression, they have a peculiar custom of *running-a-muck*, in which an individual, careless of his own life, rushes forward with a drawn *kris* or dagger, striking at everything and every one he meets. They are capable of attachment; gratitude, and fidelity, have great parental and filial affection, love for their country, and a regard for truth. The faculties of their mind are generally feeble; they are slow of comprehension, credulous, and superstitious; their judgment narrow, and their reason, memory, and imagination alike weak; they are, however, good imitators, and have an aptitude for music: in their manners they are grave, courteous, and reserved; they consider it most respectful to sit, cover the head, and turn the back to their superiors. The more savage tribes go quite naked, with the exception of a small piece of cloth worn round the loins. In the Philippines the dress is nearly the same for both sexes, and between the flowing dress of the Asiatics, and the close one of Europe, consisting of two coverings: excepting the Mohammedans, all wear the head uncovered. Their teeth are usually filed and blackened: the womens' ornaments are chiefly of gold: pearls are never worn. All the men are armed with the *kris*, or dagger, which, with the spear, is the favourite weapon; the others are the club, sling, sword, and bow and arrows; the latter are often poisoned with *ancher*, which is, however, by no means a powerful drug. They are not expert in the use of fire-arms. The materials of their dwellings are commonly bamboo, ratan, palmetto-leaves, and wild grass, the two latter of which are used for roofing: houses in the neighbourhood of the seas are mounted on posts 15 to 20 ft. high, and superior residences are enclosed within temporary palings. They consist of but one floor, and their furniture is rude and scanty; the beds are rough mats, or often mere benches, on which a person lies down with his day-dress wrapt around him. Knives and forks are unknown, and porcelain dishes are a luxury: meals are taken sitting on the ground; the food is served up in trays of wood or metal, and grasped by handfuls by each as he wants it. The Polynesian language, which, in various dialects, is spoken over nearly the whole of the archip., and extends as well to Madagascar, and to the farthest of Cook's discoveries toward the S., is in every respect different from all others, and probably derived from an ancient nation originally settled in Java, where it is spoken in its greatest purity. Next to the dialect of Java, those of the Malay penins., Bugis and Macassar, are the most civilized; Sanskrit is introduced into the more improved islands of the W. division; Arabic has also been introduced by the Mohammedans. There is, in parts, also a small admixture of Chinese and Persian, Portuguese and Dutch.

By far the greater portion of the land is yet uncultivated; and of that which is, the chief part is no better than a morass for half the year. There is a wide difference in the industry of the natives: some are roaming about their forests, but the greater number have actually made "a respectable progress in social order, tamed the useful animals, applied themselves successfully to agriculture, to fisheries, to navigation, and even to mining." The negro race are fond of hunting; all are devoted to games of hazard, and in Java, cock-fighting is a favourite amusement. They are fond of dancing; their dances being grave, stately, and slow: their music is not destitute of melody. Polygamy and concubinage are common among the higher ranks in the more civilized states. Chastity is variously appreciated; but women are never immured, and are even eligible to govern in elective monarchies as Celebes. Slavery exists everywhere except in Java. The inhab. of the archip. are clothed in cotton, mostly woven by themselves: silk they never wore generally, nor was the silkworm ever cultivated by them; their loom they have derived from the Hindoos. They know how to work many of the most useful metals, as iron, tin, and gold. Some of their musical instruments are made of a kind of bell-metal, which they cast themselves; and they sometimes use a metallic coinage. Iron, however, is but little used for tools and implements of agriculture: their cutlery is wretched, from a want of knowledge how to temper it; and they are unable to make a lock for a musket. They carve *kris* handles, and make betel-boxes in a very superior manner, and build vessels even to 40 or 50 tons burden; but their smaller ones are better, safer, and swifter. They manufacture *balachang*, a kind of fish-sauce, both for home consumption and exportation: salt they obtain by the usual means of evaporation, and saltpetre by boiling the soil of caves which bats and birds frequent. The manuf. of glass is unknown; but they attempt that of gunpowder; the great request, however, in which they hold that of Europe, proves the inferiority of their own. In war, the flower of their land-forces always consists of infantry; but their naval strength is the more formidable: their warfare has always been confined to predatory descents on adjacent islands. Every description of government is to be met with in this archip., from unlimited freedom in a savage state, to absolute despotism in the most civilized; in no one is there an hereditary nobility, and the

civil and religious authority are in every case kept distinct. The public revenues are usually derived from the three sources of taxes on land, a poll-tax, and taxes on articles consumed or imported; in Java there is a tax on fisheries. Farming the revenues is a common practice, and it is common in many states for the prince or chief to reward his officers by assigning to them, instead of paying them directly, a certain extent of land, or the amount of the value of the labour of a certain number of cultivators. The prevailing religion is Mohammedan, which was introduced into the archip. in the 13th, and continued to spread till the end of the 16th century. Christianity prevails only in the Philippines and the Spice isl. The Mohammedan laws are those chiefly in force in the civilized parts, and are closely adhered to sometimes; but the task of avenging of private injuries mostly passes into private hands. The *lex talionis* is very popular, though almost all punishments may be compounded or alleviated by paying the party injured, his friends, or the executioner: stabbing by the *kris* is the most usual mode of capital punishment.

Trade in the archipelago is esteemed a most honourable employment, and even sovereigns personally engage in it. Java, Sumatra, and Celebes are the chief seats of trade: from the latter 40 vessels go annually to the N. coast of Australia, and many others into the rest of the archipelago, to collect articles for the Chinese trade, the most considerable of all, yet not of 180 years' standing. The exports to China are pepper, cloves, mace, and nutmegs, scented woods, ebony, ivory, horns, hides, tortoise-shell, sharks' fins, edible birds'-nests, gold-dust, benzoin, camphor, betel, wax, wool, tripang, and European woollens and cottons. The trade with India is believed by Mr. Crawfurd to have commenced at the beginning of the second century of the Christian æra, and is now very extensive, the value of the imports from the archipelago into Calcutta only, in 1837–38, having amounted to £542,780: these imports consist principally of pepper, tin, betel-nut, fine woods, gold and silver, damar, spices, &c. The exports to Europe and America have very greatly increased within these few years; principally in consequence of the wonderfully extended growth of sugar, coffee, indigo, &c. in Java (which see). But, exclusive of these great staples, Java sends rice to the other islands, to the Cape of Good Hope, and even to Europe; sago is sent to Europe, China, and Bengal; cotton is produced principally in the great south chain of the first and second divisions, but little, however, is sent beyond the archipelago. The chief imports are black tea, coarse porcelain, wrought iron, cottons and silks, brass and tutenague ware, paper, books, shoes, fans, umbrellas, paint, and toys, from China; salt, tobacco, blue cotton cloths and chintzes, from India. Chintzes dyed red, green, and other bright colours, and especially in patterns of *running flowers*, are peculiarly acceptable to the natives. Manchester and Glasgow cottons, *bandanas* handkerchiefs, cotton velvets and woollens, English saddlery and iron, fire-arms and ammunition, glass and plated wares, raw and wrought silks, and opium, are also in great request. These nations are ignorant of arithmetic, and, excepting in Java, 1000 is the highest number they have any term to express. Interest on money lent is very high; bills of exchange are unknown; and women are almost solely the merchants, brokers, and money-changers. (For other particulars see *Articles on the several Islands*, and the learned and excellent *History of the Indian Archipelago*, by John Crawfurd, Esq., F.R.S., 3 vols. 8vo, *passim*.)

ARCIS-SUR-AUBE, a town of France, dep. Aube, cap. arrond., on the river of that name, at the point where it begins to become navigable, and where it is crossed by the high road from Troyes to Rheims. Pop. 2759. There are no buildings worth notice. It has manufactures of woollen stockings and caps, an establishment for spinning cotton, tanneries, &c., and is the entrepôt of the iron of the valley of the Aube, and of the wire and wood-work of the Vosges. This town suffered severely during the campaign of 1814. Napoleon, who displayed equal skill and courage, repulsed at this point, with a very inferior force, one of the principal divisions of the allied army.

ARCO, or ARCH, a town of the Tyrol, with a castle, on the Sarca, 7 m. W. Roveredo. Pop. 2000.

ARCOLE, a village of Austrian Italy, on the Alpone, 15 m. E.S.E. Verona. A series of sanguinary engagements took place here on the 15th, 16th, and 17th of November, 1796, between the Austrians and the French under Napoleon, when the former were ultimately defeated.

ARCOS DE LA FRONTERA, a town of Spain, Andalusia, on the Guadalete, 30 m. E.N.E. Cadiz. Pop. 10,000. It is situated on an elevated rock, and is of difficult access. Streets unpaved, and ill adapted for foot passengers. It has two parish churches, and some convents for both sexes. The great altar of the church of Santa Maria is much adorned. The country in the vicinity is mountainous, intersected by valleys, and very fertile.

ARCOT, a marit. district of Hindostan, prov. Carnatic, presid. Madras, divided into two sub-districts or collectorates, comprising the whole country from Coleroon river on the S. to the frontier of the Nellore district on the N. and E. of Cuddapah, Mysore, and Salem, with the exception of the Chingleput district lying round Madras. The districts are divided by the Palaur river. That to the N. comprises an area of 6200 sq. m., and a pop. of 506,831; and that to the S. an area of 4500 sq. m., and a pop. of 550,230. Near the sea the country is low and well cultivated; but farther inland it is hilly, with extensive tracts of jungle. Agriculture is the great business of the natives; and this depends very much on irrigation, to assist in which many very large tanks, artificial channels, and dams have been constructed. The country is held under the ryotwar system (see INDIA). The revenue of the N. division amounted in 1835-36 to £287,718, and that of the S. division to £240,967. The trade in piece goods has been well-nigh annihilated by the introduction of the cheaper cottons of Great Britain; but cotton stuffs still continue to be manufactured at Pulicat and Irrycum, and there is an extensive iron foundry at Porto Novo. (*Madras Almanac for* 1838, part ii., p. 17, &c.)

ARCOT, a city of Hindostan, the Mohammedan cap. of the Carnatic, on the S. side of the Palaur, 68 m. W.S.W Madras, lat. 12° 54′ N., long. 79° 23′ E. It is well built, is enclosed by walls, and contains the ruins of the palace of the nabobs of Arcot. The population consists principally of Mohammedans who speak the Decanny dialect, which we call Hindostani. It has a handsome Mohammedan mosque, with some other Mohammedan religious edifices. The citadel, formerly of large extent and considerable strength, is now quite in ruins, its principal defences having been blown up; but the rampart next the river, as it protects the town from inundation, is kept in good repair. Arcot is very ancient, and has undergone many vicissitudes. It came definitively into our possession in 1801. (*Hamilton's E. I. Gazetteer.*)

ARDAGH, an insignificant village of Ireland, co. Longford. The church is very ancient; and it was the see of a bishopric, united in 1685 to the bishopric of Kilmore, but separated from the latter in 1741, when it was united to the archbishopric of Tuam.

ARDEBYL, a town of Persia, prov. Azerbijan, 26 m. W. from the Caspian sea, between and which there is a chain of pretty high mountains, near the edge of an extensive and elevated plain, lat. 38° 15′ N., long. 48° 23′ E. Pop. said by Mr. Fraser to amount to 500 or 600 families, or from 3000 to 3600 individuals. Houses mean and small, built of mud or sun-burnt bricks, with flat roofs like those of the poorest villages. It is surrounded by a ruinous mud wall; but the fort is a regular square, with bastions, a ditch, glacis, and drawbridge in the European style. The place is remarkable for its containing the tombs of Sheikh Suffu, the founder of the Suffite dynasty of Persian princes and of a religious sect, and of some of his descendants. It is a good deal resorted to by pilgrims, but is now falling into decay. A fine library formerly belonged to Ardebyl; but it was carried to Petersburg on the town being taken by the Russians, by whom, however, it was restored to the Persians. (*Fraser's Travels on the Shores of the Caspian Sea*, p. 296; *Journal of the Geographical Society*, iii., p. 27.)

ARDECHE, a dep. of France, lying lengthwise along the W. side of the Rhone, by which it is separated from the Drome, having S. the Gard, W. the Lozere and Haute Loire, and N. the Loire. Area, 539,000 hect. Pop. 353,752. With the exception of a narrow border along the Rhone, most part of the surface is occupied by hills and mountains belonging to the chain of the Cevennes: mount Mezen, on its W. frontier, the highest in the dep., rises to the height of 1774 toises (5770 feet) above the level of the sea. Several of the smaller hills are of volcanic origin. The cultivable soil is estimated at about 129,000; meadows, 44,000; vineyards, 27,000; forests, 98,000; mountains, heaths, &c., 148,000; and *cultures diverses* 63,000 hect. Besides the Rhone, the dep. is watered by the Ardèche, whence it derives its name, the Erieux, Doux, &c.; and it has to boast of the source of the Loire, which rises about 18 m. W. Privas. There are mines of coal, iron, lead, antimony, &c. The produce of corn is insufficient for the consumption of the inhabitants, the deficiency being supplied by potatoes and chestnuts, of which last the forests produce immense quantities. Valleys cultivated with the plough; hills generally with the spade. The inhabitants are exceedingly industrious, as is evinced by their careful system of irrigation, and by the terraces formed on the sides of the hills planted with vines. The culture of the latter is an object of great attention; and the wines of Limony, St. Joseph, Cornas, St. Peray, &c., particularly the last-mentioned, are highly esteemed in foreign countries, as well as in France. The raising of the silk-worm and the production of silk is also a most important object in the economy of the dep. The culture of the olive has been abandoned, and the only oil used is now procured

from walnuts. Butter and cheese yield considerable returns; great numbers of fat hogs are exported; and the sheep, which are numerous, furnish annually about 410,000 kilogs. wool. Manufacturing industry is prosecuted with much spirit and success. The dep., which from 1808 to 1812 produced at an average 732,000 kilogs. a year of cocoons, worth 2,196,000 fr., produced, in 1829, 319,600 kilogs. raw silk, worth about 16,000,000 fr., and had at the same time 236 establishments for spinning, organzining, &c., this silk, by which its value was raised to 23,244,256 fr.! and since then there has been a considerable increase. The paper produced at Annonay and other places ranks among the very best in Europe. The manufacture is not, however, very extensive, employing only about 400 work-people, and furnishing 313,500 reams a year. Latterly, the tanning of leather, particularly of goat-skins for gloves, has become a considerable business. There are also fabrics of coarse cloth, linen, and straw hats; establishments for spinning cotton, with iron-works, forges, &c. The dep. returns four members to the Ch. of Dep. Constit. in 1837, 1057. Total public revenue in 1831 very near 5,000,000 fr. Principal towns, Privas the cap., Annonay, Aubenas, &c.

ARDEE, an inland town of Ireland, co. Louth, prov. Leinster, on the Dee, whence its ancient name of Atherdee, "Town on the Dee," 36 m. N.N.W. Dublin. A strong castle, now fitted up as a courthouse, built here by one of the early English settlers, long rendered it a place of much importance; but it was, notwithstanding, burned by Edward Bruce during his invasion of Ireland, in 1315, and again by O'Neil, during the wars in the reign of Elizabeth. In 1641, it was the head-quarters of Sir Phelim O'Neil. Afterward it fell into the hands of Cromwell, and was one of the stations of the army of James II. while retiring before that of William III. previously to the battle of the Boyne. Pop. in 1821, 3588; in 1831, 3975, being about ⅓ds of that of the entire parish, which in 1834 contained 6151 inhab., of whom 458 were of the Episcopal church, 45 Protestant diss., and 5648 Roman Catholics. The town, which stands in a fertile district, consists of a main street, having several lanes branching from it; the dwellings, with the exception of some good houses, are mostly miserable cabins. The church, built in the early part of the 13th century, and originally forming part of an Augustine monastery, is a plain structure in good repair: the Roman Catholic chapel is a new and spacious edifice. There are schools for both sexes, under the endowment of Erasmus Smith; a savings' bank, and a dispensary. In the centre of the town is another ancient castle, now fitted up as a dwelling-house, and near the entrance is a large artificial mound, called the Castle Guard. It was incorporated towards the close of the reign of Edward III., and received additional privileges from subsequent monarchs. Its ruling charter is that of 11th Anne, under which it consists of a portreeve, 23 burgesses, and an unlimited number of freemen; the municipal government being vested in the portreeve, six burgesses, and six freemen, who hold office for life. The corporation returned two m. to the Irish parl., and continues to enjoy a revenue of about £135 per annum. The local courts have fallen into disuse; general sessions of the peace are held in January and June, and petty sessions every Wednesday: part of the ancient castle is used as a bridewell. The manufacture of malt is carried on to a considerable extent, 64,483 bushels having paid duty in 1836: there are also flour and meal mills; turf is brought from a bog, about two miles distant by the river Dee, which is here navigable for boats. A market-place for corn was built in 1710, and shambles in 1796, in which a well-stocked market is held every Tuesday. Fairs, principally for live stock, are held in a large, enclosed area provided by the corporation, on 1st March, 10th April, 6th June, 8th July, 20th August, 23d October, and 17th December; that of October is principally for sheep. The right of tolls, which was for some time matter of dispute and turbulence, has been decided in favour of the corporation. The post-office revenue amounted in 1830 to £317, and in 1836 to £546; a daily mail car from Drogheda to Louth passes through Ardee, carrying at an average two passengers each trip. (*Railroad Report; Priv. Infor.*)

ARDELAN, a prov. of Persia, forming the E. division of Kurdistan. It extends 200 m. in length, from the stream Sharook to the Turkish district of Sohaub, and is nearly 160 m. in breadth. From the Sharook to Senna, cap. prov., in lat. 35° 12′ N., long. 40° E., the surface presents successive clusters of hills, heaped, as it were, on each other, on extensive table lands, covered with huts and the flocks of tribes passing the summer months here, and migrating in winter towards Bagdad. The soil is good, and will yield abundance of wheat and barley: but the Kurds, who prefer a pastoral life, content themselves with raising only what is absolutely necessary for their subsistence. Tobacco is cultivated in small quantities; and the extensive forests of oak on the mountains W. of Senna afford abundance of timber and gall-nuts. The former is floated down the Zab in rafts into the Tigris, and the latter exported to India. Various tribes inhabit Ardelan, which are represented as robust, brave, temperate, and living to a great age; but they are averse from settled habits; war and rapine are their delight; and they scarce consider murder and parricide as crimes! They have a language of their own, and are proud of their descent, which they trace back to the most distant epochs. Some of their chiefs have great power. (*Kinneir's Persia*, p. 142.)

ARDENNES, a dep. in the N. of France, having N. Belgium, E. dep. Meuse, S. dep. Marne, and W. dep. Aisne. Area, 517,383 hect. Pop. 306,861. It derives its name from the old forest of Ardennes, which occupies its N. division. It is divided into two portions by a mountainous ridge, a ramification of the chain of the Vosges, by which it is traversed from S.E. to N.W. Principal rivers Meuse and Aisne, connected by means of the canal of the Ardennes and the Bar. Soil of very different degrees of fertility. The N. is interspersed with mountains or high hills covered with forests and heaths, and some plains in the S.W. district are naked, arid, and barren. But it has some large and fruitful valleys, particularly that of the Aisne, one of the best corn countries in France. The extent of its principal divisions is set down as follows in the official tables, viz., cultivable lands, 314,000; meadows, 48,000; forests, 95,000; and heaths, &c., 11,000 hect. Agriculture has recently made much progress, and more corn is now produced than is sufficient for the consumption of the inhabitants. The crop of 1831 was estimated at about 570,000 hect., while that of 1839 was estimated at 912,000. Some inferior wine is made in the S. districts. There are large herds of cattle and flocks of sheep, there being among the latter, which are celebrated for their mutton, several of the long-wooled and merino breeds. Average annual produce of wool, 560,000 kilogs. This dep. is distinguished by its mines and manufactures. Among the former are those of iron, lead, calamine, &c., with quarries of slate and marble, the former the most important of the kind in the N. of France; coal is also found, but it is not worked, at least to any considerable extent. The annual produce of iron is estimated at above 4,500,000 kilogs. bar, and above 700,000 kilogs. cast. Charleville produces annually above 3,000,000 kilogs. nails: the copper works furnish above 180,000 kilogs. sheet copper, with above 110,000 kilogs. brass-wire for pins, clock-work, &c., and copper for caldrons and boilers. Above 6000 individuals are employed in the arrondissement of Mezières in the nail trade, and 600 in the manufacture of ironmongery goods. Immense quantities of slates are quarried at Fumay, Fepin, St. Barnabé, &c. Fabrics of superior earthenware, glass, white lead, tanneries, &c., are met with at Montherme and other places. There are also numerous establishments for the spinning of wool; and various branches of the woollen manufacture are extensively carried on at Sedan, Bethel, &c. The great manufactory of fire-arms on account of government, carried on at Charleville, has been transferred to Feitri and Chatellerault. Besides furnishing timber and other products for exportation to the contiguous depts. and Belgium, the forests are the great source of the productiveness of the mines, timber being the fuel used in the iron and copper works. The dep. returns four m. to the Ch. of Dep. Const. in 1837, 1322. Public revenue in 1831, 8,075,880 fr. Principal towns, Mezières, Sedan, Charleville, Bethel, Givet, &c. (*Hugo, France Pittoresque*, art. *Ardennes*; and *Official Tables*.)

ARDES, a town of France, dep. Puy-de-Dome, cap. cant., on a small river that falls into the Allier, 10 m. S.W., Issoire. Pop. 1830.

ARDGLASS, a marit. town of Ireland, co. Down, prov. Ulster, on the sea-coast, a little to the N. of St. John's Point, between Dundrum bay and the entrance of Strangford lough, 68 m. N.N.E. Dublin. It was formerly of such commercial importance that a mercantile company from London settled here in the reign of Hen. IV., and in that of Hen. VI. its trade exceeded that of any port to the N. of Drogheda. It was also a place of considerable strength, as appears from the gallant stand made in it by Simon Jordan, at the close of the reign of Elizabeth, who maintained it successfully during a siege of three years against the earl of Tyrone; but subsequently, in consequence of its exclusive commercial privileges having been purchased up by the Crown, and transferred to Newry and Belfast, its trade declined, insomuch that it has been for many years merely a fishing station and watering-place, and the port for embarkation to a few passengers to the Isle of Man. Pop. in 1834, 1628, of whom 661 were of the E. church, 29 Prot. dis., and 938 R. Cath. It stands on the side of an elevated tract of land overlooking the sea, between two remarkable hills. The late proprietor expended a considerable sum in buildings suited to make it a fashionable bathing-place. It now consists of a long, semicircular street, with lanes branching from it; a range, called the Crescent, overlooking the bay, and several detached residences. The pa. church and R. Cath. chapel are neat

buildings. Schools, on the foundation of Erasmus Smith, educate ninety boys and eighty girls; there are also several private schools, in which about 100 pupils are instructed. The castle, now the occasional residence of the proprietor, consists of a range of very ancient buildings, supposed to have been stores for merchandise, converted into a castellated mansion of three stories. A manorial court holds pleas to the amount of £100. The harbour has also been much improved. It consists of an inner cove, capable of admitting vessels of 100 tons, but nearly dry at low water, and of a large outer harbour, which, having been still farther enlarged by a pier, extending 300 feet into deep water, admits vessels of 500 tons at any time of tide; it has a lighthouse at its extremity. A constabulary force and coast-guard are maintained here. There are no manufactures: its trade is confined to that of grain, of which considerable quantities are shipped. Its low state in these respects is indicated by its post-office revenue, which, in 1830, was but £90, and in 1836 was not returned. In its commercial arrangements it is considered as a creek or dependency of Killough, with which port its custom duties are consolidated. (*See* KILLOUGH.) The fishery is the almost exclusive occupation of the working classes; that of herrings being most followed. During the season, which continues from the beginning of June to the close of August, vessels assemble here, not only from the fishing ports on the E. coast of Ireland, but from the Isle of Man and Cornwall. In 1834 about 300 vessels were collected, of which a third were Manx, a third English from Penzance in Cornwall, and the remainder Irish. Besides herrings, most kinds of round and flat fish are abundant; but they are not so much sought for. The fishermen, as a body, are orderly, well conducted, willing to work, and not more addicted to the use of ardent spirits than most others of the same grade. When disabled by age or accident, they are principally supported by their children and friends. It is observed, that though the takes of fish are frequently very large, the quantity brought in for sale never exceeds the demand. (*Fishery Report; Priv. Infor.*)

ARDJA, a town of Turkey in Asia, on the left bank of the Euphrates, 45 m. N.W. Bussorah.

ARDNAMURCHAN POINT, a promontory on the W. coast of Scotland, Argyleshire, being the most westerly point in the mainland of Great Britain, lat. 56° 45′ N., long. 6° 8′ 30″ W.

ARDNAREE, a marit. town of Ireland, co. Sligo, prov. Connaught, 160½ m. W.N.W. Dublin, on the Moy, a bridge over which river connects it with the town of Ballina. It being, therefore, in reality a suburb of the latter, the particulars relative to it will be found under BALLINA.

ARDOCH, a village of Scotland, co. Perth, pa. Muthil, 8 m. N. Dumblane, remarkable for having in its vicinity one of the best preserved Roman stations or forts in the empire. It is an oblong, 420 feet by 375 within the lines. On the W. side it is defended by the steep banks of the river Knaig, on the S. by a deep morass and two ditches, and on the other sides, where it is most exposed, by no fewer than five parallel ditches and six ramparts. On the S. side the ditches have been partially destroyed in the process of cultivation, and the W. side has been injured by carrying (unnecessarily) the military road from Stirling through Crieff to the Highlands through part of the works; but it is now luckily inclosed and protected from farther depredation. The prætorium, which is well preserved, is a square, 60 feet in the side, but it is not exactly in the centre of the station. Near this strong fort are three camps of different magnitudes, one 2800 by 1950 feet, estimated to accommodate 25,000 men; another, 1910 by 1340 feet, accommodating 12,000 men; and the third and smallest, 1060 by 900 feet, accommodating 4000 men. Nothing certain is known as to the period when, or the general by whom, this station and camps were constructed; but they are generally supposed to have been the work of Agricola. A little to the W. of Ardoch a cairn formerly existed, 182 feet in height; but it is now nearly demolished, the stones having been carried away to build houses and fences. (*Roy's Military Antiquities; New Statistical Account of Scotland*, art. *Muthil.*)

ARDOYE, a town of Belgium, 14 m. S.S.W. Bruges. Pop. 5000.

ARDRA, or AYEM, a country of Africa, formerly independent, but now a prov. of Dahomey. Ardra is also the name of the capital of the above country, about 40 m. inland.

ARDRES, a small but well-fortified town of France, dep. Pas de Calais, cap. cant., 9 m. S.E. Calais. Pop. 2150. In the vicinity of this town in June, 1520, was held the famous meeting between Francis I., king of France, and Henry VIII., king of England. The pomp and magnificence displayed on both sides, during eighteen days that the meeting lasted, acquired for the place of rendezvous the name of the *Champ du drap d'or*. The interview had no very important political result.

ARDROSSAN, a parish and sea-port town of Scotland, co. Ayr, the town being 24 m. W.S.W. Glasgow, 20 m. S. Greenock, and about 1 m. N.W. Saltcoats. Pop. of parish in 1831, 3597; of Ardrossan, at present, (1838) from 1000 to 1100. The town was founded by the late Earl of Eglintoun. His lordship's intention was to make a harbour here that should be accessible at all times of the tide; and as a project was, at the same time, set on foot for bringing a canal from Glasgow to Ardrossan, it was supposed that the latter would become the port of the former, and that the circuitous navigation of the Clyde would be avoided. In furtherance of this design, Lord Eglintoun expended vast sums on the harbour and town. The harbour is partly formed by a small islet, called Horse Isle, which shelters it on the N.W., and by a lengthened circular pier, and a breakwater. Within the extremity of the latter, there are 26 feet water at spring ebbs, shoaling gradually to 15 feet, where the pier commences. The wet docks which it was intended to construct have not been proceeded with. The town is laid out on a regular and magnificent plan; there is a splendid establishment of baths; and latterly, the place has been a good deal resorted to by visiters in the bathing season. The projected canal from Glasgow to Ardrossan not having been excavated farther than the village of Johnstone in Renfrewshire, an act was obtained, in 1827, for constructing a railway from Johnstone to Ardrossan; but hitherto it has been only completed as far as Kilwinning. There can, however, be little doubt that a railway will, at no distant period, be carried from Glasgow to Ardrossan; and when this is done, the latter will become the point whence the steam packets will sail for Liverpool and Belfast. The shipping of coal from Ardrossan has lately increased rapidly. During the year 1836 there entered the port 1963 vessels, of the burden of 108,549 tons. (*New Statistical Acc. of Scotland*, art. *Ardrossan; Priv. Information.*)

AREBO, or ARBON, a town of Benin, on the river Formosa, 60 m. from its mouth Lat. 5° 58′ N., long. 5° 8′ E.

ARECIFE, a sea-port town, cap. island of Lancerota, one of the Canaries, on its E. coast, lat. 28° 56′ N., long. 13° 36′ W. Pop. 2500. The harbour, which though small is secure, is formed by several rocky islets. It has two entrances, the N. having a depth of 12, and the E. of 17½ feet at low water, with a 9 feet rise of tide. Both entrances are defended by bomb-proof forts. The inhab. are mostly engaged in the fishery on the opposite coast of Africa. (*Journal Geog. Society*, vi., p. 287.)

ARENAC, co., Mich., situated on the N.W. side of Saginaw bay, and contains about 400 sq. m. Watered by Rifle river and other streams flowing into Saginaw bay. It is unorganized.

ARENDAL, a sea-port town of Norway, on the Arendal, 75 m. N.E. Christiansand, lat. 58° 27′ N., long. 8° 50′ 25″ E. Pop. 1800. It is mostly built on piles, and small vessels reach almost all parts of the town by means of the canals by which it is intersected. The harbour is protected by the opposite island of Tromoc. There are iron mines and forges in the vicinity; and a good deal of trade is carried on in iron and timber.

ARENDOUK, a village of Belgium, prov. Antwerp, 5½ m. E. by S. Turnhout. Pop. 2500. It has manufactures of stockings and linens, and distilleries.

ARENIS DE MAR, a town of Spain, Catalonia, 26 m. N.E. Barcelona, near the sea. Pop. 5000. It is neat and clean, has a fine parish church and a convent, fabrics of silk and cotton stockings, a school of pilotage, a yard for the building of small vessels, and anchor-forges. The women employ themselves in making lace.

ARENSBURG, a sea-port town of European Russia, gov. Livonia, capital of the island of Oesel, in the Baltic, at the mouth of the gulf of Riga, being situated on the S. side of the island, lat. 58° 15′ N., long. 22° 17′ 45″ E. Pop. 1800. It has a castle, a Russian and a Lutheran church, a public school, and a hospital. The water in the harbour being shallow, vessels are obliged to anchor in the roads at a considerable distance from town. The articles of export consist of corn, timber, butter, cheese, tallow, hides, and seal oil. (See OESEL.)

AREQUIPA, a city of S. America, rep. Peru, cap. prov. same name, in the valley of Quilca, on the Chile, at the foot of M. Omate, 7700 feet above the level of the sea, 30 m. E. from the Pacific ocean, and 200 m. S.S.W. Cuzco, lat. 16° 30′ S., long. 73° 11′ W. It was founded by order of Pizarro, in 1536. The houses, though low, on account of the prevalence of earthquakes, are strongly built; and the cathedral, a bronze fountain in the great square, and the bridge over the Chile, deserve notice. It has four convents, a college, a workhouse, &c.; and it has, or had, flourishing manufactures of gold and silver cloths, woollens, and cottons. Its environs, notwithstanding their elevation, are very fruitful; and by means of its port Mollendo, and of the road passing through it from Lima to the S., it is the seat of a pretty extensive commerce. It is very subject to earthquakes, from several of which it has sustained great injury. The accounts of its pop. differ very widely; but it may perhaps be estimated at about 35,000.

ARETHUSA, a famous fountain of Sicily, which rises close to the sea, in the city of Syracuse. Cicero says of it, *In hac insula (Ortygia) extrema est fons aquæ dulcis, cui nomen Arethusæ est, incredibili magnitudine, plenissimus piscium; qui fluctu totus operiretur, nisi munitione ac mole lapidum à mari disjunctus esset.* (*In Verr.*, lib. iv., § 53.) Poetry and fable have combined to give an enduring celebrity to this fountain. It was supposed that the river Alpheus, which flows past Olympia in Greece, and falls into the Sicilian sea, did not terminate its course there; but that it continued to flow in a subterranean channel, preserving the purity of its waters, till they again reappeared in the fountain Arethusa; and in proof of this it was affirmed that things cast into the Alpheus were after a while thrown up by the fountain! Virgil alludes to this circumstance when he says,

> Sic tibi, cum fluctus subter labere Sicanos,
> Doris amara suam non intermiscet undam.
> *Eclog.* x., lin. 4, 5.

and it is referred to by Pliny (*Hist. Nat.*, lib. ii., § 3), Seneca (*Quæst. N.*, lib., iii., § 26), and other ancient authors. The poetical account of the fountain may be seen in *Ovid's Met.*, lib. v., lin. 572.

This celebrated spring is now sadly changed. The sea has made its way, probably by the agency of the earthquakes so frequent here, into the fountain; so that, instead of being sweet, the water, which also is greatly diminished in quantity, in consequence of a large portion rising in the sea, is brackish and unfit for any purpose but that of washing. Its fish have disappeared with the sacred groves and temples that adorned its banks; and this glory of ancient Syracuse is now degraded into a sort of public washing tub for the poorer classes of the modern city. (*Swinburne's Two Sicilies*, ii., p. 332, 4to edit.; *Hughes's Travels*, i., p. 41, 8vo edit.)

AREVALO, a town of Spain, Old Castile, prov. Avila, on the Adaja, 29 m. N.N.E. Avila. Pop. 4500. Besides churches, it has two hospitals and two corn markets.

AREZZO (an. *Arretium*) a city of Tuscany, in the rich plain of Chiana (which see), 31 m. E. by N. Sienna, lat. 43° 18′ 53″ N., long. 12° 0′ 30″ E. Pop. 10,000. It is surrounded by walls, has a citadel, but is neither well built nor well laid out. It is the sent of a bishop, and has a Gothic cathedral. Its finest building, *le Logge*, containing the custom-house and theatre, in the principal square, has a magnificent portico, 400 feet in length. It has also numerous churches, convents, and four hospitals. There are manufactures of woollen stuffs and pins. Petrarch was born here, on the 20th July, 1304; and this also is the native country of Vassari, Bacchi, and of Leonde Bruin, called Aretin, Redi, &c.

Arezzo is very ancient, having been one of the principal states of Etruria. After it became subject to the Romans, it was reckoned a post of great importance as a defence against the incursions of the Cisalpine Gauls. It was famous for its terra-cotta vases, ranked by Pliny with those of Samos and Saguntum. (*Hist. Nat.*, lib. xxxv., § 12.) The remains of the ruins of an amphitheatre are still visible. It was taken by assault by the French on the 19th of October, 1800.

ARGANIL, a town of Portugal, prov. Beira, 21 m. E. Coimbra. Pop. 1700.

ARGELET, a town of France, dep. Pyrénées Orientales, 14 m. S.E. Perpignan, near the sea. Pop. 1967.

ARGENTAN, a town of France dep. Orne, cap. arrond., on the river of that name, 22 m. N. by W. Alençon. Pop. 5772. It is agreeably situated on a hill in the middle of a large and fertile plain. The walls by which it was formerly surrounded have been demolished, and its ramparts converted into agreeable promenades. It is pretty well built, has a tribunal of original jurisdiction, with manufactures of linen, lace (called *point d' Alençon*), tanneries, bleaching-grounds, &c.

ARGENTAT or ARGENTAC, a town of France, dep. Corrèze, cap. cant. on the Dordogne. Pop. 3029. There are mines of coal and lead in the environs.

ARGENTEUIL, a town of France, dep. Seine et Oise, cap. cant., on the Seine, 13 m. N.W. Paris. Pop. 4536. Heloisa was educated in a nunnery in this town; and it was to the same place that she retired, in 1120, after the misfortune of Abélard, before she became abbess of Paraclet. There is here a hospital, established by St. Vincent de Paul.

ARGENTIE'RE, a town of France, dep. Ardèche, on the Ligne, 20 m. S.W. Privas. Pop. 3000. It derives its name from mines of silver, wrought here in the 12th century. It is situated on a rock in a deep valley, has narrow, crooked streets, and is ill built and filthy. It has filatures and fabrics of silk.

ARGENTINE, t., Genesee co., Mich. Pop. 177.

ARGENTON SUR-CREUSE, a town of France, dep. Indre, cap. cant., on the Creuse, 16 m. S.S.E. Châteauroux. Pop. 4319. This town is divided into two parts by the Creuse. The higher and more ancient part contained a vast Gothic castle, dismantled by Louis XIV., and of which there are now hardly any remains. The bleaching grounds for woollens at this place have been long celebrated. Argenton was called *Argentomagus* by the Romans; and medals, and other remains of that illustrious people, are still found in the town and its vicinity.

ARGENTRE', a village of France, dep. Ille et Vilaine, cap. cant., 5 m. S.S.E. Vitré. Pop. 2000.

ARGENTRE-SOUS-LAVAL, a village of France, dep. Mayenne, cap. cant., 6 m. E. Laval. Pop. 1702. It has valuable marble quarries.

ARGOS, a city of Greece in the Morea, in antiquity the cap. of Argolis, the kingdom of Agamemnon, and one of the most ancient and celebrated of the Grecian cities. It is situated about 2 m. from the bottom of the gulf of Argos (*Angolicus Sinus*), and about 4½ m. N.W. Napoli di Romania, lat. 37° 40′ N., long. 22° 44′ E. Some fragments of its Cyclopean walls, and vestiges of the theatre, are the only remains of the ancient city that can be identified below the acropolis. The latter stood upon a pointed rock of considerable elevation, and great natural strength, which is now surmounted by a castle, built on the foundations of the ancient citadel. The town suffered much during the revolutionary struggle between the Greeks and Turks, but it is said to have since rapidly risen from its ruins; the buildings, however, are mean and poor. Pop. probably 3000.

ARGOSTOLI, a sea port town, cap. island of Cephalonia, on the E. side of the gulf of the same name, lat. 38° 10′ 40″ N., long. 20° 29′ 15″ E. Pop. from 4000 to 5000. Situation low and unhealthy, and the houses mostly mean and poor; but both the appearance and police of the town, particularly the latter have been much improved since it came under the protection of the English. The gulf of Argostoli is about 8 m. in depth by about 1½ or 2 m. in width, and has in most parts good anchorage.

ARGUIN, a very small island, in the gulf of the same name, on the W. coast of Africa, about 54 m. S.E. from cape Blanco. It is abundantly supplied with fresh water, and is supposed, apparently on good grounds, by D'Anville, Bougainville, Rennell, &c., to be identical with the island of Cerne, where Hanno settled a colony during his famous voyage of discovery. In modern times it has been successively possessed by the Portuguese, Dutch and French; but has been abandoned for more than half a century. The dangerous bank or shoal of Arguin extends S.E. a considerable distance from cape Blanco. It has been the scene of numerous shipwrecks, among others of that of the French frigate la Méduse.

ARGUNSKOI, a town and fortress of Siberia, on the Argun, 162 m. from its mouth.

ARGYLE, or ARGYLL, a marit. co. of Scotland, consisting partly of mainland and partly of islands, of which the principal are Islay, Mull, and Jura, having N. Inverness-shire, E. Perth and Dumbarton shires, S. the Irish sea and the frith of Clyde, and W. the Atlantic. Its shores are extremely irregular, consisting of lengthened promontories and deep bays and inlets. The total area is estimated at 2,054,400 acres, of which 1,446,400 are mainland, and 608,000 islands. The rivers are unimportant; but the fresh-water lakes in the mainland and islands are supposed to cover 51,840 acres. Owing to its deep bays and gulfs, the sea coast of the mainland is estimated at about 600 m. A large portion of the surface consists of heathy moors, morasses, rocks, and wild rugged mountains. Ben Cruachan, the most elevated of the latter, rises 3670 feet above the level of the sea. Woods and plantations cover from 35,000 to 45,000 acres. Lead, copper, and iron are met with, and coal is wrought near Campbelton. Good marble is found in the island of Tiree, and several other places; and the slate quarries of Easdale and Balachulish supply a large portion of the demand for Scotland. Climate mild but wet, variable, and boisterous. The entire extent of the arable land is not supposed to exceed 170,000 acres, so that grazing constitutes the main business of the farmer. Argyle is celebrated for the excellence of its native breed of black cattle; they are small, hardy, easily fed, and, when fattened in the rich pastures of the Lowlands of Scotland or England, afford the very best beef that is brought to table. The stock is estimated at from 65,000 to 70,000, furnishing a large annual supply for exportation. Sheep farming is not carried on so extensively as in some other Highland counties; but latterly it has been a good deal extended, and the breeds of sheep much improved. Property in a few hands. Farms of all sizes, extending from a few acres to many square miles. In various districts the practice of holding land in partnership, or what is called *run-rig*, is still kept up. Under this system a number of persons take a farm in common, each being bound for the rent. They then divide the arable land into small contiguous portions, or ridges, as equally—quantity and quality taken together—as is possible; the space falling to each tenant being determined by lot, sometimes

for the whole lease, and sometimes only for a single season! Ploughing and most other sorts of labour are performed in common; and if, as is usually the case, any hill pasture be attached to the low ground, it is let in common. In some of the low Highland districts occupied in this way, the land falling to the share of an individual does not exceed from 3 to 7 acres, and that, perhaps, is divided into some dozen or twenty patches. It is needless to enlarge on the pernicious influence of this mode of holding land. Where it prevails it is obvious there can be nothing like industry, nor anything deserving the name of agriculture. We are, therefore, glad to have to say that, though still much too prevalent, it is rapidly declining both in this and other Highland counties, partly in consequence of the extension of the sheep farming system, and partly from many landlords having set themselves against it, and divided the lands held in common into separate possessions. Farm buildings very various: those on the largest and best farms good and substantial; but, in general, the houses of the smaller class of occupiers, and of the cottiers, are miserable hovels, sometimes without either windows or chimneys. Improved cottages are, however, begun to be introduced, and it is to be hoped that they may be universally diffused. Principal corn crops, oats and barley, especially the first. Potatoes are very extensively cultivated, and form an important part of the food of the inhabitants. Average rent of land, including islands, in 1810, *1s. 11d.* an acre. Kelp is made along the shores, both of the mainland and islands; but the business has latterly fallen very much off. This, also, is the case with the herring fishery, which used formerly to be prosecuted to a much greater extent than at present, in loch Fyne and other arms of the adjacent sea.

Argyle is popularly divided into the seven districts of Argyle, Cowal, Kintyre, Lorn, Appin, Islay, and Mull, and contains 50 parishes. Principal towns, Campbelton, Inverary, and Oban. It had, in 1841, 23,193 inhabited houses, 19,358 families, and 192,283 inhab., having increased from 71,859 in 1801. It sends one m. to the H. C. for the co., and Campbelton and Inverary join with Ayr and Irvine in returning a m. Parl. constituency in 1837, 1552. Valued rent £149,596 Scotch; annual value of real property in 1815, £227,493.

Argyle, p. t., Washington co., N. Y., 36 m. N. Albany, 416 W. It has three churches, ten stores, two grist-mills, five saw-mills, seventeen schools, 363 scholars. Pop. 3111.

Argyle t., Penobscot co., Me., 89 m. N.E. Augusta. It contains two grist-mills, forty-two saw-mills, eight schools, 304 scholars. Pop. 527.

ARGYRO CASTRO, a town of Turkey in Europe, in Albania, the principal place in the extensive and well-cultivated valley of Deropuli, near the river Drino, on the lower declivity of the mountains on the W. side of the valley, at a short distance from the site of the old Roman town of *Hadrianopolis* or *Justinianopolis*, 45 m. N. W. Yannina. It has an imposing and peculiar aspect, being built on three separate ridges, divided from each other by deep chasms or ravines. The houses, which are mostly good, are not contiguous, but stand in various positions. "Some are placed on commanding eminences, others beneath projecting crags, and many on the ridges of precipices; but the greater part upon the flat surface of the rock, between its deep ravines: the whole appearance is singularly striking, and its fine effect augmented, not only by the minarets of its mosques, but by the grand castle or fortress, upon a much larger scale than any ever before constructed in this country." (*Hughes*, ii., 360, 8vo ed.) Pouqueville estimated the population, previously to the capture of the town by Ali Pacha, at 2060 families, making probably from 12,000 to 13,000 inhab. (*Voyage dans la Grèce*, i., 339.) Mr. Hughes, who visited the town soon after its capture in 1813, states that it was supposed to contain about 15,000 inhab., which corresponds pretty closely with Pouqueville's estimate. It is probable that the pop. has not differed materially in the interval. According to Urquhart (*Spirit of the East*, ii., 234), Argyro Castro contains 2000 Albanian and 200 Greek families.* It has a good bazar, which used to be well supplied with articles of commerce. Previously to its subjugation by Ali Pacha, it was a place of considerable industry, had a pretty extensive internal trade, and enjoyed a considerable degree of independence.

ARIANO, a town of Naples, prov. Principato Ultra, on a steep hill, in one of the passes of the Apennines, 17 m. E. Benevento, on the high road from Naples to Foggia and Manfredonia. Pop. circa 8000. It is the residence of a bishop, and has a fine cathedral, with numerous churches, convents, and monts-de-piété; a seminary, a hospital, and a manufacture of earthenware. It suffered much from earthquakes in 1456 and 1732, and seems latterly to have been declining.

* Balbi says (3d ed., p. 884) that it contains from 4000 to 8000 inhab.!

ARICA, a sea-port town of S. America, on the Pacific ocean, at the mouth of a small and well-watered valley, 210 m. N. W. Potosi, lat. 18° 28′ 40″ S., long. 70° 13′ 30″ W. It naturally belongs to Bolivia or Upper Peru; but it belonged in 1836, and probably still belongs, with a narrow strip of land extending as far S. as the Pavillion de Pica, to Peru. It was nearly destroyed by an earthquake in 1605; and has been ever since in a comparatively poor state. But it is the natural outlet of one of the principal mining districts of S. America, and of a large extent of country; and now that the disqualifications under which it laboured, during the Spanish régime, are removed, it will, no doubt, become a port of very considerable importance. It is a better landing place than the contiguous ports of Ilo, Mollendo, and Quilca; and it is much better situated for commerce than Lamar, that has hitherto been the principal port of Bolivia. But notwithstanding its superiority to most other ports on this part of the American coast, it is, owing to the heavy surf, at all times difficult to effect a landing, and sometimes quite impossible, unless in the *balsas* of the natives. These are a sort of floats made of inflated seal-skins; and so dexterous are the natives in their management, that there is not the least risk of being upset, or even wetted with the surf. On these original and apparently frail rafts, all merchandise is landed at Arica; and the specie, and other articles of export, are conveyed to the vessels in the bay, unless the sea be unusually calm, and the surf run very low. (*Stevenson's S. America*, iii., 323, &c.)

ARIENZO, a town of Naples, prov. Terra di Lavoro, 8 m. N. Nola, and 18 m. W. by N. Naples. Pop. 11,000. It is situated on Mount Tifati, on the high road from Naples to Benevento, and has seven parish churches, a hospital, and a *mont-de-piété*.

ARIETTA, t., Hamilton co., N. Y., 72 m. N.W. Albany. It has a great extent, with a few inhabitants in its S. part. It has two stores, one grist-mill, nine saw-mills. Pop. 209.

ARIGNA, a place in the N. of the co. Roscommon, Ireland, on the W. side of lough Allen, at which are coal and iron mines that have been worked at different times with various success; but generally with great loss to the parties carrying them on. The coal is of an inferior quality. The proceedings of a company formed in London, in 1824, for working the Arigna mines, were of so singular, or rather so disgraceful a character, as to give rise to an inquiry before a committee of the House of Commons. Full details as to these mines may be found in *Weld's Survey of Roscommon*.

ARINTHOD, a town of France, dep. Jura, cap. cant., 21 m. S. Lons-le-Saunier. Pop. 1618.

ARISPE, a town of Mexico, in the intendency of Sonora, near the source of the river Yagrin. Pop. 7600.

ARKANSAS, one of the Western United States, is bounded N. by Missouri; E. by the Mississippi river, separating it from Tennessee and Mississippi; S. by Louisiana, and W. by the Indian territory. It is between 33° and 36° 30′ N. lat. and between 89° 30′ and 94° 30′ W. long., and between 12° 30′ and 17° 30′ W. long. from Washington. It is 240 miles long, and 228 wide, containing 54,500 square miles, or 34,800,000 acres. The population in 1830 was 30,388; in 1840, 97,574, of which 19,935 were slaves. Of the free population 42,211 were white males; 34,963 white females; 248 coloured males; 217 coloured females. Employed in agriculture, 26,355; in commerce, 215; in manufactures and trades, 1173; navigating the ocean, 3; do. rivers and canals, &c., 39; the learned professions, 301. It contained in 1840, 40 counties, which, with their population, were as follows:

Counties.	Total Pop.	Counties.	Total Pop.
Arkansas	1,346	Madison	2,775
Benton	2 228	Marion	1,325
Carroll	2,844	Miller	
Chicot	3,806	Mississippi	1,410
Clarke	2,309	Monroe	936
Conway	2,892	Phillips	3,547
Crawford	4,266	Pike	969
Crittenden	1,561	Poinsett	1,320
Desha	1,598	Pope	2,850
Franklin	2,665	Pulaski	5,350
Greene	1,586	Randolph	2,196
Hempstead	4,921	St. Francis	2,499
Hot Spring	1,907	Saline	2,061
Independence	3,669	Scott	1,694
Izard	2,244	Searcy	936
Jackson	1,540	Sevier	2,810
Jefferson	2,566	Union	2,889
Johnson	3,433	Van Buren	1,518
Lafayette	2,200	Washington	7,148
Lawrence	2,536	White	929
		Total	97,574

The capital is Little Rock, situated on the S. side of Arkansas r., 300 m. from its entrance into the Mississippi. The other principal towns or villages are Columbia and Helena,

on the Mississippi r., Batesville, on White r., Van Buren, on Arkansas r., Fayetteville, in the N.W. part of the state, and Fulton, on Red r.

The eastern part of the state, for the distance of 100 m. from the Mississippi, is low and wet, covered extensively with swamps and marshes, and much of it is subject to be overflowed at certain seasons. Near the St. Francis hills, and at Point Chico, the eastern front along the Mississippi, is above the overflow. In the middle, the country is uneven and broken, and in the W. it is hilly and mountainous. There are some extensive prairies and some heavily timbered land. On the margins of the rivers the soil is generally fertile, but back of this it is poor. In many parts there is a deficiency of water. The Ozark mountains, rising sometimes to the height of from 1000 to 2000 feet, cross its N.W. part. A range of hills, called the Black mountains, runs between the Arkansas and White rivers, extending W. from near White river to the western border of the state. A little S.W. of the centre of the state are boiling springs, the temperature of which sometimes rises nearly to the boiling point, though subject to much variation. Near these springs are ridges of hills, which rise into elevated peaks, deserving the name of mountains. Wild animals, as the deer, elk, bear and wolf, and wild fowls, as the wild goose, turkey and quail, are found in abundance. Its mineral productions are extensive, consisting of iron ore, gypsum, coal, and salt. The country is well adapted to the raising of cattle. There were in 1840, 51,472 horses and mules, 188,786 neat cattle, 42,151 sheep, 393,058 swine. Indian corn and cotton are the principal productions, with considerable wheat, &c. It produced in 1840, 105,878 bushels of wheat, 4,846,632 of Indian corn, 189,553 of oats, 293,608 of potatoes, 6,028,642 pounds of cotton, and 148,439 of tobacco. It had 20 houses engaged in foreign trade, with a capital of $91,000; 263 retail stores, with a capital of $1,578,719. Its household or family manufactures amounted to $489,750. There were two cotton manufactories with 90 spindles, fifty-three distilleries, one powder-mill, ten flouring-mills, 292 grist-mills, eighty-eight saw-mills, one oil-mill, and nine printing-offices, issuing three semi-weekly and six weekly newspapers. Total capital employed in manufactures $494,467. There is no college in this state. There were eight academies with 300 students; 113 schools with 2614 scholars.

In the eastern part, particularly on the borders of the rivers, the climate is generally moist and unhealthy; but in the middle and western part it is salubrious. Its rivers afford great facilities for commerce. The Mississippi runs on its E. border for the distance of nearly 400 miles. The Arkansas r., which gives name to the state, flows through it in a south-eastwardly direction, is a broad and deep stream, and is navigable for steam-boats 300 m. to Little Rock, and, in the spring-floods, 350 miles farther to Port Gibson, beyond the W. border of the state. White r. rises in the Black mountains, runs through a fertile and healthy country, abounding with springs and streams of pure water, and affords many mill-seats. It flows into the Arkansas r., and is uncommonly circuitous in its course. The St. Francis river rises in Missouri, and flows S. nearly parallel to the Mississippi, which it at length enters. It is boatable for 300 miles. The Wachita waters its southern, and the Red r., a majestic stream, its S.W. part.

The principal religious denominations are Methodists and Baptists; there are also Presbyterians, Episcopalians and Roman Catholics.

At the commencement of 1840, there was one bank with three branches, a capital of $1,501,888, and a circulation of $301,310. The state debt amounts to $3,176,000, invested in three banks.

The constitution of the state was formed in 1836. The governor is chosen by the people for four years, but cannot hold the office more than eight years in twelve. The members of the senate are chosen by the people for four years, and the representatives for two years. The elections are *viva voce*. The senate can never consist of less than 17, nor more than 33 members; and the house of representatives of less than 54, nor more than 100 members. The judges of the supreme court are appointed for eight years, and of the circuit court for four years, and are all chosen by the legislature. The judges of the county courts are chosen by the justices of the peace. The legislature meets once in two years at Little Rock. Every white male citizen of the United States, and who has resided in the state for six months, possesses the right of suffrage. No lotteries can be established, or lottery tickets sold. The legislature may establish one bank with branches, and one banking institution to promote the interests of agriculture. It cannot emancipate slaves, without the consent of their owners. Slaves have the right of trial by jury, and suffer the same degree of punishment for a crime as white persons, and no other. Courts of justice are obliged to assign counsel to the slaves for their defence.

Arkansas was a part of the Louisiana purchase. It was made a separate territory in 1819, and was admitted to the Union in 1836.

Arkansas, River, Ark., the next largest tributary of the Mississippi after the Missouri, rises in the Rocky mountains, in about 42° N. lat., near the sources of Louis r., a branch of the Columbia, and the Del Norte. It forms a part of the boundary between the United States and Mexico, in the upper part of its course. Its whole length, including its curves, is over 2000 ms. to its extreme source. In the summer, it pours a broad deep stream from the mountains upon the arid plains through which it passes, which so absorb its waters, that in the dry season it can be passed, many hundred miles below the mountains, without reaching as high as the knees. The Great Canadian fork enters it on the S. side, and is its largest tributary. It is so impregnated with salt in some parts as to be unfit for drink. During the periodical swell it is navigable nearly to the Rocky mountains, and at other times for 600 m. above its entrance into the Mississippi. The navigation is unobstructed by rocks, shoals or rapids. The soil on its borders in some of the lower parts is fertile; in the upper parts it is sterile. For 30 or 40 m. from its mouth, which is 300 yds. wide, it passes through an inundated forest.

Arkansas, county, Ark. Situated in the E. part of the state, and contains 1080 sq. m. Watered by Arkansas river, which passes through its S.W. part, and by White r., which runs on its E. border, and receives bayou Agnew. Bayou Meter flows through its W. part, and enters the Arkansas. The surface is generally level; with some elevations in the W. part. There were in 1840, 6251 neat cattle, and 6810 swine, and it produced 70,834 bushels of Indian corn, 3164 of potatoes, 361,404 pounds of cotton, 1422 of tobacco. It had five stores, five grist-mills, one saw-mill, one school, 24 scholars. Pop., whites 980, slaves 361, free coloured 5; total 1346. Capital, Arkansas.

Arkansas Post, p. v. capital of Arkansas co. Ark., 117 m. S.E. Little Rock, 1087 W. Situated on the N. bank of Arkansas r., on a high bluff, with flats in the vicinity, inundated at times by White r. It is 50 m. from the Mississippi by the course of the river, and contains a court-house, jail, a printing-office, forty or fifty dwellings, and about 300 inhabitants.

ARKIKO, a sea-port of Abyssinia, at the bottom of the bay of Massuah; being, according to Lord Valentia, a mere collection of miserable huts. Lat. 15° 32′ N., long. 39° 45′ E.

ARKLOW, a marit. town, E. coast of Ireland, co. Wicklow, prov. Leinster, on the Ovoca, at its mouth, 39 m. S. by E. Dublin. It was taken possession of, and a castle erected by the first English settlers. In 1649 it was taken by Cromwell, and dismantled. A severe conflict took place here in 1798, between the royal forces and the insurgents; in which the latter were defeated with much slaughter, and their leader killed. Pop. in 1821, 3808; in 1831, 4383; being two thirds of the parish, which in 1834 had a pop. of 6394; of whom 2037 were of the E. Church, and 4357 R. Cath.

The town, placed on the declivity of a hill on the S. side of the Ovoca, which is crossed at a short distance below by a bridge of 19 arches, is divided into the Upper Town, consisting chiefly of a main street, formed of well-built houses, and of the Lower Town, called also the Fishery, from being chiefly inhabited by fishermen. The church, a handsome building in the English style, was erected in 1823. The R. Cath. chapel is also an elegant modern structure. The Methodists have a small place of worship. A male school is supported on the foundation of Erasmus Smith; two female schools by private contributions, and some others in the same manner; in which, and in private seminaries, about 550 children receive instruction. A fever hospital, with a dispensary, is in the immediate vicinity of the town. A small infantry barrack stands on the site of the ancient castle, and a coast-guard station is in the neighbourhood. Petty sessions are held every Thursday. The town is a constabulary station. The inhab. derive their support chiefly from the fisheries. There used to be an abundant summer fishery for herring and hake; but the former have deserted the coast for some years, and the winter fishery is also declining. The oyster fishery continues to be a great and constant source of employment to the fishermen, who attribute the comforts they enjoy to its continuance. The oysters are carried in boats to Beaumaris, in Anglesey, where they are laid on banks; and raised, when required, for the Liverpool market. These people build their cottages on the sandy beach; few have any kind of garden. Their exertions are much impeded by the defects of the harbour, which has a bar at its mouth, with seldom more than five feet water even at high spring tides. The boats when returning home are obliged to lie off the bar and watch the opportunity of crossing it on the rise of the wave, and few boats come in without striking. The fishermen keep up a light, at their own expense, during the season, to point out the bar. The vessels and men engaged in the fishery in 1836 were,

	No.	Tonnage.	Men.
Decked vessels	30	1174	156
Half-decked, ditto	90	720	540
Open sail-boats	10	..	50
Row-boats	5	..	20
Total	144	1894	766

Malting is carried on to a small extent, the quantity paying duty in 1836 being 9081 bushels. The commerce of the town, owing to the very defective state of the harbour, and the want of any kind of quay or landing pier, is very limited. The principal exports and imports for 1836, were as follow:

Exports.		Imports.	
Corn	548 tons.	Coals	4186 tons.
Copper ore	8180 cwts.	Oatmeal	1030 cwts.
Herrings	100 barrels.	Salt	2160 bush.
Beer	1960 gallons.	Groceries	£1063 value.

The estimated value of which, besides a few other minor articles, was: Exports, £3677; imports, £6763.

The markets are held on Thursdays; the fairs on the 11th of January, 22d of March, 19th of April, 14th of May, 28th of June, 9th of August, 23th of September, and 15th of November. The post-office revenue for 1830 was £309; and for 1836, £252. The mail-coach road from Dublin to Wexford passes through Arklow; and a car, conveying on an average three passengers each trip, plies between it and Dublin, six times a week. (*Fishery Report; Rail-road Report; and Priv. Infor.*)

ARKWRIGHT, p. t., Chautauque co. N.Y., 398 m. W. by S. Albany, 350 W. It contains four saw-mills, seven schools, 290 scholars. Pop. 1418.

ARLANC, a town of France, dep. Puy de Dome, cap. cant., on the Dolore, 10 m. S. Ambert. Pop. 4198. It manufactures ribands, and articles of *menue-merceric*.

ARLES (an. *Arelas* or *Arelate*), a city of France, dep. Bouches du Rhone, cap. arrond., on the left bank of the Rhone, at the point where the river divides into two branches to inclose its delta, or the island of Camargue, 46 m. W.N.W. Marseilles, lat. 43° 40′ 31″ N., long. 4° 27′ 47″ E. Pop. cant. (the largest in France), 20,048; town, 13,342. Its situation, though pleasing, is, owing to the adjacent marshes, not very healthy; and its streets being narrow and dirty, and its houses mostly old and mean, it is indebted for its celebrity principally to the historical associations connected with its name and its monuments. It was an important town on the invasion of Gaul by Cæsar, who calls it Arelate. It subsequently became a Roman colony; and was long a large, rich, and populous city. Its amphitheatre, (which does not, however, appear ever to have been quite finished) is a noble monument, capable, according to Martinière, of accommodating 30,000 spectators: it is of an oval form, 1284 feet in circumference, three stories high, occupying the highest place in the city, and is older, larger, and more magnificent than that of Nismes, but not so well preserved. The obelisk of Arles consists of a single block of granite about 54 feet in height; though, unlike other monuments of the same kind, it be without hieroglyphics, it is all but certain that it has been brought from Egypt; but there are no authentic accounts with respect to it, except that, after being long buried in the ground, it was erected on the pedestal, 20 feet in height, on which it stands, in 1676. A beautiful statue of Venus, now in the museum of Paris, was discovered here in 1651; and, exclusive of the above, the ruins of an aqueduct, of two temples, of a triumphal arch, an extensive cemetery, and numerous fragments of granite and marble columns, evince the former grandeur and importance of the city. It has a cathedral and numerous churches; and has been the seat of several ecclesiastical councils. The town-hall, built by Mansard, is a handsome edifice; and it has a school of navigation, a college, a museum of antiquities, a small public library, a theatre, &c. Silk, soap, glass bottles, &c., are manufactured; and the sausages of Arles are in the highest esteem. To obviate the difficulties in the navigation of the Rhone and Durance, a navigable canal has been made from the city to the sea at Port Bouc, about 12 m. E. of the E. embouchure of the Rhone, and from the city to the Durance opposite to Cadenet. It is also connected with the canal of Beaucaire, and consequently with that of Languedoc; so that it has become the centre of a considerable and growing trade.

After being pillaged, A.D. 270, Arles was repaired and embellished by Constantine, whose son, Constantine II., was born in it. It declined under the Merovingian kings. In 855 it became the capital of a kingdom of the same name, united in 933 to that of Burgundy. It was sacked by the Saracens in 730. In the 12th century it constituted a republic; and in 1251 it submitted to Charles of Anjou. (*Martinière, Grand Dictionnaire*, t. i., p. 413–417; *Hugo, Bouches du Rhone, &c.*)

ARLESHEIM, a village of Switzerland, cant. Bale, 4 m. S.E. Bale. It has baths and a fine botanical garden.

ARLES-SUR-TECH, a town of France, dep. Pyrénées Orientales, cap. cant., 6 m. W.S.W. Céret. Pop. 2225. It has hot mineral springs.

ARLEUX, a town of France, dep. du Nord, cap. cant., on the Sauset, 6 m. S. Douay. Pop. 1755.

ARLINGTON, p. t., Bennington co., Vt. Watered by Green river and branches of the Battenkill, the latter of which affords good water power. A good white marble is found. Chartered in 1761. It contains two churches, three stores, one woollen-factory, one grist-mill, six saw-mills, nine schools, 325 scholars. Pop. 1038.

ARLON (an. *Orolaunum*), a town of the Low countries, duch. of Luxembourg, cap. cant., on a hill in the middle of forests, 16 m. W.N.W. Luxembourg. Pop. 3653. It has iron works, and some manufactures of linen and woollen stuffs, and earthenware. Arlon is very ancient, and was formerly fortified, and of much greater importance than at present. It was nearly burned down in 1785.

ARMA (SANTIAGO DE), a town of S. America, New Granada, on the Arma, an affluent of the Cauca, 240 m. N. by E. Popayan.

ARMACAO, a small town of Brazil, on the island of St. Catherine, that was, and perhaps is, a considerable fishing station. Lat. 27° 30′ S., long. 48° 40′ W.

ARMAGH, an inland co., Ireland, prov. Ulster, having N. lough Neagh, W. Tyrone and Monaghan, S. Louth, and Down. It is about 31 m. in length from N. to S., and 20 m. across where broadest, containing 328,183 imp. acres, of which 42,472 are unimproved mountain and bog, and 18,394 water, being part of lough Neagh. Surface partly rugged and mountainous, but generally flat. Soil pretty fertile. Property to a great extent in the hands of the church, colleges, and corporations; but some noblemen and gentlemen have good estates. Minor estates numerous, and the tenures by which they are held such as to reduce them into the minutest portions. Farms very small, from two and five to twenty-five acres; those of the latter size and up to forty being deemed large. Of 1500 tenants on Lord Gosford's estate, in the barony of Fews, there are not more than sixty or seventy who occupy so much as twenty acres. This is the estate on which Mr. Blacker has introduced his system of stall feeding into the smallest farms; but though a vast improvement on the old scourging plan, it is quite visionary to suppose that there can be anything like a really good or profitable system of cultivation on such patches. Potatoes, oats, and flax are the principal crops; but a considerable quantity of good wheat is raised. There are some dairies which produce butter; and cattle of an inferior breed are reared in the mountains. Average rent of land 17*s.* an acre. Linen manufacture widely diffused. Cottages preferable to those in most Irish counties, with the exception of Down and Antrim. The rivers Bann and Newry being joined by the Newry canal, there is a navigable communication between the sea at Carlingford Bay and lough Neagh. Armagh contains five baronies and twenty parishes. Principal town, Armagh. Pop. in 1821, 197,427; in 1831, 220,651. It returns three m. to the H. of C.; viz., two for the co. and one for the city of Armagh. Parl. constituency of co. 1836-7, 4041.

ARMAGH, a city of Ireland, prov. Ulster, cap. of the above co., on the Callan, an affluent of the Blackwater, 70 m. N. by W. Dublin. lat. 54° 21′ N., long. 6° 37′ W. It is said to have been founded by St. Patrick, A.D. 450, who is reported to have made it the seat of a college, which became so celebrated as to be speedily attended by above 1000 students! Afterward it suffered greatly from the devastations of the Danes, who were ultimately driven out in 1004. It was sacked by Edward Bruce in 1315; and again by Sir Phelim O'Neil, in 1641; and in 1688 was pillaged by the troops under William III. Since the Revolution it has gradually increased in extent and prosperity, particularly in consequence of having been made the residence of Primate Boulter; and, subsequently, of his various successors in the see; each of whom has contributed to its improvement by liberal donations or bequests. It was originally called *Druimsailleagh* and *Ard-sailleagh*, "the hill," or "height of sallows." Its modern name. Ardmagha, "the field on a hill," is obviously derived from its situation on a rising ground of considerable elevation. The population in 1821, was 8493; and in 1831, 9470. In 1834 the total number of inhab. was 10,764; of whom 3586 were of the E. Church, 1532 Prot. dis., and 5546 R. Catholics. The number of houses in 1831 was 1372, giving an average of 6·902 inhab. to a house.

It is well built, chiefly of a hard reddish marble, raised in the vicinity. The streets, which are well constructed, flagged, and macadamised, diverge from the cathedral down the sides of the hill on which it is built. A plentiful supply of water is conveyed through them, in pipes, from a reservoir at some distance, and they are kept perfectly clean, and are well lighted with gas. A library, containing upwards of 20,000 volumes, was built and endowed by Primate Robinson, the great benefactor of the town, as was also an ob-

servatory, to which a fine astronomical apparatus has been supplied by him and some of his successors, particularly the present primate, Lord John Beresford. Robinson endeavoured to restore the city to its ancient rank, as the seat of a university, but this he was unable to effect. The Tontine buildings consist of a suite of apartments for assembly rooms, and occasionally for dramatic entertainments; part of them is occupied by a news-room and a savings' bank. An enclosed space, called the Mall, adjoining the town, and neatly laid out and planted, affords the citizens a convenient place of recreation in fine weather. The primate's demesne also, near the town, is open for respectable people to walk in; and two of the resident gentlemen have imitated this example by throwing open their pleasure-grounds. The archbishop's mansion is plain in style, but elegant in its architectural proportions, and near it is a private chapel. Barracks in the vicinity afford accommodation for 800 men.

Armagh derives its corporate privileges from a charter of James I., in 1613, confirmed by William III. The ruling body consists of a sovereign, twelve burgesses, and an unlimited number of freemen, chosen by the former classes; but at the alteration of the franchise by the Reform Act there were but two freemen. It returned two m. to the Irish parl., but only sends one m. to the imp. parl. The electors are the burgesses and freemen residing within 7 m., and the £10 householders, their number in 1837 being 454. The Reform Act has also laid down a new boundary for electoral purposes, which comprises only 277 acres, whereas the former municipal boundary included 1147 acres. A seneschal's court is held for the archbishop's manor, for pleas of £10 and under, but its jurisdiction does not pervade the whole place, part of the city being in the adjoining manor of Mountmorris. The assizes and general sessions of the peace are held twice a year; a court for insolvent debtors three times a year; and a court of petty sessions every Saturday. The sessions-house is a handsome modern building. The co. jail, at one end of the mall, is a plain substantial building, not sufficiently large for the proper accommodation of the numbers confined in it: it has a tread-mill. The committals for a series of years have been as follows:

1824—334	1829—400	1834—350
1825—334	1830—301	1835—399
1826—348	1831—403	1836—563
1827—578	1832—393	1837—258
1828—549	1833—404	

The sentences of those committed in the last-named year, were—death, none; transportation—for life, 3; for 14 years, none; for seven years, 17; imprisonment—for three or two years, none; for one year, 13; for six months, 128; fine, 11; acquitted, or discharged for want of prosecution, 86.

The city is the seat of the archdiocese of Armagh, and the residence of the archbishop, styled Primate of all Ireland. His right to this title was long contested by the archbishop of Dublin. The controversy commenced in 1182, and was not terminated until 1634, when the right of precedence, and the style of primate of *all* Ireland, was confirmed to Armagh, and the inferior style of primate of Ireland given to Dublin. The ecclesiastical province comprises the ten dioceses of Armagh, Clogher, Meath, Down, Connor, Derry, Raphoe, Kilmore, Dromore, and Ardagh; but under the provisions of the late act for regulating the sees of Ireland, the prov. of Tuam is to be consolidated with it on the demise of the existing interests, and to be held by six prelates, according to the following arrangements: 1, Armagh and Clogher; 2, Tuam, Ardagh, Killala, and Achonry; 3, Derry and Raphoe; 4, Down and Connor; 5, Kilmore and Elphin; 6, Meath. The diocese of Armagh is divided into the upper or English part, which includes the cos. of Louth and Meath, and the lower or Irish part, containing Armagh, Tyrone, and part of Londonderry. It extends over 100,563 acres, of which 87,809 are profitable; the annual income, by rents and renewal-fines, is stated to be £17,670, which, on the demise of the present archbishop, is to be reduced to £10,000. The cathedral, a large ancient building, after suffering often by fire and violence, is at present undergoing very extensive repairs. It contains several fine monuments: that of Brian Boru, interred in it after the battle of Clontarf, cannot now be traced. A chapel of ease, near the mall, is consecrated to St. Mark. In the R. Catholic arrangements, the parish is one of those belonging to the archbishop, who resides and has his cathedral in Drogheda. The parish chapel, which is remarkable for its triple roof, is too small for the congregation. There are places of worship for Presbyterians, Seceders, Independents, and two for Methodists.

Armagh has one of the free grammar schools so liberally endowed by James I. It is a large building, in an enclosed area, with accommodations for 100 resident pupils. The present primate maintains a separate school, for the general education of the boys of the choir. There is a charter school for boys and girls, under the endowment of Mr. Dreincourt; a Lancastrian, a national, and a Sunday school, besides several private establishments; affording together instruction to about 650 pupils in the endowed, and 600 in the unendowed schools.

The county infirmary is in the town, the fever hospital and lunatic asylum in its vicinity: the latter, which receives patients from Armagh, Monaghan, Fermanagh, and Cavan, is in an enclosed area of thirteen acres, used for the exercise and horticultural employment of the inmates. The building is intended for 122 cases, and there were 116 patients in it at the close of 1837, who were maintained at the annual charge of £2188, being an average of £18 10*s.* each. The other charitable institutions are, a mendicity asylum, the paupers of which are employed in cleaning the streets; and two loan funds. A bequest for the foundation of a blind asylum has not yet been brought into action.

Though little or no manufacture be carried on in the town, Armagh is the centre of a large inland trade, chiefly in grain, linen, and yarn. The linen-hall, a large and well-arranged building, is open for sales on Tuesdays, chiefly for brown linens, the weekly average of which is 8000 webs, estimated at £12,000. The weekly sales of yarn, at the yarn-market, average £3500. There are, in or near the town, two distilleries, a brewery, and several tanneries and flour-mills. Markets are held on Tuesdays for linen, yarn, flax, flax-seed, and provisions; on Saturdays, for grain and provisions; and on the first Saturday in every month for cattle. A market-house, with extensive ranges of buildings for the exposure of goods, has lately been erected. The tolls, having been bought up by the inhab., are regulated by a committee; the profits, after clearing off the principal advanced, amounting to £1700, together with the interest accruing thereon, are to be expended in the improvement of the town. Fairs are held on the Tuesday after Michaelmas, and in the week before Christmas. The bank of Ireland and the Provincial bank have branches here. The chief vents for the goods sold in the fairs and markets, are by the Blackwater, which passes within 4 m. of the town, through lough Neagh to Belfast, by the Lagan canal, and to Newry by the Newry navigation. The canal now in process of construction between loughs Neagh and Erne, passes within one mile of the city.

The amount of excise duties collected in the Armagh district during the undernamed years, were as follows:

£	£
1828—84,077	1832—69,739
1829—76,157	1833—72,137
1830—78,777	1834—76,506
1831—66,516	1835—69,076

The general appearance of Armagh is pleasing. Its situation, on the declivity of a high hill, gives it an imposing aspect, and tends considerably to its cleanliness and salubrity. The houses are substantially built; the number of thatched cottages in its suburbs very inconsiderable. The residence of the primate, and of several of the dignified clergy, together with the immediate vicinity of a number of resident noblemen and gentry, induces an expenditure highly beneficial to all classes, which is still farther increased by the circulation of money by the markets. The habits of the higher classes are social and refined. The working classes suffer little from poverty or want of employment: their dress, both men and women, is substantial; their habitations comfortable, their food above the quality common throughout the country; the fuel, coal, is brought from Great Britain by the canals, or from the collieries in Tyrone: peat is also much used. (*Priv. Information.*)

ARMAGH, t., Mifflin co., Pa., 12 m. N.E. Lewiston. Drained by the Great and Little Keshicoquillas creeks, and contains four stores, one woollen factory, four grist-mills, ten saw-mills, one distillery, seven schools, 250 scholars. Pop. 1463.

ARMAGH, p. b., Wheatfield t., Indiana co., Pa., 158 m. W. by N. Harrisburg, 201 W. It contains three stores, one school, 32 scholars. Pop. 152.

ARMEGON, a sea-port town of Hindostan, on the coast of the Carnatic, 66 m. N. Madras, lat. 14° N., long. 80° 11′ E. An English factory was established here in 1625.

ARMENIA, an extensive country of W. Asia, consisting principally of the table land lying between the Kur on the N. and the Kurdistan mountains on the S., having the Euphrates from the ridge of mount Taurus to Erzingan on the W., and approaching to near the Caspian sea on the E. But the limits of Armenia differed widely at different periods, and were at no time exactly defined. The flat parts of the country are, probably, not less than from 5000 to 6000 feet above the level of the sea, and it is intersected by several lofty mountain chains, the summits of some of which—as that of Ararat (see ARARAT)—ascend within the line of perpetual congelation. Armenia gives birth to some large and celebrated rivers, as the Euphrates and Tigris, flowing S. to the Persian gulf; the *Cyrus* or Kur, and its important tributary, the *Araxes* or Aras, flowing E. to the Caspian sea; and the *Akampsis* or Chorak, flowing N. to the Black sea.

It has three great lakes; those of Van, Shahee or Urmiah, and Goukcha or Sevan. The circumference of the first is estimated at 240 m.; it has several islands; and its waters, though brackish, are drunk by cattle. The other two lakes are also very extensive. The water of that of Urmiah is excessively salt, and so buoyant that one can with difficulty stand where it is 3 feet deep. The soil and products are very various; but in general the former is abundantly fertile, especially in the few spots where it is irrigated. In the higher parts all sorts of corn may be advantageously cultivated; and the valleys produce excellent cotton, tobacco, grapes, &c. The ploughs are all drawn by oxen or buffaloes; no fewer than eight or ten of the former being frequently attached to one. The only minerals raised in modern times are copper, iron, and rock salt; but in antiquity the precious metals ranked among its products. Owing to the great elevation of the country, the climate is in most parts rather severe; but though the winters last long, the summer heats are sufficient to bring all the fruits of the earth to perfection. The country is in many parts desert, and is everywhere very thinly peopled. Besides the Armenians, or old inhabitants, who are principally engaged in agriculture and trade, the population consists of Turks, Persians, and Russians, and wandering pastoral hordes of Turkmans and Koords. The principal towns are Erivan, Erzeroom, Nakchivan, Akhlat, Van, Akhalzikh, &c., which see.

Armenia, though it has long since been effaced from the list of nations, was governed, for a lengthened period, either by independent princes or by vassals of the Assyrian and Persian monarchs. It subsequently became the theatre of long-continued struggles between the Persians and Romans; and, notwithstanding the hardiness of the inhabitants, and the natural advantages of the country for defensive warfare, it seems never to have been able to oppose an effectual resistance to any invader. In the 13th century it was overrun by the Mogals; and in the succeeding century the last trace of its independence disappeared, and the Armenians ceased to have a country.

The people early began to seek an asylum in foreign parts from the oppression under which they suffered at home, and they are now widely diffused over Turkey, Persia, Russia, and India. Their emigrations have not, however, always been voluntary. In 1604, Schah Abbas, emperor of Persia, in order to protect his dominions on the side of Armenia against the Turks, resolved to carry off the inhabitants, and to lay waste a large portion of the country, so that it might no longer be able to support an army! This monstrous resolution was executed with the most revolting barbarity. The inhabitants, driven off like cattle, perished by thousands, while their houses were burned down, and every vestige of civilization obliterated. A part of the survivers were settled in the suburbs of Ispahan, where they were kindly treated; but the greater number, being settled in an unhealthy part of the prov. of Mazunderan, were soon swept off by disease. Until recently, Armenia was divided between Turkey and Persia; but the former ceded to Russia, by the treaty of Adrianople, a considerable portion of her Armenian territories; and in 1827 Russia acquired the entire prov. of Erivan from Persia. These acquisitions have been consolidated into the government of Armenia.

Whatever may be its influence in other respects, there can be little doubt that the occupation of part of Armenia by the Russians will be of singular advantage to its inhabitants. Great numbers of Armenians have already emigrated from the Turkish and Persian provinces to those of Russia, where they have been advantageously settled. The depredations of the petty chiefs and of the wandering tribes will now be effectually restrained; and, for the first time for these several centuries, the Armenians will be made aware of the advantages resulting from the security of property, and from living under a strong and (compared with those under which they formerly lived) a liberal and tolerant government. Col. Montekh bears decisive testimony to the benefits that have resulted to Georgia and other Transcaucasian countries from their occupation by Russia. You may now, he says, "*travel in perfect security, with post horses*, from the mouths of the Phasis to the Kur and the Caspian, through countries where, in 1815, the roads were all but impracticable, and exposed to the unrestrained attacks of robbers and other banditti." (*Journal of the Geographical Society*, vol. iii., p. 37.)

The total number of the Armenian nation is estimated by Mr. Conder at about 2,000,000, of whom about two thirds may be within the Ottoman dominions. With the exception of the Jews, no other people is so much scattered. It is supposed that there are about 200,000 in Constantinople and the adjacent villages; about 40,000 in India; 10,000 in Hungary and the contiguous countries; and they are met with in Africa and even America.

Like the Jews, the Armenians found in foreign countries are mostly all engaged in some department of commerce, or of the employments connected therewith. The moment, in fact, that they leave their native soil, they endeavour either to get themselves or their children into some branch of trade. They begin with the lowest departments; the more able or fortunate ascending gradually from one grade to another, till they arrive at that of banker, the summit of their ambition. A large proportion of the foreign and internal trade of Turkey, Persia, Southern Russia, India, &c., particularly the first, is in their hands. They are exceedingly industrious; and, though not free from the vices produced by slavery and ignorance, are honester in their dealings, and less prone to practise deceit, than the Greeks.

The Armenians are Christians differing but little from those of the Eastern or Greek church. They reject the decrees of the council of Chalcedon, and admit only a divine nature in Christ. Their officiating clergy, or *vartabeds*, are obliged to marry, but celibacy is enjoined upon those of a higher grade, as patriarchs, bishops, &c. The election of the officiating clergy is in the hands of the people, and is uniformly exercised by them; but, notwithstanding this circumstance, and that the priests have no fixed incomes, but depend entirely on fees and other perquisites, they do not appear to have much influence, or to be very attentive to their duties: they are uniformly almost in the last degree illiterate, and their morals are not represented in the most favourable point of view. (*Missionary Researches*, p. 243.)

The Armenians, with the exception of a small minority, do not acknowledge the supremacy of the pope; but since 1441 have recognised, as their spiritual superior, the patriarch of Echmiadzin, residing at the famous convent of the three churches, near Erivan, now in possession of Russia. The patriarchs of Constantinople and Jerusalem have no authority in ecclesiastical affairs; but the Turkish government consider the former as the head of the Armenian rayahs: through him all applications are received and all orders issued; and he is accustomed to receive an annual stipend from the different bishops, which was paid him even by the patriarch of Echmiadzin till the latter became a Russian subject. Previously to 1441, the patriarchs of Sis and Athamar (a monastery on an island in lake Van) shared the spiritual authority with the patriarch of Echmiadzin; and latterly the Porte has been endeavouring to sever the connexion between its Armenian subjects and their old spiritual head, now under the control of a foreign power, by directing their attention to, and reviving the pretensions of, the patriarch of Sis, resident within the Turkish territories. (*Elliott's Travels*, i., p. 470.)

The language of Armenia is harsh, and overloaded with consonants. Besides a great many Indo-Germanic roots, it exhibits numerous relations with the Finnish idioms of Siberia, and other languages of N. Asia. Its grammar is exceedingly complex. The ancient Armenian is no longer spoken, and exists only as a dead language in books: it is so very different from the modern Armenian that it is no longer understood, except by those by whom it is studied. The modern language is largely made up of Persian and Turkish words; and its grammar, and the construction of its phrases, are totally distinct from those of the ancient language.

The alphabet of the Armenians, introduced A.D. 406, and still in use, consists of thirty-eight letters, of which thirty are consonants, and eight vowels. At an early period, the Armenians had a literature and learned men; and though the great bulk of the nation be now plunged in the grossest ignorance, they continue to this day to possess both, and works of considerable merit are still printed in their language. They have printing-presses at Constantinople, Venice, Moscow, Calcutta, and other places. (For further particulars, see *Tournefort*, vol. ii., p. 389–418; *Joubert, Voyage en Arménie et en Perse, passim; Smith and Dwight's Missionary Researches in Armenia*, with the learned Introductory Discourse by *Conder*; *Colonel Monteith's* Paper in the *Journal of the Geographical Society*, vol. iii.; and the excellent article by *Klaproth*, in the *Encyclopédie des Gens du Monde*.)

ARMENT, a village of Upper Egypt, near the left bank of the Nile, 16 m. N. Esné. It occupies the site of the ancient *Hermontis*. It has in its environs a temple, on the walls of which, among other figures, is a giraffe—an animal now unknown in Egypt.

ARMENTIÈRES, a frontier town of France, dep. du Nord, cap. cant., on the Lys, 13 m. N.W. Lille. Pop. 6512. It is well built, clean, and handsome; has a communal college; an establishment for spinning cotton; fabrics of table-linen, mattresses, laces, thread, tobacco, &c., with bleaching-grounds, soap-works, distilleries, and a refinery of salt. Large quantities of bricks made in the environs are exported by the Lys, and boats are built for its navigation. It has a celebrated market for seed corn.

ARMSTRONG, county, Pa. Situated centrally in the W. part of the state, and contains 575 sq. m. Drained by Alleghany river and its tributaries. There were, in 1840, 26,110 neat cattle, 54,815 sheep, 29,621 swine; and there

were produced 289,789 bushels of wheat, 138,190 of rye, 171,089 of Indian corn, 508,998 of oats, 170,046 of potatoes. It had seventy-nine stores, two woollen-factories, twelve fulling-mills, sixty-eight grist-mills, ninety-one saw-mills, twenty-five tanneries, five potteries, three furnaces, two printing-offices, two weekly newspapers, two academies, with 166 students, 105 schools, with 1936 scholars. Of bituminous coal there were produced 705,490 bushels, of salt 322,030. Pop. 28,365. Capital, Kittaning.

ARMSTRONG, t., Indiana co., Pa., 7 m. W. Indiana bor. Drained by Crooked creek, and contains three stores, three grist-mills, seven saw-mills, two schools, 76 scholars. Pop. 1054.

ARNAU, a walled town of Bohemia, on the Elbe, 18 m. N.E. Gitschim. Pop. 1400. It has manufactures of linen, bleach-fields, print-works, and copper forges.

ARNAY-LE-DUC, a town of France, dep. Cote d'Or, cap. cant. near the Arroux, 29 m. S.W. Dijon. Pop. 2617. It has manufactures of cloth, serges, druggets, &c. On the 25th of June, 1570, the great Huguenot leader, Admiral Coligny, defeated near this town the army of the Marshal de Cossé-Gonor.

ARNEDO, a town of Spain, prov. of Burgos, on the Cidacos, 10 m. S. Calahorra. Pop. 1600. It is said to have had no fewer than *nine* parish churches! Good wine is made in its neighbourhood.

ARNEE, a town of Hindostan, prov. Carnatic, 74 m. S.W. Madras, lat. 12° 46′ N., long. 79° 23′ E.

ARNEMUYDEN, a small town of the Netherlands, island of Walcheren, 3 m. E. Middelburg. Its port, which was formerly considerable, has been filled up, and it is now nearly two miles from the sea; with which, however, it is connected by a canal.

ARNHEM, a town of the Netherlands, cap. prov. Guelderland, on the right bank of the Rhine, at the foot of the Veluwe hills, 34 m. E. by S. Utrecht, lat. 51° 58′ 47″ N., long. 5° 54′ 45″ E. Pop. 14,600. It is a fortified place of the first class; its fortifications having been greatly improved and enlarged, in 1702, by the famous engineer Coehorn. The ramparts, planted with elms, afford an agreeable promenade. The town is well built, has a good port on the river, which is crossed by a bridge of boats, and is advantageously situated for trade. It is the residence of a governor, and is the seat of a court of assizes, of a tribunal of original jurisdiction, and a tribunal of commerce; and has a college, a literary society, an agricultural commission, &c. In the church of St. Eusebius are the tombs of the old dukes and counts of Guelderland.

ARNO, a considerable and celebrated river of Italy (Tuscany), the *Arnus* of the Romans, has its source in the Apennines, at mount Falterona, 5 or 6 m. N. Pratovecchio. At first it flows S. to Punte a Burinno; thence N.W. to Pontasiere, where it receives the Sieve; whence it pursues a westerly course, flowing through Florence and Pisa; 7 m. below which it falls into the Mediterranean. Its embouchure was formerly a good deal farther to the S.; but having become obstructed, it was diverted into a new channel cut for it in 1603. Its course may be estimated at from 140 to 150 m. It is naturally navigable from the sea to Florence, and has been made navigable from Florence to near its source by means of twenty-seven locks; but its navigation is liable to many obstructions, at certain seasons from floods, and at other seasons from droughts: to guard against the injurious influence of the former, it has been embanked for the greater part of its course. The Val d'Arno, or the country between Florence and Pisa, is one of the richest, best cultivated, and most beautiful of any in Italy.

ARNSBERG, a town of Prussian Westphalia, cap. reg. and circ. of the same name, on the Ruhr, by which it is almost encompassed, 57 m. N.E. Cologne. Pop. 4500. It is the residence of the provincial authorities, and has a court of appeal for the regency, a Catholic gymnasium, an agricultural society, &c. The inhabitants are principally employed in the preparation of potashes, and in distillation.

ARNSTADT, a well-built town of Saxony, principality Schwarzburg Sondershausen, on the Gera, 11 m. S. by W. Erfurth. Pop. 4500. It has a castle, a college, a cabinet of natural history, and fabrics of cotton and brass, with a considerable trade in corn, timber, wool, furs, and colonial produce.

ARNSTEIN, a town of Bavaria, circle Lower Mayne, on the Werpe, 16 m. N.N.W. Wurzburg. Pop. 2000. It is the birthplace of the historian Schmidt.

ARNSWALDE, a town of the Prussian states, prov. Brandenburg, cap. circle, 19 m. S.E. Stargard. Pop. 3800. It is nearly surrounded by three lakes well supplied with fish.

AROLSEN, a town of the principality of Waldeck, on the Aar, 12 m. N. by W. Waldeck. Pop. 1500. It is the residence of the prince, and the seat of the principal authorities of the province; it is well built; has a fine castle, in which is a valuable collection of coins and antiquities, with a library and a picture gallery; there is also a college, grammar school, &c.

ARONA, a town of the Sardinian states, prov. Novara, on the Lago Maggiore, near its southern extremity, lat. 45° 45′ 53″ N., long. 8° 34′ 16″ E. Pop. 2000. Its fortifications, which were formerly considerable, were demolished by the French after the battle of Marengo. It is well built, has a gymnasium, a hospital, a collegiate church and three others, a port on the lake, with yards for the construction of vessels for its navigation, and a pretty considerable commerce. St. Charles Borromeo was a native of this town; and in 1697 a colossal statue was erected in honour of the saint, by the people of Milan, on a neighbouring eminence. This immense work, the *chef-d'œuvre* of Zanelli and Falconi, stands on a granite pedestal 46 ft. high, and is itself 66 ft. high! The head, hands, and feet are cast; the drapery, and book which he holds in his hand, are hammered out of sheet copper, set on timber framing: the execution is very fine, particularly the expression of the countenance, looking down upon the world "more in pity than in anger." The attitude of the body is remarkably easy and simple, and the proportions are so good that the idea of a colossus does not enter the mind until a comparison has been made with objects of known dimensions situated near it, such as the travellers every day see at the foot of the statue. A sort of staircase leads from the bottom to the top of the statue. (*Simond's Italy*, p. 10; *Conder's Italy*, vol. i., p. 310.)

ARONCHES, a town of Portugal, prov. Alentejo, 16 m. S. E. Portalegre. Pop. 3000. It has a church, a convent, a hospital, and a workhouse.

AROOSTOOK, county, Me. Situated in the N.E. part of the state, extending N. to the St. John's river, separating it from Canada. Watered by Aroostook and Matawamkeg rivers. It is unsettled in its N. part. There were, in 1840, 6109 neat cattle, 9905 sheep, 4303 swine, and there were produced 41,982 bushels of wheat, 36,518 of oats, 21,912 of buckwheat, and 108,554 of potatoes. It had 20 stores, two flouring-mills, thirteen grist-mills, thirteen saw-mills, twenty-eight schools, 1150 scholars. Pop. 9413.

AROOSTOOK, river, Me., rises in Penobscot co., crosses Aroostook co., and enters St. John's river in New-Brunswick. The lands on this river are very fertile, and well adapted to wheat. A road passes from Bangor to fort Fairfield on this river, on the E. boundary of the United States. The length of the river is over 100 m., and its course is circuitous.

ARPAGON, a small town of France, dep. Seine et Oise, 11 m. W. Corbeil. It has tanneries, a brewery, and some trade in flour.

ARPAIA, a miserable, bleak-looking village of Naples, prov. Principato Ultra, between Capua and Benevento, 3 m. E. Arienzo. It would be unworthy of notice were it not that it is supposed by some to occupy the site of the ancient *Caudium*, memorable for the great disaster that there befell the Roman arms, anno 311 B.C. But the better opinion seems to be, that the defile situated a little to the N. of Arpaia, between St. Agato and Moisno, is the real scene of this disaster, and the place so celebrated by the name of the *Furcæ Caudinæ*. The Forks consist of a small plane, traversed by a stream, having a narrow outlet at each end, and shut up everywhere else by continuous and impracticable mountains. A powerful Roman army having unwarily entered this defile, the Samnites immediately blocked up the farther outlet; and the Romans, having retraced their steps, found that their enemies had anticipated their movement, by blocking up the pass by which they had entered as well as the other. Caught thus, as it were, in a trap, they were obliged to accept the terms dictated by the Samnites, who granted them their lives, on their delivering up their arms, and passing one by one half naked under the yoke. (*Liv.*, lib. ix., cap. 1–7.)

ARPINO (an, *Arpinum*), a town of Naples, prov. Terra di Lavoro, 6 m. S.W. Sora. Pop. 9000. It is agreeably situated on some eminences, has various churches, a hospital, with manufactories of the best cloth made in Naples, paper, and tanneries. This is a very ancient city. Having been wrested from the Samnites by the Romans, it became a municipal town, and its citizens were enrolled in the Cornelian tribe 302 years B.C. (*Liv.*, lib. x., § 1, and lib. xxxvii., § 36, and *Cicero pro Cn Planco.*) But it is chiefly memorable for being the birthplace of two of the most distinguished men Italy ever produced—Caius Marius, surnamed the third founder of Rome, and M. Tullius Cicero, the prince of Roman orators. The latter frequently alludes to Arpinum in his Letters, and dwells with complacency on the rude and primitive simplicity of its inhabitants. (*Cramer's Ancient Italy*, vol. ii., p. 114.)

In its environs is a paper-mill recently established at an expense of above £11,000, and employing 200 work-people. Balbi says that it produces sixty reams a day, and that the pulp is converted into dried paper in less than a minute! We suspect this is an exaggeration, otherwise it exceeds anything done in this country; about three minutes being

required here, in the best mills, for the conversion of pulp into dried paper. (*Abrégé*, ed. 1837, p. 415.)

ARQUA, a town of Austrian Italy, prov. Padua, 12 m. S.W. Padua, in the bosom of the Euganean hills. The pop. does not exceed 1000; and the place would not be worth notice but for its having been the residence of Petrarch during the latter years of his life, and the place where that great poet and restorer of modern literature breathed his last, on the 19th of July, 1374. "His ashes are preserved in the churchyard of the town, in a sarcophagus of red marble, raised on four pilasters on an elevated base, and preserved from an association with meaner tombs." The kindred genius to whom we are indebted for these details observes,

> "They keep his dust in Arqua, where he died;
> The mountain village where his latter days
> Went down the vale of years; and 'tis their pride—
> An honest pride—and let it be their praise,
> To offer to the passing stranger's gaze
> His mansion and his sepulchre; both plain
> And venerably simple, such as raise
> A feeling more accordant with his strain,
> Than if a pyramid form'd his monumental fane."

"The house in which Petrarch resided is on the edge of a little knoll overlooking two descents, and commanding a view not only of the glowing gardens in the dales immediately beneath, but of the wide plains, above whose low woods of mulberry and willow, thickened into a dark mass by festoons of vines, tall single cypresses, and the spires of towers, are seen in the distance, which stretches to the mouths of the Po and the shores of the Adriatic. The chair in which the poet breathed his last is still shown among the precious relics of Arqua." (*Childe Harold*, canto iv., § 31, and note 9.)

ARQUA, an ancient village of Austrian Italy, on the Castagnaro canal, 5 m. S.S.W. Rovigo. Pop. 2800. It has some trade in cotton and silk.

ARQUENNES, a village of Belgium, prov. Hainault, 13 m. N.W. Charleroi. Pop. 1500. It has valuable lime and marble quarries.

ARQUES, a small decayed town of France, dep. Seine Inferieure, about 3 m. from Dieppe. During the middle ages this was the principal bulwark of Normandy towards the N.; its castle, now in ruins, having withstood several sieges. In the vicinity of this town, in 1589, Henry IV. defeated the troops of the League under the Duc de Mayenne.

ARRAN, an island of Scotland, co. Bute, in the arm of the sea between the Mull of Cantire and the Ayrshire coast; being separated from the former by Kilbrannan sound, and from the latter by the frith of Clyde. It is 4½ m. from the nearest point of the Isle of Bute, 3¾ m. from the nearest point of Cantire, and 10½ m. from Ardrossan point in Ayrshire. It is about 16½ m. in length from N. to S., and from 6 to 9 in breadth,* comprising about 72,000 acres, of which about 11,000 may be arable. It exhibits a striking contrast in its N. and S. divisions: the former, or that of the N. of Brodick, presenting lofty bare and rugged granite mountains, connected by steep ridges and intersected by deep valleys and ravines. Goatfell, the highest mountain in the island, rises to the height of 2865 feet above the sea. The S. and largest division of the island is composed of undulating hilly ground, the eminences of which are of a flattened or rounded configuration, and covered with a deep stratum of peat and other alluvial matter. Round the greater part of the coast an almost uninterrupted broad bank or girdle of gravel has been formed by the action of the sea, the soft greensward on which affords a pleasant and convenient access along the sea side. The shores are generally steep and rocky, but high cliffs are not frequent. Three deep bays indent the island—Ransa on the N.W., and Brodick and Lamlash on the E.: the latter, being defended from the W. gales by Holy-island, 1 m. in length, is one of the best asylums for shipping in the frith of Clyde. Marble, jasper, agates, cairn-gorms, and a fine species of rock crystal, called the Arran diamond, are met with. The red deer and wild goat, formerly very abundant, are now nearly, if not entirely, extirpated. Cheviot sheep are generally introduced; and the native breeds of cattle and horses are being superseded by the larger and more esteemed breeds of Argyleshire and Ayrshire. Swine are raised in considerable numbers; and the steam boats that touch at the island have opened a new market for fowls and eggs. Grouse and black-cock are very plentiful. The system of agriculture formerly followed in Arran was as bad as can well be imagined; the lands were held jointly by several tenants on the common or *run-rig* plan (see ARGYLE), and were scourged by a constant course of corn crops, which succeeded each other in a series, unbroken except by the occasional introduction of potatoes, as long as the soil would produce anything: but, since 1815, the duke of Hamilton, who is proprietor of nearly the whole island, has laboured strenuously and successfully to introduce a better system; partly by letting farms to individuals for a fixed term of years, excluding subtenants and assignees; partly by introducing conditions into the leases fitted to insure a better system of management; and partly by expending large sums on the building of houses, enclosing, making drains, roads, &c. The people at first were very much opposed to the change; but their prejudices have gradually given way, and they are now for the most part sensible that it has been as advantageous to them as to the proprietor. Since the occupiers have enjoyed possessions each might call his own, they have steadily advanced in habits of industry; and though in this respect they are still behind the tenants and labourers of the mainland, it is believed that in no insular Highland district is greater industry shown than in Arran.

There are now a number of large farms enclosed, subdivided, and well cultivated, having valuable stocks of cattle and comfortable farm-steadings, where formerly there were numerous huts without chimneys or windows, and ridges running in all directions without a single enclosure or subdivision. The general rotation, except on the shores, is, 1. Oats; 2. Green crop—potatoes, turnips, beans, or peas, with manure; 3. Bear or bigg, wheat, or oats, often manured; 4. Hay; 5. Pasture grass; 6. Pasture, sometimes grass a year or two longer. On the shores and holms, the rotation is, 1. Oats; 2. Green crop; 3. Bigg or wheat—these often with manure; 4. Hay; and then oats, &c., again. These rotations are not always adhered to by the tenants having the small possessions, but they all sow grass seeds with the corn crop which succeeds the green one; and this of itself necessarily leads to better management than they formerly practised. Wheat to a considerable extent has for a few years past been raised by the tenants of the larger possessions, and a great number of the small tenants also grow from half an acre to two acres each of that grain.

By these changes in the mode of possession, and by the improvement of the soil, it will easily be seen that more and better cattle may be reared and supported than formerly, and the produce of milk is also much greater. Since 1822, the duke of Hamilton has supplied good Argyleshire bulls, at his own expense, for the cattle on his property, keeping always in the island from 20 to 30, placed at convenient distances. The consequence of this arrangement is, that the cattle have been surprisingly improved in every respect. On a few of the larger farms stocks of Ayrshire cows are kept, and succeed very well.

The rental of the island amounts to from £11,000 to £12,000 a year.

A number of boats employed in the herring fishery belong to Kilbride and Brodick, the principal villages. But the herring fishery in the frith of Clyde and loch Fyne is not nearly so prosperous at present as it once was. Luckily its decline is little, if any, loss to the island; for, having no considerable town population, the fishery is principally carried on by the cottiers and small farmers, engrossing their attention at the time their services are most necessary on shore, at the same time that it has a tendency to generate and keep alive idle and dissipated habits. Kelp used to be produced in considerable quantities, but its manufacture has now nearly ceased. Most of the woollen cloth formerly used in the island was made by the women, but a good deal is now imported.

The yearly export of produce from Arran cannot be given with perfect accuracy; but the following statement is believed to be a pretty near approximation to its quantity and value:

	L.
900 black cattle, at 3l. 10s.	3,150
450 swine, at 1l. 10s.	675
Fowls and eggs	700
Sheep and wool	2,500
Bear or bigg, 2500 qrs., at 26s.	3,250
Wheat, 700 bolls, at 24s.	840
Beans and peas, 900 bolls, at 16s.	720
Oats, in grain and meal, 3000 qrs., at 20s.	3,000
Potatoes, 3000 bolls, at 10s.	1,500
Herrings caught by 100 wherries, at 40l. per wherry	4,000
Butter and cheese	1,000
Shell-fish, about	100
Freestone and limestone	600
Total	L. 21,260

A good deal of illicitly distilled whiskey was formerly exported; but that branch of industry, if it may be so called, has all but ceased.

Brodick, the principal village, is finely situated, at the bottom of Brodick bay on the E. side of the island. Near it is Brodick castle, a seat, and occasional residence, of the dukes of Hamilton. Though Gaelic be generally spoken, English is understood by everybody.

Arran is divided into two parishes. Its population amounted, in 1755, according to Dr. Webster, to 3646; in 1801 it amounted to 5179; and in 1831, to 6427. It declined somewhat during the ten years ending with 1831, but is again on

* These are the dimensions as given in John Arrowsmith's map. It is generally represented as much larger, or from 20 m. to 35 m. in length, and from 12 m. to 20 m. in breadth.

the increase. (*Anderson's Highlands; M'Donald's Survey of the Hebrides;* and *Paterson's Account of the Duke of Hamilton's Improvements in Arran*, in the *Transactions of the Highland Society.*)

ARRAN (N. ISLES OF), on the W. coast of Ireland, co. Donegal, opposite Dangloe, the most N. extremity of the largest, called Arranmore, being in lat. 55° N., long. 8° 29′ W. A light-house is erected on this point, with a fixed light elevated 200 feet above high-water mark. This island contains about 2000 acres, and nearly 1000 inhab., the land being divided into the minutest portions, such as a "cow's foot," or the quarter of a cow's grass. They are mostly fishers. On a smaller island, a fishing village, called Rutland, was erected by the Fishing board, in 1786, but it is now nearly deserted.

ARRAN (S. ISLES OF). These consist of three islands stretching N.W. and S.E., about 12 m. along the mouth of Galway bay, in Ireland, being part of the co. Galway. They contain in all about 7000 acres; the largest, Arranmore, comprising about 4607; Innis More, 1336; and Innis Leer, 909. Pop. 3191. They are the property of Mr. Digby, and yield a rent of above £2000 a year, the tenants paying from £2 to £6 each. They are very fertile, but occasionally suffer from a scarcity of water. The fishing of cod and ling is carried on to a considerable extent, a pier having been constricted at the village of Killaney (pop. 1000) on the largest island, at the expense of the Fishery Board, for the accommodation of the craft employed. The principal products are fresh and cured fish, oats, feathers, the produce of puffins, a superior kind of yearling calves in great demand by the Connaught graziers; to which were formerly added, great quantities of smuggled whiskey. A light-house, with a revolving light, has been erected on the highest point of the largest or most northerly of the islands, lat. 53° 7′ N., long. 9° 40′ W., having the lantern elevated 498 feet above the level of the sea. These islands give the title of Earl to the family of Gore. The inhabitants, who are very poor, continue in a very primitive state, and the Irish language is universally spoken. (*Dutton's Statistical Survey of Galway*, p. 2, &c.; *Reports on the Fisheries of Ireland*, App., p. 104, &c.)

ARRAS, a city of France, dép. Pas de Calais, of which it is the cap., on the Scarpe and the Crinchon, 60 m. S.E. Calais, lat. 50° 17′ 54″ N., long. 2° 46′ 25″ E. Pop. 23,485. It is situated in the middle of an extensive and fertile plain: the Scarpe divides it into two parts; it is well built; houses stone; several of its squares and public buildings handsome, and worthy of notice. Among the latter are the old Gothic church of St. Waast, the hôtel of the Préfet, theatre, belfry, barracks, &c. The cathedral, a fine old Gothic building, was destroyed during the revolutionary phrensy. Arras was fortified, during the reign of Louis XIV., by Vauban. The citadel, which is very strong, is separated from the town by an esplanade, but it is included within the line of the works. It is the seat of a bishopric; and has a court of assizes, a tribunal of original jurisdiction, a college, a grand diocesan seminary, a secondary ecclesiastical school, a school of engineering (*école régimentaire de génie*), an academy of belles-lettres, a literary society, a botanical garden, a school for deaf and dumb, a school of design, a cabinet of natural history and antiquities, a museum of pictures, a public library containing 36,000 volumes, &c. There are establishments for the spinning of cotton, manufactures of cotton stuffs, hosiery, lace, coarse woollen stuffs, and potteries; and fabrics for the preparation of beet-root sugar, soap, starch, beer, rape-oil, &c. The Scarpe becomes navigable at this point.

Arras is a very ancient city, and has been the theatre of many sanguinary contests. The revocation of the edict of Nantes gave a severe blow to its manufactures. It also suffered much during the revolution, having been for a considerable time at the mercy of Lebon, a ferocious terrorist, a native of the place. Robespierre, of infamous memory, was also a native of Arras; as was Damiens, the assassin of Louis XV. (*Hugo, France Pittoresque*, art. *Pas de Calais.*)

ARRAYOLLOS, a town of Portugal, prov. Alentejo, 15 m. N.N.W. Evora, at the foot of a mountain on the summit of which is a citadel. Pop. 1900. It has some fabrics of stained paper.

ARRIÈGE, a dep. in the S. of France, on the Spanish frontier, having S. the Pyrenean mountains, E. the dépts. Pyrénées Orientales and Aude, and N. and W. the Haute Garonne. Area, 455,000 hectares. Pop. 260,536. This dep. consists principally of the N. slope of the Pyrenees; the mountains, which cover the greater part of its surface, increasing gradually in elevation as they approach its S. frontier; the altitude of the highest summits varying from about 7000 to about 10,500 feet above the level of the sea. The principal valleys are those of the Arriège and the Salat, the only navigable rivers in the dep. According to the official tables, the cultivable lands occupy about 148,000, meadows 34,000, woods (on the mountains) 90,000, vineyards 11,632, and heaths, wastes, &c., 136,600 hectares. Gold has been found; and there are valuable iron mines near Vic Dessos, and other places. The N. portion is pretty fertile and well cultivated, producing wheat, rye, oats, maize, millet, &c. Horses an inferior breed, and oxen and mules frequently employed in their stead. The total produce of wine is estimated at 115,000 hectolitres a year; but the quality is inferior, and is wholly retained for home use. The forests have not been taken proper care of; and in many parts, owing to the consumption of the iron furnaces, and the want of sufficient attention, there is a scarcity of wood. The working of metals is the principal branch of manufacturing industry; but there are also manufactures of cloth, serges, floss-silk, cotton stuffs, &c. It returns three m. to the Ch. of Dep. Const. in 1838, 806. Public revenue, in 1831, very near 3,000,000 fr. Principal towns, Foix, Mazeat, Pamiers, &c. (*Hugo, France Pittoresque*, art. *Arriège.*)

ARROW ROCK, p. t., Saline co., Mo., 72 m. N.W. Jefferson city, 986 W. The village is situated on the S. side of the Missouri river, on an elevated bluff, with a good landing. A ferry here crosses the Missouri. The town or precinct has seven schools, 179 scholars. Pop. 2093.

ARROYO-DEL-PUERCO, a town of Spain, Estremadura, 10 m. W. Caceres. Pop. 5000. It has a parish church, adorned with some good pictures by Morales; with manufactures of cloth and earthenware.

ARS-EN-RE′, a sea-port town of France, dép. Charente Inférieure, on the W. coast of the Isle de Ré. Pop. 3609. Salt is produced in its vicinity, and shipped in considerable quantities from its port.

ARSIERO, a village of Austrian Italy, prov. Vicenza, 6 m. N. by W. Schio. Pop. 2400. It has paper fabrics, and a quantity of fine white veined marble.

ART, a town of Switzerland, cant. Schwitz, at the S. extremity of the lake of Zug, 7 m. S. Zug, at the foot of mounts Rigi and Rossburg. It is well built. The church of St. George is remarkable for its architecture, and for an immense fountain, formed of a single block of granite. There is a convent of Capuchins, with a good library. The valley of Art is very picturesque and interesting, from its position among the highest mountains of breccia anywhere to be met with.

ARTA, a town of Spain, island of Majorca, on its N.W. angle. Cape Pera, where there is a small fort, depends on it. Pop. 8000. Its territory, which is very fruitful, produces cotton, and has mill-stone quarries.

ARTA, a town of Turkey in Europe, Albania, on the Arta, about 7 m. above where it falls into the gulf of that name. It is a place of considerable size and trade. When visited by Dr. Holland, in 1812, it contained six mosques, a large cathedral, and a great number of Greek churches, and was supposed to have a population of about 6000. It suffered severely during the Greek insurrection; and Lieut. Wolfe, by whom it was visited in 1830, says that, in many places, masses of ruins impeded the passage of the streets, and that an aspect of desolation and misery hung over it. We understand, however, that it has begun to improve. Its population was estimated by Mr. Wolfe at 7000 at a maximum. It is governed by a bey, under the pacha of Yannina, and is the seat of a Greek bishop. It has manufactures of cottons, woollens, and leather. The floccatas, or shaggy capotes made here, are reckoned very superior. Embroidery is said to be brought to considerable perfection; and all articles of dress from Arta are highly prized. Each trade has its separate street or bazar; but, by a judicious regulation, butchers are obliged to kill and sell their meat outside the town. The market is abundantly supplied with fruit and vegetables. There is a curious Venetian bridge over the river, consisting of one large and several very small arches.

There can be no doubt that Arta occupies the site of the ancient *Ambracia*. Traces of the ancient walls may be seen in many places, but especially under the more modern remains of the ruined castle: the stones consist of vast quadrangular blocks, so admirably fitted that it is with difficulty the point of a penknife can be inserted between them: no mortar seems to have been used in their construction. There is here, also, the ruins of a convent, built in 845, now converted into a caravansera. (*Holland's Travels in Albania, &c.*, p. 72, 4to ed.; *Wolfe's Observations on the Gulf of Arta, Journal of the Geogr. Society*, vol. iii., p. 77.)

ARTA (GULF OF), the *Sinus Ambracius* of the ancients, is a deep inlet of the gulf of the Ionian sea, between the Turkish province of Albania and the N.W. part of the new kingdom of Greece. The entrance to it, between Prevesa on the N. and the fort of La Punta on the S., is only 700 yards across. The fort now mentioned is built at the extremity of a low, narrow, tongue of land, celebrated in history as the *Promontory of Actium*. Outside the entrance is a bar, composed of gravel, coarse sand, and sea weed, with 15 feet water when shallowest. On entering the gulf, we first come to what is called the bay of Prevesa, occupying the

space between the mouth of the gulf and the capes La Scero on the N. and Madouna on the S., and it is only after passing these headlands that the gulf properly opens. It is a noble sheet of water: its extreme length from W. to E., including the bay of Prevesa, is about 25 m., and its greatest breadth about 16 m.; but in several places it is a good deal narrower: the depth varies from 13 and 14 to 36 fathoms. The S. shore consists of high land, with bold promontories, clothed with rich and extensive woods; the N. shore is for the most part low, and has encroached considerably on the water. Part of the vast chain of Pindus is seen from the gulf. It has been long celebrated for the variety and excellence of its fish: red and gray mullet are the most abundant; and there are plenty of soles, eels, prawns, &c.: sardine fishing is extensively carried on.

The entrance to the gulf of Arta was the scene of one of the most memorable and important conflicts recorded in history. The battle of Actium, which decided the fate of Augustus and Mark Antony, and of the Roman world, was fought off the promontory of that name, at the southern entrance to the gulf, anno B.C. 29. The exact space occupied by the hostile fleets has been disputed. Most probably the battle raged all round the promontory, but principally on its W. side, or in what is now called the harbour of Prevesa, and the contiguous sea. (See the authorities cited in the previous article, *Ferguson's History of the Roman Republic*, cap. 35; *Plutarch's Life of Mark Antony, &c.*)

ARTAGONA, a walled town of Spain, Navarre, 15 m. S. Pampeluna. Pop. 2099.

ARTAKI, a small sea-port town of Turkey in Asia, on the S.W. coast of the peninsula of Cyzicus (which see), sea of Marmora, 75 m. W.S.W. Constantinople. It has a convenient anchorage.

ARTERN, a town of Prussian Saxony, reg. Merseburg, on the Unstrut, 30 m. W. by S. Halle. Pop. 2409. It has a castle, a brine-spring, and a distillery.

ARTHUR'S SEAT, a hill in the immediate vicinity of Edinburgh, on the S.E. side of the city, rising 822 feet above the level of the sea. Its ascent from the latter is gradual and easy; but on the side towards the city, it rises abruptly, and, in parts, almost perpendicularly, from the low grounds. On the S. side of the hill, above the footpath leading from Edinburgh to Duddingstone, is a superb range of porphyritic greenstone columns, from 50 to 60 feet high. The part of the hill nearest Holyrood-house is called Salisbury Crags, and, till within these few years, its quarries furnished most part of the paving stones used in London. The view from the top of Arthur's seat is one of the most diversified and fine in the empire.

ARUDY, a town of France, dep. Basses Pyrenées, cap. cant., on the Ossau, 12 m. S.E. Oloron. Pop. 1725. It is the centre of an active and considerable commerce with the neighbouring valleys.

ARUNDEL, a burgh, m. town and pa. of England, co. of Sussex, on the N. bank of the Arun, about 3½ m. from its embouchure, 55 m. S.S.W. London. Pop. 2803. The town is pretty well built, and has a thriving appearance. It derives its entire consequence from its being immediately contiguous to Arundel Castle, formerly a strong fortress, now the magnificent baronial residence of the Dukes of Norfolk, having been rebuilt at a great expense by the late duke. The possessor of this castle enjoys, without further creation, the dignity of earl. Previously to the Reform Act, Arundel returned two members to the H. of C., the right of voting being vested in the inhabitants paying scot and lot; but since the Reform Act it only returns one member. Constitutency, 1836-37, 336. The Arun, which is here crossed by a neat bridge, is navigable thus far; and is joined by canals with the Thames, on the one hand, and Chichester harbour on the other.

ARVERT, a town of France, dep. Charente Inférieure, 24 m. W. Saintes. Pop. 2360. It is the chief place of the peninsula of the same name formed by the Gironde, the Seudre, and the sea. It has a considerable trade in wine, and fresh and salt fish, particularly sardines.

ARZAMAS, a town of Russia in Europe, gov. Nijni Novgorod, cap. district, at the confluence of the Choka and Tioncha, 62 m. S. Nijni Novgorod. Pop. 8000. It is old and ill built; has twenty-two churches and two convents, with soap-works, tanneries, print-works, iron foundries, &c. It has two great annual fairs.

ARZANNO, a town of France, dep. Finisterre, cap. cant., arrond. Quimperle. Pop. 1957.

ARZANO, a village of Naples, in the immediate neighbourhood of the capital. Pop. 4500. It has numerous villas; and flax and hemp are largely produced in its environs.

ARZEW (an. *Arsenaria*), a sea-port town of Algiers, prov. Tlemsen, at the mouth of the Sigg, 30 m. N.N.E. Oran, lat. 35° 45′ N., long. 0° 54′ E. The bay is small, but, though open to winds from the E. and N.E., it is the best on this part of the coast. The modern town, which is ill built and inconsiderable, occupies the site of the ancient Arsenaria: fragments of columns, inscriptions, cisterns, and other remains of the ancient city, being scattered all round. Corn and salt are both exported. The latter is obtained from the salt pits of Arzew, about 5 m. inland.

ARZIGNANO, a town of Austrian Italy, 10 m. W. Vicenza. Pop. 4000. It is situated in an agreeable plain, surrounded with cultivated hills; and has filatures of silk, fabrics of cloth, dye-works, and brick-works. Its territory produces good wine, and has two coal mines.

ASAPH (ST.), a city of N. Wales, county Flint, 185 m. N.W. London, 5 m. N. Denbigh, finely situated in the vale of Clwyd, on an eminence on the banks of the Elwy, near its confluence with the Clwyd, over both of which it has bridges. Pop. of parish 3144, of city 2000? It consists principally of a single street; and is remarkable only as being the seat of a bishopric, worth £6300 a year. The cathedral, a plain building, was erected towards the end of the 15th century, but has since undergone many repairs: it is not used for public worship; the parish church, in the lower part of the town, being appropriated to that purpose. Drs. Barrow (uncle to the famous Dr. Isaac Barrow), Beveridge, Tanner, Horsley, &c., have been bishops of this see; and in the cathedral is a handsome monument, erected in 1829, in memory of the celebrated Dean Shipley. It has a free grammar school, endowed by Bishop Beveridge; and an alms-house, for eight poor widows, endowed by Bishop Barrow. It unites with the other boroughs of this co. in returning a m. to the H. of C.

ASARO, a town of Sicily, prov. Catania, 9 m. S. Nicosia. Pop. 3000.

ASCALON, an ancient sea-port town of Palestine, 15 m. N. Gaza, and 45 m. E.S.E. Jerusalem, lat. 31° 39′ N., long. 34° 33′ E. There is not a single inhabitant within the old walls, which are still standing; but a modern suburban village, called Scalona, from the ancient name, has a pop. of 300 or 400, and is frequented by the small vessels trading to this coast.

The ruins present a strange mixture of Syrian, Greek, and Gothic remains. There are also the remains of a Roman amphitheatre, and the columns of a temple, supposed to be that of the Syrian Venus, mentioned by Herodotus (i., § 105), or a Greek edifice raised in imitation of it.

Ascalon is exceedingly ancient. Before the establishment of the Israelites in Palestine, it was one of the lordships of the Philistines. Subsequently, it became one of the ports belonging to the tribe of Judah; and, on the downfall of the Jewish kingdom, it fell to the king of Assyria. It afterward formed part of the Persian empire, then of the kingdom of the Ptolemies; and, on the subversion of the latter in the last century B.C., it was subjected to the dominion of Rome. It was a bishop's see in the first ages of Christianity; was conquered by the Saracens at the commencement of their conquests, and became the scene of more than one battle during the time of the Crusades. It was one of the strongholds of the W. Christians; but Saladin, on gaining possession of the town, destroyed its works. It has since continued in a state of decay: the prophecy of, Zechariah, "Ascalon shall not be inhabited," and that of Ezekiel, "It shall be a desolation," are now actually fulfilled.

Ascalon stands at the mouth of a stream (the Sorek), where the accumulation of soil is so great, that the ruins are every day removing farther from the sea. (*Volney*, ii., 283; *Robinson*, i., 21.)

ASCENSION, an island in the Atlantic ocean, between Africa and Brazil, about 8 m. in length by about 6 in breadth, its fort being in lat. 7° 26′ N., long. 14° 24′ W. It is of volcanic formation, and one of its hills, of tufous limestone, rises to the height of about 2800 feet. It has a bleak and barren appearance; and was uninhabited till the imprisonment of Napoleon at St. Helena, when it was garrisoned by a small British force, through whose exertions it has been partly cultivated and wonderfully improved. Springs of fresh water have been discovered. Vast numbers of turtle are taken on its shores. The climate is remarkably healthy, and the anchorage, though open, is said to be good. The object in occupying it is, that it may serve as a depôt for stores, and a place for watering ships cruising on the coast of Brazil or in the South Atlantic ocean. Its name is derived from its having been discovered on Ascension-day, the 20th of May, 1501, by a Spanish navigator in the service of Portugal.

ASCENSION, parish, La. Situated in the S.E. part of the state, and contains 400 sq. m. It lies on both sides of the Mississippi, and is subject to be overflowed at high water, the immediate bank of the river being the highest land in the parish. The La Fourche, one of the outlets of the Mississippi, passes off at Donaldsonville. It produces sugar, cotton, oranges, figs, peaches, &c. It had in 1840, 3815 neat cattle, 2845 sheep, and 1082 swine. It produced 280,725 bushels of Indian corn, 1,028,050 pounds of sugar, and 13,568,000 of cotton. It had twenty foreign commercial

houses, seventy-eight retail stores, three saw-mills, three academies with 56 students, two schools with 69 scholars. Pop.: whites 2955, slaves 4553, free coloured 143; total, 6951. Cap. Donaldsonville.

ASCH, a town and lordship, N.W. frontier of Bohemia, circle Elnbogen, 14 m. N.W. Eger. The town has 2500, and the lordship, which belongs to the family of Zedlwitz, above 6000 inhab.

ASCHAFFENBURG, a city of Bavaria, circ. Lower Mayne, on a hill, on the Mayne, which is here crossed by a stone bridge, 38 m. N.W. Wurtsburg. Pop. 7000. The town is indifferently built, and the streets are narrow and crooked. It has, however, a fine palace, formerly occupied by the electors of Mayence, to which magnificent gardens are attached. It has also an old Gothic church, containing the tombs of its princes, a town-hall, &c.; with a lyceum, a gymnasium, an ecclesiastical seminary, a school of design, a public library, a collection of pictures, &c. It manufactures tinted papers, and has a good deal of trade in timber, wine, tobacco, &c.

ASCHERSLEBEN, a town of the Prussian states, prov. Saxony, reg. Magdeburg, at the confluence of the Eine and the Wipper, 14 m. E.S.E. Quedlinburg. Pop. 9730. It has five Protestant churches, one Catholic do., a synagogue, a gymnasium, two hospitals, &c.; and very considerable manufactures of woollen and linen stuffs, and earthenware.

ASCOLI, a town of Italy, states of the Church, cap. deleg. same name, on the angle formed by the junction of the Castellano with the Tronto, 15 m. above where the latter falls into the Adriatic, lat. 42° 51′ 24″ N., long. 13° 25′ 15″ E. Pop. 12,000. It is a well-built handsome town; has a cathedral and numerous churches, many of which are ornamented with valuable paintings by native artists. The church of St. Gregorio Magno consists principally of the remains of a Roman temple. Of modern buildings, the principal is the *Palazzo Anzianale*, containing a museum, a library, and a theatre: there is also the palace of the governor, and numerous palaces belonging to resident nobles. Ascoli is a frontier town, on the side of Naples, and is a place of some strength, being surrounded by old walls and towers, and furnished with a citadel. Its harbour at the mouth of the Tronto, is a good deal frequented by coasters, and is defended by two small forts.

Ascoli, the *Asculum Picenum* of the Romans, is one of the most ancient of the Italian towns. It is described by Strabo as a place of great strength, surrounded by walls and inaccessible heights. It was the first city to declare against the Romans when the Social war broke out; and, in the course of that war, it sustained a long and memorable siege against Pompey; by whom, however, it was finally taken. (*Cramer's Anc. Italy*, i., p. 288.)

ASCOLI DI SATRIANO (an. *Asculum Apulum*), a town of Naples, prov. Capitanata, 13 m. E. by S. Rovigo. Pop. 6000. It is situated on a hill; has a fine cathedral, a diocesan seminary, a hospital, and some convents.

This town is very ancient. It was under its walls that Pyrrhus encountered the Roman legions for the second time, with no decisive advantage on either side. It was almost entirely destroyed by an earthquake in 1400.

ASCUTNEY, mountain, Vt. Situated on the boundary between Windsor and Weathersfield. It is an isolated summit, which rises to the height of 3320 feet above tide water, and 3116 above the level of Connecticut river, at Windsor. Its summit presents an extensive and beautiful prospect, and is often ascended by the inquisitive traveller.

ASDOUD (the *Ashdod* of Scripture, and Αζωτος of the Greeks), a sea-port town of Palestine, on the coast of the Mediterranean. Lat. 31° 45′ N., long. 34° 37′ E., 35 m. W. Jerusalem, and 11 N.E. Ascalon, on the summit of a grassy hill, surrounded by luxuriant pasture grounds. Its present pop. is very limited, probably not more than 200, or 300. It has no ruins; and would be unworthy of notice, were it not for the figure it makes in sacred history. It was one of the five lordships of the Philistines (Phœnicians); and thither the Ark of the Covenant was brought when that people took it from the Jews. (1 Sam., v., 1.) It may be gathered, generally, that the Philistine power yielded to the arm of David (2 Sam., v., 29, *et seq.*; 1 Chron., xviii., 1); and it is probable that Ashdod became then a Jewish town. If this, however, were the case, it did not remain so; for, 200 years later, the destruction of the walls of Ashdod is reckoned among the triumphs of Uzziah over the Philistines. (2 Chron., xxvi., 6.) It appears to have fallen into the hands of the Assyrians soon after this; and subsequently, according to Herodotus (ii., § 157), stood a siege of twenty-nine years by the Egyptians, under Psammeticus. It is not afterward heard of as a place of importance. The existing village is celebrated only for the number of scorpions that infest it. The water upon this part of the coast is shallow, and the land perceptibly gaining on the sea. (*Volney*, ii., 283; *Robinson*, i., 21.)

ASHANTEE, an extensive native kingdom of W. Africa, lying along the Gold coast of Guinea; extending from 4° 27′ to 10° N. lat., and from 4° 48′ W. to 1° 10′ E. long., being about 280 m. in length and as many in breadth. It may contain about 70,000 sq. m.

Physical Features of the Country.—Mountains and Plains.—This is a mountainous country, though it has few eminences very abrupt or precipitous. None of the mountains approach the snow line, being, like those of Africa in general, more remarkable for breadth and extent than for height. With regard to composition, all the species of granite, quartz, and slate are met with, but there is an almost total absence of calcareous stone. There are some small tracts of level land on the E. and W.; and the whole country N. of 7½° or 8° lat. is a large plain, terminated on the N.W. by a mountainous country, called, from the nature of its surface, Kowe,* and on the N.E. by the sandy desert of Ghofan. (*Isert, Voy. Guin.*, 249; *Bowditch*, 163, &c.; *Dupuis*, par. ii., 30, &c.; *Capt. Adams's Remarks*, 176.)

Rivers and Lakes.—Though not lying in the basin of any one of the first-class African rivers, few countries are better watered. Along the coast are found the embouchures of several respectable streams, the various affluents of which intersect the country in every direction. The Assinee, a large river, is usually reckoned the line of demarcation between the Gold and Ivory coast, and forms, for some miles from its mouth, the W. limit of Ashantee. The Volta, or Asweda, the largest of the Ashantee rivers, runs into the sea in 30′ E. long.: its length is estimated at about 400 miles. There are several lakes which, in the summer season, frequently overflow their banks.

Climate.—Soil and Natural Products.—The heat and insalubrity of the climate of Guinea are proverbial, but both appear to be exaggerated. It seems to be now admitted that countries under and near the equator are less hot than those under and near the tropics, the annual motion of the earth keeping the latter regions for a much longer period vertically beneath the sun. From this cause, therefore, the heat of Ashantee might be expected to be less than that of countries 12° or 15° farther N. The accumulation of water serves also to lower the general temperature, and, upon the whole, though during six months, or from October to March, the heat is extremely violent, during the other half year it is so far from being inconvenient, that fires and warm clothing are frequently desirable. The nights (always nearly of the same length) are cold, even during the hot months, and, in a night-halt in a forest, a blaze is as necessary against the cold heavy dews as against the ferocious beasts. (*Bosman*, 90; *Barbot*, 193, 194; *Hutton*, 142; *Adams*, 234.) The coast is, however, extremely unhealthy, especially to Europeans. Bosman (90, 92) ascribes this partly to the scorching days followed by chilling nights, but more to a sulphureous mist (apparently a species of miasma) which rises from the valleys and the neighbourhood of rivers every morning, especially during the rainy season. Poor food, bad accommodation, and exposure to the night air, add to these evils, which are still farther increased by a want of regularity in living among both natives and Europeans; but, after all, the climate of this coast is not worse than that of most others similarly situated, and much superior to that of W. Africa farther N., or to that of Guiana, in the same lat., on the other side of the Atlantic. The interior, though covered with dense forests, and consequently exposed to the effects of vegetable decomposition under a vertical sun, enjoys a comparatively salubrious atmosphere; and Isert (p. 256) recommends the erection of hospitals, in the inland parts, for the benefit of sufferers from the European forts on the coast. The air is usually calm, except in the case of tornadoes, and the wind from the desert, called Harmattan. The former, however, are pretty frequent, and, in the dry season, particularly annoying, from being followed by violent cold rains. The Harmattan is mostly experienced between the end of December and the beginning of February. It has a N.E. or an E.N.E. direction; is perfectly dry, extremely cold, and loaded with an impalpable powder, sufficiently thick to obscure the sun at noon. It is exceedingly destructive; its dryness being such that it absorbs the moisture from everything with which it comes in contact: opening the seams of ships, the joints of floorings, and destroying all animal and vegetable life opposed to its unmitigated violence. It is, in fact, a *cold* simoom (see ARABIA), dried in passing over the Great desert, and subsequently cooled in crossing the high mountains S. of the Niger. It blows usually for two or three days, but occasionally for a fortnight at a time, and with much force. Like other tropical countries, Ashantee has its dry and rainy seasons, or, rather, two rainy and one dry season in each year. The first rains, ushered in by violent tornadoes, occur about the latter end of May or the beginning of June; being followed by fogs and hazy weather, extremely pernicious and particularly

* Kong is the generic term for a mountain, in the language of the Mandingoes. (*Park's Travels, Appendix*, lxxxvi.)

powerful in July and August. The second rains come on in October, and thence till April is the dry and hot season. The range of the thermometer, in 1817, at 2 P.M., was between 68° (Jan. 2) and 71½° (Oct. 12): this was at Coomassie, among the mountains. In a sandy plain, near the mouth of the Volta, Isert (*Obser. Mat.*, 25) once saw it rise to the extraordinary height of 139°; but even there the average, at 1 P.M., was not more than 78°. (*Bosman*, 90–99; *Barbot*, 191–194; *Isert*, 258; and *Obser. Mat., passim*; *Bowditch*, 315, 497; *Adams*, 45, 164–168; *Hutton*, 388; *Dupuis*, i., 84.)

A small part of the coast, towards the E. and W. boundaries, is sandy, but the greater portion, and all the interior, is an argillaceous and aluminous soil, mixed with a rich black earth. This, with the abundance of water, renders the country extremely fertile. From 7½° N. lat. down to the water's edge, Ashantee presents a solid mass of forest, extending E. and W. from the Volta to the Assinee rivers. (*Dupuis*, par. ii., 29.) The trees have all the stupendous characteristics which mark African vegetation, but are strikingly different on the coast and in the interior. Near the sea flourishes the gigantic boabab (*Adansonia digitata*), the cactus (probably introduced from America), the mangrove (*Rhizophora mangle*), various species of palm, the cotton, and other large trees, mixed with a wild entanglement of thorny bush, itself growing to a size inconceivable to a European. (*Isert*, 98, 103, 140, &c.; *Barbot*, 205.) About 15 m. inland, on reaching the summit of the first mountains, the boabab disappears, but a tree equal in magnitude supplies its place (*Isert*, 255); the mangrove also vanishes, and palms become very scarce, except the oliferous (*Elæis guineensis*), and the viniferous (*Phœnix*). Instead of these appear many peculiar species, among which is one tall tree of great elegance, bearing flowers like the tulip; a new kind of aloe and citron; and, in a word, a whole forest of trees unknown elsewhere. (*Isert*, 246–247.)

N. of 7½° or 8° lat., trees and shrubs appear only in widely-distant patches, the lands are covered with jungle and Guinea grass, which grows to an enormous height and thickness; and which, being fired, is used by the natives to manure their plantations. (*Dupuis*, par. ii., 30, 34.) The sugar-cane grows wild; and the country produces, besides, tobacco, maize, dhourra, millet, yams, rice, potatoes, and all the alimentary plants, in the utmost profusion. Of fruits the list is interminable; including the pine-apple, orange, banana, cocoa, fig, papay, and, in short, all that are produced in any part of the world between the tropics. Of gums and aromatic plants the list is very great; as is likewise that of dye and hard woods. The exuberant abundance of aloes, balsams (*Gloriosa superba*), tuberoses, lilies, and amaranths, give to the flora of Ashantee a splendor and magnificence nowhere excelled, and but rarely equalled.—(*Bosman*, xiv., 267, 289; *Barbot*, 190–205; *Isert*, 118, 139, 183, 263; *Adams*, 172.)

The animals are as various and numerous as the plants. Elephants, rhinoceroses, giraffes (*Dupuis*, i., 55), buffaloes, deer, antelopes, sloths,* civet cats, apes, monkeys, baboons, porcupines, and goats, are among the harmless kinds; lions (*Dupuis*, i., 24, 49, &c.), tigers, leopards, jackals, wolves, wild boars, and wild cats, among those of a ferocious sort. The rivers swarm with hippopotami and alligators of several species, some of which are eaten by the natives. A gigantic rat, an odoriferous mouse, and a small animal called aroampo (*man-eater*), which digs up and devours dead bodies, seem to be peculiar to Ashantee. The domestic animals are the same as those of Europe; but the horse is scarce, and of a bad breed, and the sheep peculiar in form. Reptiles are prodigiously numerous: serpents of every size, from the enormous boa to a frightfully venomous creature, scarcely a yard long, infest not only the woods and long grass, but the dwellings of the natives, and the forts of the Europeans. Scorpions (sometimes as big as a small lobster) and centipedes—the wound from which, though not dangerous, is extremely painful—abound in every place; and toads and frogs are not only as plentiful as in Europe, but the former grow to such a size, that Bosman, when he first saw one, took it for a land-tortoise (p. 257). Lizards of all sizes; from the iguana downward, including two species of cameleons, are found here. (*Bosman*, 224–247, 257–259; *Barbot*, 206–216; *Isert*, 53, 103, 185, &c.; *Bowditch*, 327–329; *Adams*, 184–188.) Of birds, there are pheasants, partridges, wild ducks (of a beautiful plumage), doves, crown birds, parrots, paroquets, Guinea sparrows, beccaficcoes, and a multitude of all kinds, great and small, many of them yet unclassed by naturalists. The water-fowl—are herons, bitterns, and sea mews: the birds of prey—eagles, kites, and a peculiar species, which, though not larger than a dove, is bolder and more rapacious than any other. A large and ugly bird, called the pookoe (of great service in destroying the field-rats), is peculiar here, as is also a creature, about twice the size of a sparrow, with a remarkable hollow and piercing voice, the sound of which is regarded by the natives as of evil omen. The general characteristic of the Ashantee birds is extreme beauty of plumage; but pleasing voices are rare among them, the nightingale and thrush being the only songsters known. Sparrows and swallows are very numerous; and the domestic fowl are the same as those of Europe. (*Bosman*, 229, 248–256; *Barbot*, 217–230; *Isert*, 21, 104, 185, 257, &c.) The woods abound in bees, and the destructive species of ant, called termes, is so numerous and rapacious, that a sheep attacked by them during the night has been found a perfect skeleton in the morning. (*Bosman*, 260.) It is said they will attack any animal, even the most powerful and venemous serpent, and destroy him. (*Dupuis*, i., 28.) Fire-flies, dragon-flies, a fly exactly resembling the cantharides in appearance and scent, together with all the insect tribes common to the tropics, except the *musquito* (*Bowditch*, 321), are found upon the coast; and in the interior, Isert, among a vast variety of species, observed several which appeared to be peculiar. The locust is not wholly unknown, but its destructive visits are rare; owing, probably, to the great distance of the desert, and the intervention of high mountains between it and Ashantee. Black and hump-backed whales are numerous on the coast between September and December. Sharks are very numerous, are frequently captured, and form the most common food of the Gold coast negroes. Other sorts of sea fish are very abundant; and the rivers are as well supplied as the sea, yielding, among others, great quantities of oysters and crabs, which feed upon the branches of the mangrove and other trees, but are not good for food if the water be fresh. (*Bosman*, 16, 259–266; *Barbot*, 231–237; *Isert*, 95, 257, &c.; *Adams*, 188–195.) Gold is more abundant in Ashantee than in any other part of Africa, probably than in any other part of the world, not excepting even S. America. It is procured partly by washing the sands in the beds of rivers and torrents after violent rains, and partly by sinking mines or pits, in a very inartificial style, among the mountains, whence it is dug up for use. Of the amount obtained annually, Europeans are, and must be, ignorant; for the superstition of the natives deprives them of access to the mines, all of which are dedicated to the national gods, and some considered too sacred for even an Ashantee to cut into. The pits and washings in Tokoo alone, are, however, reported to yield sometimes as much as 2000 oz. per month; and Bosman, in 1726, gave the following as the average amount of the exports, which are now, probably, exceeded:

	Marks.		Lbs.
Dutch West India Company	1500	=	750
English African Company	1200	=	600
Dutch Private Traders	1500	=	750
English	1000	=	500
Prussians and Danes	1000	=	500
Portuguese and French	800	=	400
Total	7000	=	3500

Or above 1½ tons annually. (*Bosman*, 61–97; *Adams*, 169).

Population, Habits, Manners, and Customs.—Bowditch (p. 316) estimates the pop. of Ashantee Proper at 1,000,000; of whom 204,000, he says, are warriors; 101,000 children under ten years; 50,000 boys between ten and sixteen; 7000 old men; and 638,000 females; and the pop. of the whole empire may, perhaps, be somewhere about 3,000,000. The men are well made, more muscular on the coast than in the interior, free from the more revolting peculiarities of negro form and feature, and some of them have even aquiline countenances. The higher order of females (those not subject to hard labour) may be said to be handsome, with features rather of an Indian than an African mould. Both sexes are cleanly, washing from head to foot every day, and afterwards anointing themselves with the grease of the shea, or butter-tree; a good cosmetic, and a preservative of the skin in this hot climate. The clothes of the better classes are convenient, and not ungraceful, consisting of immense cloaks, exactly like the Roman toga, manufactured of the most costly silks. The war-dress substitutes for this a close vest, covered with metal ornaments and scraps of Moorish writing, as spells against danger, loose cotton drawers, and large boots of dull red leather. The superior chiefs have gold breast-plates; and all who can procure them wear gold ornaments in profusion. Some of these are well wrought, others are merely lumps of rock-gold hung to the wrist: the war-cap consists of gold or gilded ram' horns, supporting an extravagant plume of eagle's feathers. In peace, the head-dress is usually a fillet. The lower orders wear nothing but a piece of cloth fastened round the waist. Bosman (119–116) enumerates five degrees, or orders of so-

* These creatures, called by the natives Fotto and Youna, do not appear in Cuvier's list of Edentata. (V., 273–276.) They differ in many respects, as the size of the head, nature of the fur, &c., from the Tardigrada of America, but their habits are identical, and, unless wilful and gratuitous deception be supposed in authors of deservedly high credit, their existence in this part of Africa cannot be questioned. (See *Bosm.*, 297; *Barb.*, 213; *Dupuis*, i., 59.)

ciety—the king, the caboceers, the gentry, the traders, and the slaves. Besides the king, however, there is, in fact, but one distinction, that of slave and freeman; to the latter appertain, of course, all the better employments of war, state, &c.; to the former, all the meaner and more laborious occupations, of which the women get much more than their fair share. The caboceers (magistrates of towns and villages) are taken indiscriminately from the gentry; and these, again, are merely such as have enriched themselves by trade or inheritance, and who, not unfrequently, were born slaves. The occupations of trade are practised alike by the poorer freemen and the better class of slaves. The intercourse between the sexes is on the worst possible footing. Marriage is effected by paying a sum of money to the parents of the girl, and a family feast. The property of the man and woman (if she have any) does not become common. Polygamy is allowed; the king's wives amounting to the extravagant number of 3333, a mystical number which is carefully kept up, to enable him to reward any distinguished caboceer by the *present of a woman*, but never exceeded. Few, however, except the richest individuals, have more than one wife, and very many have none; for the husband having unlimited power of life, limb, and liberty, over his wife, (and prostitution being noways discreditable), females frequently refuse to marry: the father, in such cases, never attempting compulsion, but instantly disclaiming all future interest in his daughter. Infants are not unfrequently married to infants. The food of the higher classes is very various; soup of dried fish, fowls, beef, or mutton; wild hog, deer, and monkey's flesh! together with the whole host of vegetables which the soil produces. Well-stocked and well-regulated markets are held in the towns, for the supply of these necessaries, as well as for articles of clothing and European manufacture. The poorer classes, excepting household slaves, live almost exclusively on fish and dhourrah. The common drink is palm-wine, one species of which is said to create a ravenous appetite.

The Ashantees have two high festivals; one annually, at the yam harvest, in September; the other at intervals of about 21 days. The last is called the adai custom, and alternately the great and little adai. It forms the calendar; the year, which commences in October, being divided by it into equal parts, and terminated by the great yam festival. At these festivals, as on all public occasions, the most brutal excesses, and the most atrocious cruelties are practised. The skulls of all the kings and chiefs whose fall has swelled the power of the reigning monarch, together with those of rebellious caboceers, to the amount of more than 200, are paraded before the assembled multitude. Rum and palm-wine are swallowed like water, till the guests are brought to a state of intoxication and madness, when hundreds of human victims are sacrificed. They seem, in fact, to delight in cruelty and blood. The death of a free person is, in almost all cases, attended by the slaughter of a human being, to "*wet the grave;*" and that of a chief invariably causes a frightful sacrifice of life. If a man of ordinary rank marry a royal female, he must be killed on his wife's grave, should he happen to survive her; and the ocras (personal attendants on the king) are all murdered on their master's grave, together with many others, male and female, often amounting to some thousands. Cannibalism, as far as respects the blood and heart of an enemy, is practised, though not avowed: and the teeth and smaller bones of vanquished foes are ostentatiously worn as ornaments, the sculls and larger joints being preserved as public trophies. Such are the disgusting enormities perpetrated by this nation of savages; who, if they contrast advantageously with other negro tribes in energy and decision of character, yield to none in that cruelty and bloodthirstiness which seem to be leading features in the African character.

Singular as it may seem, the music of the Ashantees is said to be pleasing and melodious, and Bowditch has reduced to notes several airs that struck him as possessing merit. Their instruments are horns made of elephants' tusks, reed flutes, a sort of bagpipe without a drone, gongs, and cymbals. They have a game of chance, called worra, played with a number of shells and a board full of holes.* They play also the Polish draughts, and a third game, which, from its description, appears to resemble the childish amusement called "*fox and geese*," in Europe. To complete their character, it may be further observed, that they are great thieves and extraordinary observers of etiquette. (*Bosman*, 100–120, 160–170, &c.; *Isert*, 169, 210, 213, &c.; *Bowditch*, 274–308; *Hutton*, 84, 89, 92, &c.; *Dupuis*, i. 140, &c.)

Diseases and Remedies.—The Ashantees are subject to several malignant disorders, of which the most peculiar, and perhaps the most dreadful, is the "*Guinea-worm*," a reptile which, formed beneath the skin, causes the most frightful sufferings. It is sometimes so large as to pass quite round the body, but more frequently varies from five or six to eight or nine inches in length. Extraction is the only cure; but if in effecting this the worm be broken, to avoid which much care and patience is necessary, the part left behind corrupts in the body, tainting the whole mass of the wretched patient's blood. This loathsome disorder is supposed to be owing to bad water, which is the more probable as it is confined to the coast: in the interior, where the water is pure and good, it is unknown. Charms and amulets are much resorted to for cures: they have, however, some knowledge of medicine. Bowditch gives a list of thirty-seven simples, as forming their Materia Medica. Surgery does not form one of their arts; and those who are wounded, and recover, are indebted for their restored health to the *vis medicatrix naturæ*. (*Bosman*, 94–96; *Isert*, 217, 335; *Bowditch*, 370–380; *Hutton*, 363.)

Industry, Agriculture, Arts, Manufactures, Commerce.—Dupuis (i., 67) has justly remarked, that the labour of clearing away obstructions in a rankly luxurious soil is about equal to that of overcoming sterility in poor and barren lands. The former is the chief employment of the Ashantee agriculturist; and in this his chief instrument is fire, by means of which he both cleans the ground, and spreads a mass of rich manure upon the soil. The only implement in use is a rude hoe; but this is sufficient, in productive grounds, flooded twice a year, to produce two crops of most kinds of corn, and an abundant supply of yams and rice. The plantations are laid out with considerable order and neatness, and the cultivated grounds are pretty extensive, though inadequate to the wants of the consumers. Despite the fertility of the soil, the approach of harvest is almost always preceded by scarcity, if not by famine. Though they do not smelt metals, the Ashantees, like several of the African nations, have blacksmiths and goldsmiths of a superior grade to what might be expected. The former manufacture all their arms (excepts muskets), razors, &c. The goldsmiths forge sundry ornaments, as rings, chains, brooches, &c., and cast figures of tame and wild beasts. They are also great idol-makers, and are able to produce fine gold thread. The fineness, variety, and brilliance of the cloths of the native weavers would not disgrace an English loom; the patterns are painted by means of feathers, with sufficient regularity to have the appearance of a coarse print. Dyers, potters, tanners, and carpenters, complete the list of Ashantee artificers; of whose handiwork a number of manufactured and other articles, in case 6, room 1, of the British Museum, are specimens. The houses, generally of one story, are thatched, and the external walls decorated with a rude hieroglyphic sculpture: they are usually painted, but not floored; and pretty closely resemble an English barn. It should be mentioned, to their credit, that all good houses have their cloacæ, which agrees well with the Ashantee character for cleanliness; and evinces, in this respect, a superiority to most other negro nations. Commerce with Europe having now been carried on for some centuries, the natives have become shrewd and expert dealers: they practise all sorts of frauds; and their dexterity in adulterating gold equals that of a first-rate chemist. Barbot (230) affirms, that the Portuguese taught them this art, as a means of driving the other European nations from the coast; and if this be true, they have shown themselves, in this instance, much more expert scholars than in any other. Gold is now, perhaps, the chief article of export; and some little is also done in the way of exporting ivory, and dye and hard woods. Slaves are exported on every possible opportunity; and, notwithstanding the vigilance of the British cruisers, there is reason to think that considerable numbers find their way across the Atlantic. The imports are principally muskets and other arms, gunpowder, spirituous liquors, tobacco, iron, tin, copper, lead, with cotton and Indian goods, which are taken, chiefly for their colours, to be unravelled and remanufactured in the native looms. The last-mentioned articles are, however, received chiefly through the interior from Dagomba, Fezzan, &c., with which the Ashantees maintain a very extensive trade, supplying them in return with liquors, iron, and other European commodities, but never with arms. The currency is gold, either in dust or small lumps; but the cowrie-shells, in use farther N., are not unknown. The denominations and values may be given as follows: 200 cowries (5 strings) = 1 tokoo (about 8*d.*); 8 tokoos = 1 ackie; 16 ackies = 1 newemeen (ounce); 2¼ ounces = 1 benda; 1 1-9th benda = 1 perguin. (*Bosman*, 6, 109, &c.; *Barbot*, 196, 227–235, 262, &c.; *Isert*, 107–116, &c.; *Bowditch*, 304–314, 330–343, &c.; *Dupuis*, par. i., 65–67, par. ii., 69–73, &c.

Government, Constitution, Laws, Revenue.—Before the power of the Ashantee king had swallowed up that of the other states, each possessed its own peculiar form of government and administration; some, as Fantee, Mina, &c., were republics; others, and by far the greater number, were despotisms; but now all are alike brought under the Ashantee constitution, the legislative power of which lies professedly

* This game is played also in Syria, and is well described by Dr. Hogg (*Visit to Alexandria, Damascus, and Jerusalem*, ii., 67) under name of "mangala."

is the king, an aristocracy, consisting of only four persons, and the assembly of caboceers or captains. The aristocracy was formerly much more numerous; but Sai Cudjo, who reigned between 1753 and 1785, began to reduce it, by uniting the stool (seat of authority) of a deceased noble to that of one still living (*Bowditch*, 236); and this plan has been successfully pursued till the present result is the consequence. On all questions of foreign policy the aristocracy have a voice equal to the king's, extending even to a veto on his decisions. In domestic affairs they have considerable influence, but it is exercised in both cases privately, the public announcements always appearing to emanate from the sole will of the monarch. The assembly of caboceers has no deliberative voice: they are mere recipients of the laws promulgated by the king and aristocracy, to which, by their office, they are bound to give effect in their several governments. The influence of the aristocracy is curbed by their poverty: they are privileged from capital punishment, but may be despoiled for any offence, a regulation that has made and keeps them beggars; and thus, in effect, though not in form, the monarch is absolutely despotic. He is also heir to the gold of every one. The king's family are not exempted from capital punishment, but their blood must not be shed: if death be awarded them, they are drowned in the Dah. Death is the punishment for cowardice; for picking up gold dropped in the market-place; for killing *an equal;* for treason; and, in some cases, for theft and adultery. The common punishment for the latter is, however, fine, or, if committed in the open air, slavery; for the former, restitution by the friends of the thief. Mutilation is inflicted for many offences; but all accusations are mostly made at the peril of the accuser, who, if he fail to establish his charge, must himself undergo the penalty of the offence. Property is hereditary, but in a way that will appear rather extraordinary to Europeans, the children of the sister succeeding, on account of the uncertainty as to the wife's fidelity! This also is the law of succession to the Stool, or Throne. The state of the country, as respects security, may be inferred from the fact that interest of money is at 33⅓ per cent. for 40 days, and the creditor has the power of seizing his debtor and family as slaves. Two or three species of ordeal are practised in doubtful cases, one of which consists in making the accused chew about one-eighth of an ounce of a poisonous bark, and then drink three or four calabashes of water. If he vomit, he is pronounced innocent; but if his stomach be potent enough to retain the poison, it is held to be a conclusive proof of guilt. The revenue, as far as it can be ascertained, consists of—1st. The gold of deceased persons, and the goods of disgraced nobles. 2d. A tax on slaves purchased for the coast. 3d. The gold mines and washings in Sokoo, Dinkra, Akim, and Assin. 4th. The washings of the market-place. (See *Nat. Prod.*) 5th. Tributes from the recently conquered states, varying from 50 bendas to 200 penguins of gold annually. In some cases this tribute is taken in kind, the largest amount for any one town being 500 slaves, 200 cows, 400 sheep, 400 cotton cloths, and 200 silk cloths. (*Bosman*, 136–150, 171–177. *Bowditch*, 252–260, 319–321. *Hutton*, 87, 314–320.)

Religion.—The allegory of "The Book and the Calabash" is prevalent through all the Gold coast and the states of Ashantee. The Great Spirit, after creating three white and as many black men and women, placed before them a large calabash and a sealed paper, giving to the black race the choice of the two. They took the calabash, which contained gold, iron, and the choicest productions of the earth, but left them in ignorance of their use and application. The paper, on the contrary, instructed the white men in every thing; made them the favourites of the Great Spirit; and gave them that superiority which the negroes always readily acknowledge.*

From this fable it is clear that they have some notion of one supreme deity; but they have, notwithstanding, lapsed into the absurdities of fetichism (see AFRICA), or of the lowest and grossest species of idolatry. They have an evil principle, of whom they stand in great dread, but it is denied that they pay him adoration. On the contrary, it is said that one of the most solemn ceremonies of many tribes is an annual assembly of men, women, and children, to drive the evil spirit from the towns and villages. They have a fixed belief in a future state—kings, priests, and caboceers being believed, after death, to reside with the Great Spirit, in an eternal renewal of their earthly state: and it is said that the sacrifice of so many human beings on the graves of their kings is intended to supply them with attendants in the future world. The victims also, it is affirmed, are not altogether averse from this sacrifice; since by it they believe they will partake the superior heaven of their chiefs; their own being, at best, merely a release from labour in the house of some inferior fetish. An uncommon number of charms, omens, lucky and unlucky days, and an implicit submission to the fetish, completes the superstition (for it would be absurd to call it religion) of the Ashantees. In some tribes, Tuesday is observed as the general Fetish day or Sabbath; but different families generally consecrate different days; all, however, observing one. There are many Mohammedans among the Ashantees; some, by their lighter complexion, attesting their Arabic origin; but the majority are not distinguishable from the other negroes. They have great influence in the court of Coomassie, are subject to their own officers in all spiritual affairs, and, where very numerous, as is the case in several towns, are governed by them also in temporal matters. (*Bosman*, 121–136; *Barbot*, 304–317; *Isert*, 187–196; *Bowditch*, 261–273; *Dupuis*, par. ii., 10, 15; *Adams*, 196–200.)

Language.—The European who has observed the affinities among the languages spoken in his own division of the world, the W. of Asia, and even the N. of Africa, is ill prepared for the Babel of tongues that prevails S. of the Sahara. In 60 m. of the Gold coast, no fewer than seven or eight languages are found, each unintelligible to the tribes speaking the other, and bearing no relation whatever to any other (*Bosman*, iii.). Bowditch (*Appendix*, 503) gives the numerals of thirty-one tribes, whence it appears that, though some few may be considered as variations from the same root, the majority do not assimilate in the slightest degree. The Ashantees, Fantees, Wossaus, Akimese, Assinese, and Aquapims, speak dialects of the same language; but for the rest of the tribes that make up this barbarian kingdom, an imaginary line often separates two who possess no means of social intercourse. This formidable obstacle to all communication is, no doubt, a chief cause of the continued degradation of the negro race, more especially as none of their languages possess symbolical characters. In Ashantee, as in other parts of Africa, the only persons who can read or write are the Moslems, and the only written language the Arabic. (*Isert*, 180–182; *Bowditch*, 344–360; *Hutton*, 368–384; *Adams*, 195.)

History.—The Ashantees have two traditions as to their first establishment in their present homes; first, that they came in twelve tribes from a country nearer the sea (*qu.* the Atlantic?); the other, that they were driven from the interior by the Mohammedan conquests in the first days of Islamism. (*Bowditch*, 228; *Dupuis*, 224.) It may be that these accounts, though apparently contradictory, are but different versions of the same tale. But, without stopping to inquire into this, we find them, in 1640, seated in the centre of their present possessions, and occasionally exercising an influence over the surrounding states of Akim, Assin, Quahou, and Akeya. Then, and for near a century later, the paramount state of the gold countries was Dinkra; but in the beginning of the 18th century, the king of that country having deflowered a wife of the Ashantee monarch, the latter, though considered a very inferior potentate, invaded the Dinkran territories, defeated his enemies in two decisive battles, killing, it is said, 100,000 men, and carrying off immense plunder. (*Bosman*, 67.) Dinkra, upon this, became attached to the Ashantee dominions, and from this epoch the extension of the latter proceeded rapidly. One by one the different states between the Assinee and Volta rivers were subdued; and, in 1807, the invasion of Fantee brought the Ashantees into collision with the British. Cape Coast castle, the principal fort of the English on the Gold coast, was in the Fantee country, and held, like the other European forts upon that coast, not as a territorial right, but at a rent from the native government. After the conquest of Fantee, the rent was claimed by and paid to the king of the Ashantees; but some difficulties made about recognising his sovereignty led to much discussion, and to two embassies (those of Bowditch and Dupuis) to the court of Coomassie. In justice to the king it must be admitted, that, whatever may be thought of his conduct to the natives, an uncommon degree of forbearance marked his behaviour to the British authorities. The treaty concluded by Dupuis in 1820 was not ratified by the council at Cape Coast castle, because, by the fifth article, it recognised the questioned sovereignty of the Fantee country; but the heart-burning necessarily consequent on this step did not break out for some time after. The death of Sai Quamina (king of Ashantee), who, according to Dupuis and Bowditch, was the steady friend of the whites, seems to have been the signal for hostilities. His successor declared war against the English; and on the 21st of January, 1824, Sir C. M'Carthy, governor of Cape Coast, at the head of 1000 men, was totally defeated by the Ashantees. It took almost three years before the English power on the Gold coast recovered from this blow; but in 1826, the Ashantees having suffered a ruinous defeat, consented to pay 6000 oz. of gold as the price of peace, and to send the king's son for education, or, rather, as hostage, to Cape Coast castle. The Ashantee power on the coast, since this event, may be considered as nearly destroyed. (*Bowditch*, 228–250; *Dupuis*, 224–264; 194–223; *Public Papers for* 1826.)

* Some believe that the reward of virtue in this world is, to be transformed into white men in the next. (*Bosman*, 131.)

ASHBOURNE, a m. town of England, co. Derby, on the E. side of the Dart, 122 m. N.W. London, 13½ N.W. Derby. The parish, in which the town is situated, contains 12,000 acres, and had, in 1831, 4884 inhab., of which about a half belong to the town. It has an old church with a fine spire, a free grammar school, two elementary schools, one for 30 boys, and the other for 30 girls, alms-houses for poor men and women, and some other charitable institutions. Dovedale, famous for its romantic beauties, is in the immediate vicinity of this town.

ASHBURNHAM, p. t., Worcester co., Mass., 53 m. N.W. Boston, 426 W. It occupies the height of land between Connecticut and Merrimac rivers, its streams flowing to the former through Miller's river, and to the latter by Nashua and Souhegan rivers. Incorporated in 1765. It contains three churches, one Congregational, one Methodist, and one Baptist; five stores, one cotton factory, three grist-mills, eighteen saw-mills, three tanneries, ten schools, 549 scholars. Pop. 1652.

ASHBURTON, a borough, m. town, and par. of England, co. Devon, hund. Teignbridge, the borough being situated within 1½ m. of the Dart, on the high road from London to Plymouth, 170 m. W.S.W. London, and 19 m. S.W. Exeter. The parish contains 8390 acres, and had, in 1831, a pop. of 4165, of whom 3467 belonged to the town. It has a handsome Gothic church, with a tower 90 feet in height, a grammar school, and free schools, which supply elementary instruction to about 100 children. It is the seat of one of the stannary courts. Serge is, or was, manufactured in the town; and there are tin and copper mines in the vicinity. Previously to the Reform Act, Ashburton returned two m. to the H. of C., the franchise being vested in freeholders having lands and tenements holding of the borough only. The Reform Act deprived it of one m., and made the boundaries of the parish and parl. bor. identical. Constit. in 1836–37, 193. It was the birth-place of Dunning, the famous lawyer, who was created Baron Ashburton; and of William Gifford, the translator of Juvenal, and the original editor of the Quarterly Review, who, on his death, left a legacy to the town. It now gives the title of baron to the head of the family of Baring. (*Boundary Report, &c.*)

ASHBY-DE-LA-ZOUCH, a m. town and par. of England, co. Leicester, hund. W. Goscote, 116 m. N.W. by N. London. The par. contains 8200 acres, and 4727 inhab., of whom about 4000 may belong to the town. It consists of one main street, and some smaller ones; has an old church, several free schools, for girls as well as boys, and manufactures, on a small scale, woollen and cotton stockings, and hats, and has some trade in malting. In the vicinity are the extensive remains of Ashby castle, built by Lord Hastings, in the reign of Edward IV., and dismantled in that of Charles II.

ASHBY, p. t., Middlesex co., Mass., 47 m. N.N.W. Boston, 443 W. A head branch of Nashua river affords water power. It has two Congregational churches, four stores, two grist-mills, seven saw-mills, one academy, 50 students, nine schools, 375 scholars. Pop. 1246.

ASHE, county, N.C., situated in the N.W. part of the state, and contains 840 sq. m. Drained by head waters of the Great Kanawha and Holston rivers. There were, in 1840, 13,611 neat cattle, 16,522 sheep, 24,071 swine, and there were produced 10,836 bushels of wheat, 17,805 of rye, 150,279 of Indian corn, 108,505 of oats, 57,982 of potatoes. It had eight stores, fifty-seven grist-mills, twenty saw-mills, ninety-seven distilleries, three tanneries, two schools, 58 scholars. Pop.: whites 6911; slaves, 497; free coloured, 59; total, 7467. Capital, Jeffersonton.

ASHFIELD, p. t., Franklin co., Mass., 108 m. W. Boston, 403 W. Watered by branches of Deerfield and Westfield rivers. Incorporated in 1764: It contains four churches, one Congregational, one Episcopal, and two Baptist; four stores, three fulling-mills, two woollen factories, one grist-mill, ten saw-mills, thirteen schools, 366 scholars. Pop. 1610.

ASHFORD, a m. town and par. of England, co. Kent, lathe of Scray, the town being situated on an eminence near the junction of the upper branches of the Stour, 47 m. E.S.E. London, 14 m. S.W. Canterbury. The par. contains 2950 acres, and 2809 inhab. The church, a Gothic fabric of considerable note, has a lofty, well-proportioned tower, and several ancient monuments. There is a free grammar school of some eminence, founded in the reign of Charles I. by an ancestor of the present Sir Edward Knatchbull, and some other charities.

ASHFORD, p. t., Windham co., Ct., 32 m. E. Hartford, 368 W. Several small streams afford good water power. Incorporated in 1714. It contains seven churches, three Congregational, three Baptist, and one Methodist; twelve stores, two woollen factories, two grist-mills, eight saw-mills, one academy, 32 students, eighteen schools, 817 schol. Pop. 2651.

ASHFORD, p. t., Cattaraugus co., N.Y., 295 W. by S. Albany, 345 W. Drained by Cattaraugus creek and its tributaries. It contains one store, one fulling-mill, one grist-mill, five saw-mills, ten schools, 346 scholars. Pop. 1469. The village contains one church, thirty dwellings, and about 200 inhabitants.

ASHLAND, p. v., Richland co., O., 79 m. N.W. Columbus, 368 W. It contains two churches, one Methodist and one Presbyterian, seventy dwellings, and about 500 inhabitants.

ASHPORT, p. v. Lauderdale co., Tenn., 206 m. W. by S. Nashville, 888 W. Situated on the E. side of the Mississippi, at the lower end of the Canadian reach, and contains several warehouses and a steam-mill. Pop. about 200.

ASHRUFF, a town of Persia, prov. Mazunderan, about 8 m. from the W. extremity of the bay, and 52 m. W. from the city of Asterabad. Near it are the ruins of an extensive and magnificent palace, built by the greatest of the Persian monarchs, Shah Abbas. The town, which was in a great degree dependant on the palace, has been seriously affected by the decay and ruin of the latter, and did not, in 1821, contain above 500 houses, thinly scattered through an extensive jungle. (*Frazer's Caspian Sea*, p. 19.)

ASHTABULA, county, O., situated in the N.W. part of the state, and contains 700 sq. m. Watered by Grand and Ashtabula rivers, which flow into lake Erie. The head waters of Shenango creek, in its S.E. part, flow into Beaver river, and thence into the Ohio. Organized in 1811. It had, in 1840, 30,019 neat cattle, 39,638 sheep, 13,143 swine, and produced 105,693 bushels of wheat, 4229 of rye, 171,576 of Indian corn, 4495 of buckwheat, 142,256 of oats, 156,305 of potatoes, 53,975 pounds of tobacco, and 148,568 of sugar. It had six foreign commercial houses, sixty-six stores, sixteen fulling-mills, four woollen factories, four furnaces, twenty-nine tanneries, four distilleries, thirty-four grist-mills, seventy-two saw-mills, two printing-offices, issuing two weekly newspapers, four academies, with 421 students, 133 schools, 5769 scholars. Pop. 23,794. Capital, Jefferson.

ASHTABULA, p. t., Astabula co., O., 204 m. N.E. Columbus, 341 W. Situated on the S. shore of lake Erie. Watered by Ashtabula river. It has thirteen schools, 720 scholars. Pop. 1704. The village is situated on both sides of Ashtabula river, 2 miles from its entrance into lake Erie, and contains two churches and ten stores.

ASHTON-UNDER-LYNE, pa. of England, co. of Lancash., hund. Salford, 6 m. long N. to S., 4 m. broad; area, 9300 acres. Pop. in 1801, 15,633; 1821, 25,967; 1831, 33,507; nearly half of whom resided in the town of Ashton; and about 10,000 in the hamlets of Lees, Mossley, Audenshaw, and part of Stayley-bridge. At present (1839), the pop. probably exceeds 42,000. Most parts of the parish abound in coal. There are about twenty shafts in operation, and the number of miners may be from 600 to 700. This is one of the principal seats of the cotton manufacture, and most part of the pop. are employed in and dependant upon it for support. There were, in all, about eighty cotton factories, employing about 18,000 hands, in the parish in 1839; of which forty-two factories and 9000 hands belonged to the town of Ashton; twenty-eight factories and 7000 hands to Staley-bridge, Mossley, &c.; and ten factories and 2000 hands to the rest of the parish. Stout printing calicoes and ginghams are the articles principally produced. The woollen manufacture is but inconsiderable. The manor and ecclesiastical patronage belong to the earl of Stamford.

ASHTON-UNDER-LYNE, a m. town of England, co. of Lancashire, in the above pa., on the N. bank of the Tame, 187 m. N.W. by N. London, and 6½ m. E. Manchester. Pop. in 1821, 9250; in 1831, 14,670. It is well laid out, well built, and is eminently thriving. Its rapid growth is owing to the still more rapid extension of the cotton manufacture. Exclusive of the factories engaged in the cotton department (see previous article), it has a hat manufactory and a silk-mill; an old and a new church, with numerous chapels and other places of worship; an excellent market, the buildings connected with which cost above £10,000, has been erected within these few years; and it has a court-house, a theatre, concert-room, &c. The free school is but slenderly endowed; but there are several other schools; a mechanics' institute, with 300 members, and six large Sunday schools, having each from 1000 to 1200 children.

There are at present (1838) four banks in the town. Market-day, Saturday. There is a cattle market on the first Saturday in each month. Fairs, March 23, April 29, July 14, 15, and 25, Nov. 10, and Nov. 21.

Ashton is admirably situated for trade and manufacture, in the centre of a populous neighbourhood, having an unlimited command of coal, and communicating by means of canals and railways (now in the course of being formed) with all parts of the empire. It was anciently a borough, but, for some cause or other, has long been disfranchised. The Reform Act conferred on it the privilege of sending one m. to the H. of C. It had in 1831, 612 £10 houses, and, in 1837–8, a constituency of 617.

ASHVILLE, C.H., p. v., capital of Buncombe co., N.C., 258 m. W. Raleigh, 486 W. Situated on French Broad river, and contains a court-house and several stores and dwellings.

ASHVILLE, C.H., capital of St. Clair co., Alabama, 97 m.

N.B. Tusaloosa, 720 W. Situated on the S.E. side of Canoe creek, and contains a court-house and several dwellings.

ASHUELOT, river, N.H., rises on the S. of Sunapee mountain, in Washington, and flows S. and E. to its entrance into Connecticut river, in the S. part of Hinsdale.

ASIA, the largest, most early civilized, and, in many respects, the most interesting of the great divisions of the globe, extends from 1° 20′ to 78° N. lat., and, when the islands belonging to it are included, from 11° S. lat. From west to east it extends from 26° to 190° E. long. The most northerly point of the continent is cape Taimura, 78° N. lat.; the most easterly, cape Tshukotskoi Noss, 190° E. long.; the most southerly, cape Buros, 1° 20′ S. lat.; and the most westerly, cape Baba, in Asia Minor, 26° E. long. Cape Taimaura and cape Buros are more than 5300 m. distant from each other, and this, consequently, is the extent of Asia from N. to S. Its greatest breadth occurs under the parallel of 70° N. lat., between cape Baba and the E. coast of the Corea, where it extends about 5600 miles from W. to E. Its surface is supposed to cover about 17,500,000 sq. m., being above four times the area of Europe.

I. Sketch of Asia.—On the N. Asia is washed by the Arctic sea, which separates it from the Arctic countries of America; on the E. by the Pacific ocean, which divides it from the continent of America; on the S. by the Indian ocean, which lies between it and Australia; on the W. it is conterminous with Africa and Europe. The boundary line between it and Africa is formed by the gulf of Aden, the straits of Babelmandeb (where both continents are only about 16 miles apart), the Red sea, and the isthmus of Suez, where both continents unite for about 70 miles. Asia is separated from Europe by the Mediterranean sea, the Ægean sea or Archipelago, the straits of the Dardanelles, the sea of Marmora, the channel of Constantinople, and the Black sea. From the eastern shores of the latter sea, the boundary line runs along the crest of mount Caucasus to the Caspian sea, which constitutes the boundary as far as the mouth of the river Oural. Thence it follows the course of that river up to its source in the Ouralian range, which latter forms the remainder of the boundary line to the gulf of Kara, E. of the island of Nova Zembla.

To the S. and S.E. of Asia is the greatest of all archipelagoes, containing many thousands of large and small islands. These belong partly to Asia, and partly to Australia, but they are not separated by any natural boundary. When the Portuguese and Spaniards began to be acquainted with the islands of India, they conquered or settled those only which were supposed likely to repay the expense and trouble. These were then, and are still, considered as belonging to Asia. The others, which did not offer such advantages, and were not settled or visited at that time, are now included in Australia. In this way, Japan, Formosa, the Philippines, the Moluccas, and that long chain of islands, which in the east begins with Timoriant, and on the west terminates with Java, are considered as belonging to Asia, while the numerous islands dispersed between the Moluccas and New Guinea, and lying at a short distance from the former, are included in Australia.

In looking at the map of Asia, we are struck by observing that the Pacific ocean, which divides it from America, nowhere reaches immediately to the coasts of the continent, but is separated from them by several chains of islands, which, with the coast, form a number of smaller sea-basins. The most northerly of these sea-basins is the *sea of Kamtschatka*, lying between the N.E. extremity of Asia and the N.W. of America, and separated from the Pacific by the Aleutian islands. The Kurilian islands, extending from cape Lopatka to Yeso, the most northerly of the islands forming the empire of Japan, separate another sea-basin from the Pacific; it is called the *sea of Tarakai*, from the large island forming its W. side, and commonly called Saghalien. Farther S. lies the *sea of Japan*, shut up by the islands constituting that empire and the opposite coasts of Manchooria and Corea. Then follows the sea, called *Tongo Hai* (Eastern sea) by the Chinese, with its extensive northern gulf, the Wang-Hai (Yellow sea). This basin is more open towards the Pacific, its entrance being shut up only by two or three small groups of islands, among which the Loo Choo have obtained some celebrity in later times. The island of Formosa forms the southern boundary of this basin. From this island to the equator extends the *Han-Hai* (Southern sea) of the Chinese, called by the Europeans the *Chinese sea*, because it is traversed by them in their voyage to China. The eastern boundaries of this basin are the Philippines and the islands of Palawan and Borneo, and it forms two great gulfs in the continent, those of Tonkin and Siam. The formation of these five sea-basins is partly owing to the three great peninsulas which project from the continent, the peninsula of the Tshuktshes, occupying 66,000 sq. m., and those of Kamtschatka and Corea, which are nearly of the same extent.

The S. coast of Asia is not surrounded by close seas, but is quite open to the Indian ocean, except where it borders on the Chinese sea; but in these parts are several gulfs which deeply penetrate into the continent, and thus form extensive peninsulas. The principal are the bay of Bengal, the sea of Arabia, the Persian gulf, the gulf of Ajan, and the Red sea, separating Asia from Africa. The peninsulas which occur on this side are those of India without the Ganges, which has an area of nearly 800,000 sq. m., India within the Ganges, and Arabia. Each of the last-mentioned comprising upwards of a million sq. m.; the three together being nearly equal to Europe in extent.

Where Asia approaches Europe, we meet the large peninsula of Asia Minor, covering a surface of more than 200,000 sq. m., which, being surrounded by the Mediterranean and Black sea, facilitates the intercourse of both continents by sea as well as by land.

The N. coast of Asia, indented by numerous deep bays, and having several projecting tongues of land, would give great advantages to maritime intercourse with other countries, did the severity of the climate not render them inaccessible all the year round. They are nearly everywhere enclosed by ice.

1. *Great Northern Plain.—Conformation of the Surface.—Rivers.*—Along the coasts of the Arctic sea, always covered with ice, except in the summer months, when it is open along the shores to a distance of a few miles, extends the greatest plain of the globe. This plain not only covers nearly the whole of northern Asia, but advances westward, extending over the east of Europe, and reaching to the very shores of the North sea, opposite Great Britain. We may even affirm, that the low and level countries which in England occur along the North sea between the Thames and Humber, constitute the farthest W. corner of this vast plain. For, a traveller departing from London, and advancing eastward between the parallels of 52° and 53° N. lat. as far as 85° E. long., and hence between 55° and 56° N. lat., will arrive at Takutsk, on the river Lena (130° E. long.), without having passed any mountain-range. The highest ground in his way would occur about 66° E. long., between the river Oural and the sources of the Tobol, where a chain of hills rises, but only to an absolute height of less than 2000 ft. In this long journey he would have traversed 130 deg. of long., or more than a third part of the curvature of the earth, and this is the length of the great plain in this parallel. But along the Arctic sea it stretches farther east, and terminates at 165° E. long. on the banks of the river Kolyma.

This plain would extend from the Atlantic to the Pacific sea, but for two mountain-ranges, which rise at its western and eastern extremities, like high walls, to protect it against the encroachments of the sea. At its western extremity are the Scandinavian mountains, lying N.N.E. and S.S.W. At its eastern extremity are the Aldan mountains, which extend from 55° N. lat., close along the shores of the sea of Tarakai or gulf of Okhotzk in a W.S.W. and E.N.E. direction, till they terminate on Behring's strait with East cape and cape Tshukotskoi Noss. The S. extremity of this range is at the sources of the river Aldan (about 55° N. lat.), closely connected with the chain of the Great Khing-Khan. It occupies a considerable width, being probably nowhere less than 150 miles across, but does not rise to a considerable height, the highest of its summits which have been measured attaining only 4055 feet above the sea, and its mean elevation being estimated at less than 2000 ft. Its N. branches fill up the whole country between the peninsula of Kamtschatka and the Polar sea with mountains of moderate elevation, many of which, however, are always covered with snow on account of their high latitude near the polar circle.

It is worthy of remark, that in the seas adjoining the two boundary ranges two of the most active volcanic systems are met with. To the west of the Scandinavian mountains a great number of volcanoes are placed on the island of Iceland, and, as it seems, also on the neighbouring island of Jan Mayen. On the east of the Aldan range the peninsula of Kamtschatka offers a similar phenomenon. It seems that the chain of mountains is mostly covered with volcanic matter, and several very high summits are still active volcanoes. The highest of the two summits of the volcano of Shiveluah rises to 10,591 feet above the sea, and that of the volcano Kliutshewsk even to 15,825 feet. The tracts of low land which extend along the sea coasts of this peninsula are partly covered with thick forests, and partly with fine grass, but neither agriculture nor the rearing of cattle is attended to, the very scanty population finding it more easy to get its subsistence by fishing.

Besides the two ranges, forming the boundary of the plain to the E. and W., it is nearly in its middle traversed by another chain, the Ouralian mountains, which run nearly due N. and S., on both sides of 60° E. long. This range, which in breadth occupies hardly anywhere more than 50

or 60 m., exhibits near its N. extremity a few summits, which rise to from 4000 to 5000 ft. But the mean elevation is probably not more than 2000 ft. above the sea. Between 56° and 54° are also some summits which attain between 4000 and 5000 ft. At the sources of the river Oural the range lowers considerably, and divides into several ridges, of which one, called the hills of Mugodsharsk, advances in a S.W. direction, and terminates on the plain which divides the Caspian sea from the lake of Aral. Thus this chain does not join the mountain ranges in the interior of Asia.

Nearly in the middle of the S. border of the Great Plain, on both sides of the hills of Mugodsharsk and the countries lying S. of it, between 45° and 64° E. long., occurs the most remarkable depression on the surface of the earth. A tract of country, extending over an area of more than 300,000 sq. m., exclusive of the Caspian sea, is, according to the supposition of Humboldt, lower than the surface of the ocean. The lowest part of it is occupied by the Caspian sea, which was supposed by Humboldt to be no less than 348 ft. below the surface of the Black sea; but later, and it is believed more correct, measurements make the level of the Caspian sea only 116 ft. below, and that of the lake of Aral 14 ft. above the level of the Black sea. According to Humboldt, this depression extends between the rivers Kooma, Wolga, and Oural, up to a line drawn from Saratow to Orenburg, whence its boundary runs to the lake of Ak-sa-kal (48° N. lat., and 63° E. long.), and then includes the countries traversed by the lower courses of the Sir-Daria (Sihoon, *Jaxartes*) and Amoo-Daria (*Oxus*). This country is so little elevated above the great lakes, which lie in the midst of it, that a strong N.W. wind of some continuance forces their waters over many miles of the adjacent tracts. Its soil consists partly of sand and partly of hard clay, on which neither trees nor shrubs grow, and which, only in spring, after the melting of the snow, is covered with a scanty but nourishing grass and numerous flowers. It is only used as pasture by the nomadic tribes which wander about in this desert. Natural wells are nowhere found, but water is met with on digging some feet down in those districts which have a sandy soil, but not in those where it consists of clay. Along the banks of the water-courses trees and shrubs grow, and the soil is fit for agricultural purposes, but is commonly used as meadows.

Along the shores of the Caspian sea this low and desert country extends to the very edge of the table-land of Iran (Persia), where it terminates between 36° and 37° N. lat., but from the table-land of Eastern Asia it is separated by a mountain region, which comprehends the countries of Khokan and Badakshan, and between them and the desert extends Bokhara, whose surface is broken into ridges of moderate height, and valleys of considerable width, which, being watered by artificial means, are very productive of all kinds of grain and fruit. This country, therefore, offers a succession of fertile and sterile tracts over the whole of its surface.

The Caspian sea, which covers a surface of 120,000 sq. m., is very deep towards its S. extremity, where it is surrounded by the mountain ranges of Iran, but where it borders on the desert it is shallow. Its waters are salt. The lake or sea of Aral, lying farther east, has a surface of between 40,000 and 50,000 sq. m., and its waters are likewise salt, as is the case with all the numerous smaller lakes which occur in the abovementioned depression. The lake of Aral receives the two largest rivers, which drain the S. parts of the desert, and descend from the table-land of E. Asia. The Sir-Daria, which in its upper course flows through Khokan, runs about 950 m., and the Sir-Amoo, which rises in Badakshan, and flows through Bokhara, and afterwards through the desert, has a course of nearly 1100 m.

The Oural dividing Asia from Europe, the great plain is divided between these two continents. Though that portion of it, which belongs to Europe, has immense tracts of very fertile land, especially in the centre of Russia, the plain of Siberia nowhere exhibits such a soil. Those parts which lie contiguous to the great depression, and as far E. as 82° E. long., are steppes, that is, level countries with a sandy, gravelly, or clayey soil, destitute of trees, except along the bottoms of some of the rivers, and covered partly with low shrubs, and partly with coarse grass, which affords only very scanty pasture. In most parts they are destitute of water. The great steppe of Barabinskaja, between the river Yrtish and Obi, is partly covered with large swamps, and intermingled with numerous salt-lakes, some of considerable extent; the remainder has a dry sterile soil, but when it begins to rise in hills towards the Altai range, many districts are fit for agriculture and are cultivated. This last observation applies still more to the countries farther E., between the river Oby and Yenesei, where agriculture has already advanced from 56° N. lat., to Krasnoyarsk. This portion of the plain is considered the granary of Siberia. Its surface is rather hilly. The countries lying E. of the Yenesei do not exhibit a level plain, but rather an undulating surface, which in some parts is even broken. But as the climate is less mild than farther west, agriculture is only pursued in a comparatively few sheltered places, and the rearing of cattle and the chace affords subsistence to its scanty population. This part of the plain is covered with immense forests of pines, birch, &c. of which the W. steppes are destitute, and its pastures are also much richer. That portion of the plain which extends N. of the polar circle has its surface frozen ten months of the year, and even in July ice is met with at the depth of a foot. It is an immense desert, covered with moss, and interspersed with numerous lakes and swamps. In summer its whole surface is changed into a swamp, and then it is inaccessible. This mossy desert is called *tundra*. It is worthy of remark, that at the mouth of the Lena, and between it and that of the Indighirka, immense masses of bones, and even entire skeletons of elephants, rhinoceroses, and antediluvian animals, are found imbedded in the ice, which never is dissolved by the rays of the sun.

This plain is drained by numerous rivers, which, descending from the Altai mountains, on the southern border of the plain, traverse it in a northerly direction. Some of them may be enumerated among the largest rivers of the globe. Such are the Obi or Oby, which unites with the Yrtish, and whose whole course rather exceeds 2000 miles. The Yenesei is still longer; for if we take for its source the Selenga, which falls into the lake of Baikal, and issues from it under the name of Lower Angara, but changes it afterwards into that of Upper Tunguska. It runs not less than 2500 m. The Lena, which is joined by the large tributaries Witim and Aldan, has a course of hardly less than 2000 m. Farther E. is the Yana, which flows about 400 m., the Indighirka about 700 m., and the Kolyma 900 m.

2. *Elevated Table-land of Eastern Asia.*—The boundary of this extensive region lies near the parallel of 50° N. lat. between 82° and 128° E. long. On the W. the boundary is formed by a line extending first from 50° N. lat. and 82° E. long., to 40° N. lat. and 73° E. long., and hence nearly due S. to 34°. From this point it follows the range of the Himalaye mountains in its S.E. direction, to 82° E. long., where this chain, which constitutes the S. edge of the table-land, begins to turn nearly due E., and continues in that direction as far as 97° E. long., near the parallel of 28° N. lat. Hence it passes S.E. to the table-land of Yu-nan, 25° S. lat., and 103° E. long., which forms the most southerly point of the Great table-land of Eastern Asia. The eastern boundary runs along the range of the Yun-ling mountains, which extend from the most southerly bend of the river Yang-tse-kiang (26° N. lat., and 103° E. long.), in a N.N.E. direction to the most northerly bend of the river Hoang-ho (41° N. lat., and 109° E. long.). At this place the Yung-ling is divided only by the narrow valley of the river from another mountain range, the In-shan, which hence forms the boundary of the table-land running E. to 116° E. long., where, turning to the N., the mountain chain is called Khing-khan, and meets the N. boundary of the table-land between 51° and 52° N. lat., and 121° E. long.

The whole of the immense area included within these lines is considerably elevated above the level of the sea. Only a few comparatively small tracts of country are supposed to have less than 3000 ft. of absolute elevation, and many of its southern plains rise to more than 10,000 ft. According to our scanty information, we may suppose that the whole country rises continually higher in form of terraces as it approaches its southern boundary, the Himalaya range. But, examining the course of the rivers, we are obliged to suppose, that this country gradually declines towards the east, as those rivers which flow from it to the west rise only on the very borders of the table land, but many of those, which traverse its internal plains, descend to the Pacific sea. Even those, which are not connected with the sea, but terminate in lakes having no outlet, run mostly from W. to E.

This table land does not extend in one uninterrupted plain, but besides its being almost everywhere surrounded by mountain ranges, its interior is likewise traversed by several extensive chains. We shall first indicate the ranges which are met on its borders, then those in the interior, and make a few observations on the countries lying between the mountain chains.

Along the N. edge of the table-land runs the Altai range, a chain of mountains which varies in width between 200 and 300 miles, and extends along the table-land about 1400 miles in length, but it continues more than 600 miles farther E., terminating at the mouth of the river Amur. The name of Altai properly applies only to the W. portion as far as the lake of Baikal, that portion which lies S.E. of the lake being called by the Russians Da-urian mountains, and by the Mongols Khing-gan. That part of the chain, which lies farther E., is named by the Russians Yablonoi Khrebet, and by the Mongols and Chinese Khing-khan Tagurick. The highest part of the range is near its W. extremity, where, on the banks of the river Tabunya, an upper

branch of the Oby, it rises in some summits to more than 10,000 ft. above the level of the sea, and is always covered with snow. The mean elevation of the whole range probably does not exceed 5000 or 6000 ft., but the larger portion of it, lying within the Chinese empire, has not been examined. In this range is embosomed the greatest alpine lake, that of Baikal, 355 m. in length, by 30 and 40 m. in width, and covering a surface of 14,800 sq. m., so that it is larger than half Scotland.

The W. boundary of the table-land, between 50° N. lat. and 82° E. long., and 40° N. lat. and 72° E. long., is not formed by a mountain chain, but by a country with a broken surface, which we shall notice hereafter. But between 40° and 34° N. lat. a continuous range rises to a great height. It is called, on our maps, Bolor Tagh, but, by the natives, Tartash, and by the Chinese geographers Tartash-i-ling. We know nothing of it, except that it rises to a very great elevation.

The vast range of the Himalaya mountains runs along the S.W. and S. edge of the table-land, from 34° N. lat. and 73° E. long., to 28° N. lat. and 97° E. long., being about 1300 m. in length, and from 250 to 350 m. across. From the low plains of India, which border on the range on the S.W., the mountain mass rises abruptly to about 4000 or 5000 feet. Behind it lies a belt of an extremely broken surface, from 100 to 200 m. in breadth, overtopped by numerous high summits, which grow higher and higher as they approach the table-land. The base on which they rest also rises gradually, till it attains near the table-land the height of 8000 or 9000 ft. Then follows the highest portion of this stupendous range, the crest of the *Himâus* or *Imâus* of the ancients, some of whose summits exceed by 10,600 and 11,000 ft. the altitude of Mont Blanc, and are the highest in any country hitherto discovered. The Dhawalagiri (28° 30′ N. lat., and 83° 30′ E. long.) attains 26,862 ft. above the sea, and the Chamalari (29° N. lat., and 89° 30′ E. long.) is probably but little lower. The Tawahir (30° 22′ N. lat., and 79° 57′ E. long.) rises to 25,749 ft. There are probably above 200 summits which rise more than 18,000 ft. above the sea, and are covered with eternal snow. In fact, the name Himalaya or Himaleh is merely a Sanscrit term for snowy; a circumstance of which Pliny was well aware when he says *Imâus incolarum lingua nivosum significante.* (*Hist. Nat.*, lib. vi., § 17.) By far the greater number of these high summits lie W. of the Chamalari; for E. of that high pinnacle, the mountains, which attain the snow-line seem huge, but few. On the S.W. are the plains of India, which are nowhere more than 1000 ft. above the sea; and on the N. of the range are the plains of Tibet, which have at least 10,000 ft. of absolute elevation. The highest crest of the range towards this table-land is between 16,000 and 18,000 ft. high, the Neetec pass, one of the lowest, rising to 16,569 ft. above the sea.

The country which lies between the E. extremity of the Himalaya range (97° E. long.) and the table-land of Yu-nan (between 100° and 104° E. long.) is entirely unknown. It contains the sources of the Irawaddi, and seems to rise to a great elevation, and to be overtopped by high summits. The table-land of Yu-nan itself must be of considerable height, as the winters are very cold, though it be placed near the tropic. Some mountain summits, which rise from it, attain the snow-line; they are mostly situated along the most southerly bend of the river Yang-tse-kiang, and may be considered as the most southerly extremity of the Yun-ling.

The Yun-ling, which rises on the E. edge of the great table-land, and runs in a N.N.E. direction between the great bends of the rivers Yang-tse-kiang and Hoang-ho, is also of considerable height, so that it is frequently called by the Chinese the Siue-ling (Snow range). The snow-capped summits are numerous, between 30° and 36° N. lat., and more especially between 32° and 34°. The length of this range is little short of 1200 m.

Respecting the In-shan and Khing-khan ranges little is known; the first has never been seen by a European, and we have only acquired some notion of its position from the Chinese geographers. But towards its E. extremity it is traversed by the great road leading from Kiachta to Pekin, and here the highest part of the mountain pass rises to 5525 ft. above the sea-level. The Khing-khan seems not to rise much above the elevated plains which extend from its western declivity westward, but it is much elevated above the valleys contiguous to its E. descent. Its absolute elevation does not appear to be great, as at the places where it was traversed by European travellers it was covered with stunted trees and low bushes to its very summit. The length of the In-shan does not much exceed 360 m. But the Khing-khan, whose northern extremity advances to the most northerly bend of the river Amur, has a length of nearly 800 m.

The most northerly of the mountain ranges traversing the interior of the great table-land of Eastern Asia is the Thian-shan. It begins at the northern extremity of the Tartash-i-ling, or Bolor Tagh, (40° N. lat.) with which it forms nearly a right angle. But, properly speaking, it projects under the name of Ak-Tagh into the plains of Bokhara, lying farther W. The Thian-shan runs from W. to E., between 70° and 96°, and then it terminates abruptly in the plain. Its western portion, which is called Muz-tagh, does not rise to a great elevation, and is passed by the caravans between Guldsha and Khasgar. Here its breadth does not exceed 30 or 40 m. But near 79° E. long., where it is traversed by the road between Puldsha and Aksu, the highest part of the mountain pass is covered with snow, and leads over a glacier. Hence this pass is called Mussur dabâhn, or the glacier pass. Farther E. is the high volcanic peak, called Peshan. The centre of the whole range is occupied by an extensive mass of very high rocks, which rise far above the snow-line, and this mass is known as one of the highest mountains in northern Asia by the name of Bogdo Oôla. To the E. of this high mountain mass occurs another volcano, named the volcano of Ho-theou (Fire-town). Snow-capped mountains appear likewise on the E. of the Bogdo Oôla, but we are very little acquainted with this part of the range.

It was formerly supposed that a high mountain range, running S.W. and N.E., connected the western extremity of the Thian-shan with the western extremity of the Altai range, but it is certain that no such range exists. The country lying between these ranges is indeed traversed by several lower ridges, of which some are of considerable extent, but they are not connected with each other, wide plains extending between them. These plains do not much differ from the steppes of western Siberia, being only covered with coarse grass; but along the rivers are considerable tracts of land, fit for agriculture, and yielding rich crops of rice and millet. Besides, there are similar tracts along the foot of the ridges. But, as this country is placed between two great deserts stretching far to the E. and W., and inhabited only by nomadic nations, agriculture was entirely unknown down to the middle of last century, when it was conquered by the Chinese, who took great pains to introduce agriculture, which is now in a flourishing state in several districts. This country is, besides, remarkable for the great number of large lakes which are met with over its whole surface. The most remarkable are the Balkash, which is said to extend from 120 to 140 m. from N. to S., the Issekul or Temurti, which is half as long, the Ala-kul, Zaisan, Kijilbash Noôr, Ike-Aral Noôr, Ubra Noôr, and a great number of smaller ones. Except the Zaisan, they have no outlets, and the water of none of them arrives at the sea. Another remarkable circumstance is the occurrence of volcanoes, at a distance of about 1000 m. from the sea. For, besides the volcanoes noticed in the Thian-shan range, there occur others to the N. of the chain; and one is found on an island in the lake of Ala-kul.

Not far from the S. extremity of the Tartash-i-ling (between 35° and 36° N. lat.) another mountain range, running E. and W., is connected with it. This chain is called, by the Chinese geographers, Kuen-luen, or Kulkun. We know very little of it, except that it stretches over the whole breadth of the great table-land, and nearly in the middle of its extent (about 92° E. long.) divides it into two ranges, of which that which declines somewhat to the N. is called Nan-shan, and is probably connected with the In-shan by the Ala-shan, a range of mountains extending along the banks of the Hoang-ho, where it flows N. The other branch of the Kuen-luen, which declines somewhat to the S., is called the Bayan Kara mountains, and frequently also the Kuen-luen, and unites with the Yun-ling about 33° N. lat. Nothing else is known of these ranges, except that they rise to a great height, and in many parts are covered with snow all the year round; whence they frequently are called Siue-mountains (snow-mountains) by the Chinese.

The immense tract of country which lies to the N. of this range (on the W. between it and the Thian-shan, and on the E. between it and the Altai mountains), is known by the name of Cobi, or more properly Gobi (the Desert in the Mongolic language), or Shamo (Sand-sea in Chinese). But the whole of this tract is not a desert. The W. portion of it, between 79° and 96° E. long., or between the Thian-shan and Kuen-luen, is only from 300 to 400 m. across, and nearly 1200 m. in length. Here we find a tract of country from 50 to 80 m. across, along the foot of the Thian-shan range, fertile in many districts, producing different kinds of grain, cotton, wine, and fruit, or covered with nourishing grass. Through this tract runs the great commercial road, which connects W. Asia with the more eastern countries, and here are situated the commercial town of Khasghar, Aksu, Kutshé, Karashar, Turfan, and Khamil, or Hami. The W. portion (between 72° and 77° E. long.) is also not a desert. Though the tracts separating the rivers are steppes, i.e. plains without trees, and producing only a coarse grass, the lands bordering the banks of the water courses are fertile in grain and cotton. Here is the town of Yarkand, and, towards the Kuen-luen, Khotun, through which two places a

road runs, which connects N. Asia with India. It is supposed that the term *cotton* is derived from the name of the last-mentioned town. The remainder of this region is a desert, and mostly of the worst kind, where the sandy surface, according to a Chinese author, moves like the waves of the sea. This desert is sometimes distinguished by the name of Shashin, or the Gobi of Lop Noör. The Lop Noör is one of the extensive lakes without an outlet, which frequently are met with in this desert. It receives from the W. the Erghengol, or river of Yarkand, which runs probably not less than 1000 miles. This part of the great table-land is supposed to be between 4000 and 5000 ft. above the sea level.

It seems, that under the meridian of Khamil (96° E. long.) the desert is narrowed to about 150 miles across by the fertile districts of Tangut, which skirt the N. declivity of the mountains of Nan-shan, and protrude far northward into the desert. The desert, dividing it from Khamil, and called Gobi of Tangut, is also less level, more stony, and better adapted for pasture than farther E. or W. Hence the Chinese government has extended its N.W. province of Kansi, through this desert to the N. side of the Thian-shan mountains.

The Great desert, Ta-Gobi, extends from the eastern extremity of the Thian-shan (96° E. long.) to the Khingkhan (120° E. long.), nearly 1200 miles in length, and its width between the Altai range on the N., and the Nan-shan, Ala-shan, and In-shan, on the S., varies between 500 and 700 miles. Through the middle of this tract extends, in the whole of its length, what is properly called the Shamo (Sand sea). It is from 150 to 250 miles across; and in it sand almost exclusively covers the surface, which commonly is level, but in some places rises into hills, on which masses of loose stone are met with. Small and shallow lakes are frequent, but their water is either salt or bitter. The vegetation is very scanty, and affords but indifferent pasture. In a few places a small number of stunted trees are met with. This part of the Gobi is about 3,000 ft. above the sea level, but it sinks in some places even to 2600 feet. In those parts of the Gobi which lie to the N. and S. of the Shamo, the surface is between 3000 and 4000 ft. above the sea. Here it is not, in general, covered with sand, but with gravel and pebbles, and is in many places rocky. The vegetation is much more vigorous, and the pastures consequently richer. It is even thought that, in many districts, agriculture would succeed, if the Nomadic nations inhabiting these countries would attend to it; and in some districts which border on China, millet is grown abundantly, and even wheat and barley, though not to a great extent. Trees are also met with, as well on the N. as on the S. of the Shamo, especially fir, birch, and poplars, but not in large forests. The countries are likewise better provided with water than the Shamo, which could not be traversed, if wells were not dug at certain places where the roads pass. The northern and southern districts have also a less level surface, ridges of stony and rocky hills traversing it in many places; they run commonly from W. to E., and are called the Black Clouds. The few and sluggish rivers which are met with, are lost in lakes without outlets. Only in the north-eastern angle are the Kerloon and Khalka-pira rivers, which, joining, form the Argoun, the principal branch of the Amur. The temperature of the air is extremely low over the whole Gobi, the waters being covered with ice six months of the year.

The country, which is included between the two branches of the Kuen-luen range, the Nan-shan, and Bayan Kara mountains, is called Thoing-hai, or Khookhoo-noor. The latter name is derived from an extensive lake in its N.E. district. It is very little known, and seems to exhibit a succession of narrow valleys and very high mountains, whose numerous summits pass far beyond the snow-line. These mountains form very extensive and high masses in the bend of the Hoang-ho, which river has its sources in the W. districts of this region.

The whole country, S. of the Kuen-luen mountains, as far S. as the Himalaya range, is comprehended under the name of Tibet. It is, doubtless, the highest part of the great table-land of eastern Asia, and there are good reasons for assigning it an average absolute elevation of 10,000 ft. above the sea level, though, towards the east, the valleys of some rivers may be considerably less. A mountain range runs through it from W. to E. It is connected with the Himalaya range by a level table-land of 14,000 ft. elevation, which surrounds the sacred lakes of Manassa-rowora and Ravanhrad, and on which, or near which, are the sources of three great rivers, the Indus, Ganges, and Yaroo-zangbo-tsiu. The mountain chain itself is called Gang-dis-ri on the W., but further E. it bears the name of Zang. Its E. extremity is separated from the Yun-ling by the valley of the Yang-tse-kiang, which here flows from N. to S. Little, or rather nothing, is known of this range, which probably being placed on so elevated a base, passes with its summits the line of congelation.

Of the country which lies to the N. of this range very little is known, if we except the most westerly corner, where the Indus river, issuing from a table-land between mountain-ridges, enters the spacious, level, and fertile valley of Leh, or Ladak, and runs in it about 300 miles, till it breaks through the mountain ranges which oppose its course, and enters the plain of India. On the W. of this fine, but elevated valley, is the Himalaya range; and on the E. another high chain, the Karakorum mountains, which, extending N.W. and S.E., connect the Kuen-luen chain with the Gang-dis-ri mountains.

The country east of the Karakorum mountains, and extending between the Kuen-luen and the Gang-dis-ri ranges, is called Katshe, or Kor Katshe. There occur in it some ranges, but the greatest part extends in wide plains, similar to the steppes, but abundantly provided with good pasture. More is not known of it. Near the Gang-dis-ri range is an extensive lake, called Tengri, and N. of it are the sources of the Yang-tse-kiang, and perhaps also those of the rivers Mackhun and Thaluen.

The country between the Gang-dis-ri range and the Himalaya mountains is Tibet Proper, and is somewhat better known, at least as far E. as H'Lassa, its capital. Its surface exhibits only low rocky hills, without any signs of vegetation, rising on extensive arid plains, covered at certain seasons with rich grass, and affording pasture to numerous herds of cattle. The valleys in which the rivers run are considerably depressed below the surface of the plains, and in these valleys agriculture is carried on with great care. All kinds of European grains are cultivated, and in some places rice. Most of the fruit-trees of Europe also succeed. But, as the portion of the country which is fit for agriculture is only a small part of the whole, the population, though far from numerous, is partly supplied with corn from the adjacent countries. The climate is very severe, and the rivers covered with ice for some months. The E. part of Tibet is very little known; it seems to be traversed by high ranges, and not to exhibit the large plains which occur farther W. In Tibet is the lake Palte, which has a large island in its centre, so that the lake has the form of a ring. The Yaroo-zangbo-tsiu, or Sampu river, runs through this country from W. to E., and, after a course of more than 1000 miles, breaks through the chain of the Himalaya range, about 95° E. long., and joins the Brahmapoutra under the name of Di-bong.

The table-land of Yu-nan, which forms the most southerly portion of the great table-land of eastern Asia, has an extremely diversified surface, being a succession of mountains which in some places rise above the snow-line, and of valleys, which, however, frequently widen to small plains. The climate indicates a considerable elevation above the sea level, but it is not so high as to preclude agriculture, corn being raised in the valleys and plains, and in some districts rice. Towards the N.W., however, it rises much higher, as there the rearing of cattle forms the principal occupation of the inhabitants, who have herds of chowry-tailed cattle (Bos grunniens), which are only found in very cold countries.

3. *Countries lying to the East of the Table-land of Eastern Asia.*—East of the desert of Gobi extends Shing-king, or Manchooria (the country of the Manchoos), to the coasts of the Pacific. It is divided from the desert by the Khingkhan mountains, which on the side of the desert are destitute of wood, but towards Manchooria are covered with fine forest-trees, among which oak is frequent. The N. boundary is formed by the Yablonoi Khrebet, or Khing-khan Tugurick. From this range (56° N. lat.) it extends to the neighbourhood of the Hoang-hai, or Yellow sea (41° N. lat.); from which it is divided only by a range of hills. But in advancing farther E. these hills rise to a high mountain chain, the Chang-pe-Shan, or Shan Alin, which attains the snow-line where it runs on the boundary between Manchuria and the peninsula of Corea. It then approaches the coast and runs so close along it as to leave only at some places a very narrow stripe of low country until it terminates at the mouth of the river Amur, opposite the Yablonoi Khrebet. Along this coast the mountain chain rises with great steepness to from 4000 to 5000 ft. above the sea. The countries enclosed by these mountain ranges exhibit different characters. The S.W. part of it, N. of the river Sira Muren, or Leao-hó, is a desert, and may be considered as part of the Gobi, which here projects beyond its natural boundary, the Khing-khan range. It has a scanty vegetation, and is only inhabited by nomadic nations. E. of it, and as far N. as the Amur river, the country is traversed by ridges of mountains and hills, between which, however, spacious valleys extend, whose fertile soil is in some places well cultivated, and yields rich crops. The mountains and hills are partly covered with trees, and partly afford rich pasture-walks for numerous herds of cattle and sheep. The climate of this portion of Manchooria is very temperate. N. of the river Amur the whole country is covered with mountain-

masses, intersected by narrow valleys. Here agriculture ceases, and cattle form the principal riches of the inhabitants, who also apply themselves industriously to the chase of animals affording furs, of which there is a great abundance. The principal river is the Amur, whose upper branch, the Argoun, runs through the N.E. districts of the Gobi, and, after entering the mountains, joins the Shilka, when the river is called Amur, or Sakhalien. The whole course of this river does not fall short of 2000 miles.

The peninsula of Corea is separated from Manchooria by the Chang-re-shan, and from this range another branches off to the S., which runs close to the E. shores, towards which it descends with great rapidity; and in these districts the level or cultivable tracts are of small extent. The numerous offsets to the W., which are less steep and elevated, contain between them large and well-cultivated valleys. But the whole country seems to have a considerable elevation above the sea-level, as its climate is very cold, its N. rivers being covered with ice for four months; yet rice, cotton, and silk, are produced in abundance.

China Proper occupies the remainder of the countries lying between the great table-land of eastern Asia and the Pacific. Several mountain ranges issuing from those that surround it, traverse its interior. Where the In-shan and the Khing-khan meet, stands a high summit, the Petsha, more than 16,000 ft. above the sea level, and from it a chain runs first S.W., and then S., 400 m., and terminates at the last great bend of the Hoang-ho. It is called Kho-thsing-shan, and though high, does not rise to the snow-line. Near 34° N. lat. two ranges branch off from the Yun-ling, the Pe-ling (northern range) and the Tapa-ling, and they continue as high mountain chains as far E. as 111° or 112° E. long., when they sink down to hills. These ranges contain some snow-capped summits towards the W., and are steep and rugged. From the E. side of the table-land of Yu-nan branches off another range, called Nan-ling (southern range), which constitutes the most extensive mountain system in China. It runs E. as far as 116° E. long., passing about 150 miles to the north of Canton; it then inclines to the N.E., in which direction it continues with a slight bend to the W. to its termination on the sea, near the harbour of Ning-po, opposite the islands of Chusan. Several summits of this range rise above the snow-line, W. of 110° E. long., and here it extends also to a considerable width. East of 110° E. long. no snow-capped summits occur, though some rise to a great elevation, but every where the descent of the range is steep and rugged.

The country lying between the Kho-thsing-shan and the Tapa-ling is full of high and extensive mountain-masses, and intersected by valleys; which are very narrow, except two which are drained by the Wei-ho, a tributary of the Hoang-ho, and by the Kan-kiang, a branch of Yang-tse-kiang. These are wide, and afford large tracts for agricultural purposes. The large tract, which extends between the Tapa-ling and the Nan-ling, is traversed by many ridges of mountains and hills, which mostly branch off from the last-mentioned range; but these elevations rise only to a moderate height, and the gentle declivities are mostly cultivated. Besides, they are separated from one another by very wide valleys, which frequently are intersected by pretty extensive plains, that every where recompense the industry of the careful cultivator. They are, in fact, hardly inferior in fertility to the great Chinese plain.

This great plain occupies the N.E. part of China, extending in length 700 miles from the great wall, N. of Pe-king, to the confluence of the rivers Yang-tse-kiang and Kan-kiang, near 30° N. lat. Its breadth is various. North of 35° N., where it partly extends to the shores of the Hoang-hai, and partly borders on the W. declivity of the Chang-tung mountains, a low range, occupying the peninsula of that name, the width of the plain varies between 150 and 250 m. Between 35° and 34° N. lat. the plain enlarges, and in the parallel of the Hoang-ho it extends more than 300 m. E. and W. Farther S. it grows still wider, and reaches nearly 500 m. inland, in the parallel of the mouth of the river Yang-tse-kiang. This large plain, though the N. districts have mostly a sandy soil, and the E., between the embouchures of the Hoang-ho and Yang-tse-kiang, are partly covered with swamps, is, perhaps, the best cultivated and most populous portion of the globe, producing abundance of rice, cotton, wheat, and tobacco, &c. It contains at least 210,000 sq. m., so that it is seven times as large as the most fertile plain of Europe, that of Lombardy. The internal communication of this fertile tract is rendered easy by the Great or Imperial canal, which traverses it from S. to N., and whose length exceeds 500 m. in a straight line, but probably its whole length is not less than 700 m. It is also traversed by the lower courses of the two great rivers of China, the Hoang-ho and the Yang-tse-kiang, which flow through it from W. to E. The Hoang-ho runs upward of 2000, and the Yang-tse-kiang more than 2900 miles, if their bends be taken into account.

4. *Countries lying to the South of the Great Table-land of Eastern Asia.*—This region comprises the two peninsulas, which are known in Europe by the name of India within and without the Ganges.

The peninsula without the Ganges is traversed by four mountain ranges, of which the three farthest east are connected with, or branch off from, the table-land of Yu-nan, the most southerly extremity of the great table-land. The most easterly, which may be called the Anam range, begins at 22° N. lat., and runs S.E. till it approaches the Chinese sea, near 17° N. lat.; hence, farther south, it proceeds parallel to the shores of that sea, and terminates at cape St. James (10° 15′). This range occupies about 100 m. in width; its elevation has not been ascertained, but it seems to be considerable, though far from rising to the snow-line, except, perhaps, where it is connected with the table-land of Yu-nan. Two other mountain chains branch off from the S.W. side of the same table land, between 95° and 97° E. long., and run nearly due S., including the narrow valley of the Thaluen river. The most westerly, which may be called the Birmah range, terminates as a chain of considerable elevation at the mouth of the Thaluen river; the other, which runs to the E. of that river, and may be called the Shan or Siam range, continues farther S., but gradually declining in height till it disappears entirely N. of the most narrow part of the peninsula of Malacca, the isthmus of Krah (11° 30′ N. lat.): for the low mountains, which occupy the interior of the S. part of that peninsula, are not connected with it.

Between the Anam range and the gulf of Tonkin lies a large plain, that of Tonkin, about 100 m. in length and width: it is low, level, and extremely fertile, especially as far as it can be irrigated. It is surrounded on the N. and W. by very fertile valleys, and traversed by the river Song-ca, which rises on the table-land of Yu-nan, and runs in an E.S.E. direction probably more than 700 m. The plain of Tonkin terminates between 19° and 20° N. lat.: farther S. the offsets from the Anam range approach close to the sea, and leave only between them larger or smaller valleys, which commonly are very fertile. South of Cape Avarella steep rocks occupy nearly the whole of the country.

We know very little of the N. portion of the country occupying the extensive tracts which separate the Anam range from the Shan range. It would seem, that as far S. as 16° N. lat., it exhibits several pretty high mountain ridges, which include valleys and surround elevated plains. S. of 16° N. lat., however, low plains constitute the general character of the country: for though several ridges occur, they do not seem to rise at any place above the elevation of high hills. These low plains have a greater abundance of water than any other country of Asia. A considerable portion of their surface is covered with permanent lakes: others are formed during the rainy season, by the inundation of the numerous and large rivers; and at that season a great portion of the land is changed into immense swamps. Though the soil is very fertile, and yields very rich crops of rice and every kind of vegetables cultivated for food between the tropics, civilization is less advanced than either in China or Hindostan; because its inhabitants, being unable to turn this abundance to their advantage, it acts as an incentive to idleness. Three large rivers drain this country. The most easterly is the Sal-gun, which runs along the Anam range, and falls into the sea near Cape St. James: its upper course is entirely unknown, but from its size towards its mouth it is supposed to run from 500 to 600 m. The Mackhaun, or river of Camboja, is called by the Chinese Lan-tsan-kiang, and rises in the interior of the great table-land, so that its whole course probably exceeds 2000 m.: it falls into the sea, W. of the mouth of the Sal-gun river. The third river is the Menam, or river of Siam, which runs about 700 m., and falls into the gulf of Siam.

The valley, in which the Thaluen runs between the mountain ranges of Siam and Birmah, is narrow; its soil is stony, and too much elevated to be irrigated by the water of the river, which rushes with great impetuosity down its confined bed, descending from the great table-land, where it is called Loo-kiang, or Noo-kiang. Its whole course probably exceeds 1500 m.

The peninsula of Malacca, which constitutes the most southerly part of the continent of Asia, and terminates with the capes of Buros and Romania, between which the island and town of Singapore are situated, is connected with the main-land by the isthmus of Krah (between 9° and 11° S. lat.), about 150 m. long, and from 70 to 80 m. wide. It is low, and its soil is formed by alluvium. The peninsula itself contains a mountain ridge in the interior, which rises to 3000 or 4000 ft., and is mostly covered with thick wood, but along the shores extends a level country, which in some districts is very fertile, but mostly not very productive.

The most westerly of the four mountain chains, which traverse the peninsula beyond the Ganges from N. to S. nearly in its whole length, is the Aracan range, dividing

Aracan from the Birman empire. It is not connected, like the others, with the table-land of Yu-nan, but with the Himalaya range. The Himalaya mountains are considered to terminate at the sources of the Brahmapoutra (97° 30′ E. long., and 28° N. lat.). The mountains which surround the upper course of that river are called the Langtan mountains, and many of their summits rise above the snow-line; the highest of those which have been measured, the Dupha Boom, attaining 13,713 ft. above the sea level: the passes which lead over it do not sink below 11,000 ft. From these mountains, which rather constitute a large mountain knot than a range, a chain issues, running W. parallel to the Himalaya range. That portion of the chain, which is immediately connected with the Langtan mountains, is called Patkoi mountains; it seems to be much lower, and more accessible. Farther W. they are called the Naga mountains, which are still lower, and extend to about 93° 30′ E. long., where they are succeeded by the Garrow hills, which rarely rise to more than 6000 ft., and terminate opposite the mountain ridges which surround the enormous pinnacle of the Chamalari in the Himalaya range.

Between this range and the Himalaya mountains extends the valley of Asam, or of the Brahmapoutra, one of the largest in Asia: its length exceeds 400 m., and in width it varies between 30 and 50 m. Its soil is very fertile, and the climate such as to bring to perfection nearly all productions cultivated between the tropics; but here also the too great abundance of water retards the progress of agriculture and the increase of the population.* The Brahmapoutra runs more than 500 m. through the centre of this valley, and is here joined by the Di-hong, which, under the name of Sampu, or Yaroo-zangbo-tsiu, flows through the plains of Tibet, and has run a course of more than 1000 m. before it reaches the Brahmapoutra. Issuing from the valley of Asam, the Brahmapoutra runs 360 m. farther through the plain of Bengal.

The country which extends along the mountain chains constituting the S. boundary of the valley of Asam, and advances as far S. as 24° N. lat., seems to be considerably elevated above the sea, the plain on which the town of Moonipore is built having an elevation of nearly 2500 feet. But the plains are commonly not of great extent, and the valleys are narrow, though the mountains which cover the greater part of the surface do not rise to a great elevation. As far as is known (for the eastern portion of this region has not been visited by European travellers) these ranges run S. and N., and form right angles, or nearly so, with the range from which they issue. One of these ranges, extending along the meridian of 91° E. long., is called the Khiebunda mountains, between Moonipore and Katshar, but farther S. the Aracan mountains. This chain, whose length rather exceeds 700 m., attains, towards the S., only a mean elevation of about 3000 ft. above the level of the sea, though some of its summits rise to 5000 ft. and upward. Its mean width may be 50 miles: it terminates at cape Negrais.

Between the Aracan mountains and the Birmah range lies the greatest part of the Birman empire. A small portion of its surface consists of rich cultivable lands; these lie in the wide valley of the Irawaddi, and in two large plains; one, situated between 22° and 23° N. lat., along the N. side of the great bend of that river, and the other between 16° and 18° N. lat.: the latter comprehends the large delta of the Irawaddi and the adjacent low country as far E. as the Birmah mountains, and may have a surface of nearly 100,000 sq. m. But its agriculture suffers from excess of water. The country E. of the Irawaddi, and S. of its great bend, is a high country, from 1500 to 2000 ft. above the level of the sea; whose hilly surface suffers from want of water, the soil being sandy and dry. The Irawaddi, which drains the Birman expire, rises in that unknown region E. of the Langtan mountain knot, and runs upward of 1200 miles, if its bends be taken into account.

Aracan; or the country lying east of the Aracan mountains, is hilly, and even mountainous in its northern districts, the Table mountain (near 21° N. lat.) rising to 8340 ft. above the sea; but its middle parts are occupied by the rather wide valley of the Huritung or Aracan river, and this is continued farther S. to 19° N. lat., being separated from the sea to the S. of the mouth of the river, by a ridge of broken hills, which rise to between 500 and 700 feet. The rains during the south-west monsoon being extremely heavy, and of long-continuance, agriculture is here also retarded by the abundance of water.

Hindostan, or the peninsula within or on this side the Ganges, is not connected either with the table-land of eastern or that of western Asia, being separated from each by a wide plain, extending first from the mouth of the Ganges along the southern declivity of the Himalaya range to the shores of the river Indus, in a W.N.W. direction, and thence along the mountains, forming the boundary of the table-land of Iran, in a S.S.W. direction to the mouth of the Indus. Thus this plain has the form of a right angle; and is, on account of its different character in the eastern and western district, with propriety divided into the plain of the Ganges and that of the Indus.

The plain of the Ganges may be compared with the great plain of China, in respect of fertility and extent, though not of population. Its length is upward of 1000 m., and its width varies between 120 and 350 m.: it covers an area of more than 200,000 sq. m. From the mouth of the Ganges it rises imperceptibly towards the N.W.; but, even at a distance of 200 m. from the sea, its surface is not 1000 ft. above it. The country between the W. mouth of the Ganges, the Hooghly, and that of the Brahmapoutra, to a distance of nearly 100 m. from the sea, is extremely low, and frequently inundated by high tides. It is called the Sunderbunds, and is nearly uninhabited on account of its unhealthiness, being covered with large forest trees, and frequented by tigers and other beasts of prey. The country which lies N. of the Sunderbunds, to an extent of 200 m. and upward, is subject to the annual inundations of the Ganges; by whose deposit it is fertilized, so as to give the most abundant crops of rice. It is cultivated with the greatest care, and nourishes a very numerous population. N. of 25° N. lat., the annual inundations of the river cease; and where no artificial means are employed to effect an irrigation for the culture of rice, the country produces wheat and other grains. But the natural fertility of the soil decreases as we advance higher up the river. It becomes more sandy, and N. of Delhi the tracts along the rivers only can be cultivated. At 30° N. lat. it is a complete desert. Between this plain and the lowest range of the Himalaya mountains extends the Tariyana, a narrow stripe of land from 12 to 20 m. wide, covered with immense forests, and frequented by a great number of elephants, tigers, and other animals. It is uninhabited, on account of its unhealthiness, the surface in the rainy season being converted into an immense swamp; but between November and March it may be visited without danger. The people inhabiting its borders are disfigured by goitres.

The river which drains this plain, the Ganges, rises in the highest and most northerly range of the Himalaya mountains, bordering on the table-land of the sacred lakes of Mansasa, Rowarra, and of Hrawan Hrad. Its several sources unite before it issues from the mountains at Hurdwar. It soon begins to change its W. into a S. and south-easterly course. In the latter direction it traverses the upper part of the plain. But from its junction with the Jumna it runs E. to the neighbourhood of Rajamahal, where it again turns to the S.E., and soon after begins to form its extensive delta, dividing in a great number of branches, of which the most easterly and principal falls into the bay of Bengal, a few miles W. of the mouth of the Brahmapoutra; but the western mouth, called the Hooghly, is in a strait line 180 m. distant from it. All rivers descending from the Himalaya mountains, between 78° and 90° E. long., increase its waters, and most of them inundating the lands contiguous to their banks during the rainy season, contribute to increase the fertility of the plain. The course of the Ganges exceeds 1300 m.

The plain of the Indus is somewhat less in extent, and greatly inferior in fertility. It extends in length about 600 m., and in width 300 at an average. Its surface may cover an area of 180,000 sq. m. Its N. part is called the Penj-ab (country of five rivers), from being watered by five large rivers, which afterward join the Indus. This tract is commonly very fertile along the water-courses, and there are even, between the rivers, districts whose soil recompenses the labour of the husbandman; but in general they have a light soil, which frequently passes into sterile sand or clay. This description also applies, for the most part, to the tract of land which lies on the right of the river, between it and the ranges which separate it from the table-land of Iran. But on the left of the Indus extends an immense sandy desert, which in the N. is called Maroost'hali, or the Great desert, and to the S. Thur, or the Little desert. It extends over the delta of the Indus, and occupies nearly half the whole plain. At its southern extremity is the Runn, an extensive salt morass, connected with the gulf of Cutch. In the desert also occur smaller lakes and marshes, in which salt is produced. It is only inhabited in a few places, where rocks protrude through the sand, having their surface covered with scanty grass. The Indus, which drains this plain, has its sources near those of the Ganges; descending through the spacious valley of Leh or Ladak; it breaks through the mountains at the north-western extremity of the Himalaya range. Its whole course amounts to upward of 1500 m.

Where the two plains of the Ganges and Indus meet, in the parallel of Delhi, between 76° and 77° E. long., begin the mountainous countries of Hindostan, which extend to its most southern extremity, cape Comorin (near 8° S. lat.). This immense tract may be divided into two triangles, connected at their bases at the Vindhya mountains, which extend between 22° and 23° from the bay of Cambay, to the

* The eastern portion of the valley is hardly more than 400 ft. above the sea level, and at its western extremity it sinks down to 200 ft.

plain of the Ganges, N.W. of Calcutta. This chain is of moderate elevation, its highest summits probably not exceeding 3000 ft. above the sea, and the most frequented of its mountain passes, that of Jaum, only rising to 2328 ft. At its western extremity, about 30 m. from the bay of Cambay, it is connected with another chain, the Aravulli range, which first runs N., in broken masses, up to the vicinity of 24° N. lat., but farther N. forms a continuous range, running N.N.E. It descends westward, with a steep declivity, to the desert of Maroost'hali, and prevents the sand of that district from encroaching on the fertile country lying farther E. Its average elevation probably does not exceed 3000 ft., though some summits rise higher, and the Aboo or Aboda peak (between 24° and 25°), even to more than 5000 ft. These two chains, the Vindhya mountains and the Aravulli range, constitute two sides of the northern triangle, and from them the country gradually lowers, until it meets the plain of the Ganges, not far from the banks of the Jumna. Contiguous to the mountains are two considerable plains; the table-land of Malwa, well known by its extensive plantations of opium, skirts the northern declivity of the Vindhya mountains for about 300 m., and has an average breadth of 50 m. Near the mountains its elevation is between 1800 and 1900 ft. above the sea level; but towards the N. it imperceptibly lowers to less than 1300 ft. The table-land of Mawar extends along the Aravulli range; it is between 150 and 180 m. long, from S. to N., and from 70 to 100 m. wide. Its elevation near the mountains is about 2000 ft. above the sea, but on its eastern border it sinks to 1400 ft. In fertility it is much inferior to the plain of Malwa; it produces different kinds of grain, but little rice. The tracts of country which separate these plains and extend to the plain of the Ganges, have a very broken surface, which on the E., in Harraoutee, rises in steep and rugged hills, but farther W., in Bundlecund, presents more gentle acclivities, and wider, as well as more fertile, valleys. The rivers which drain these countries fall into the Jumna, a tributary of the Ganges.

The peninsula of Gujerat, lying opposite the mouth of the rivers Nerbudda and Tapty, is united to the continent of Hindostan by an isthmus more than 50 m. long, between the southern part of the salt morass called the Runn and the bay of Cambay. This isthmus is so low that, in the rainy season, the waters of both gulfs unite, and convert the peninsula into an island. The districts contiguous to this isthmus, as well as those bordering on the gulfs of Cambay and Cutch, have an undulating surface, and contain extensive tracts of fertile and well-cultivated land. The lands along the western coast are rather level, but their surface is stony, covered with little earth, and not fertile. The interior of the peninsula, and all the districts surrounding the southern coast, have a very broken surface, and are mostly covered with bare rocks, but contain a number of fertile valleys. The mountains in the centre of the peninsula attain a moderate elevation. The whole is well supplied with running water, except the north-western extremity, but is destitute of wood, except on the hills along the southern coast.

Contiguous to the eastern extremity of the Vindhya mountains, but S. of them (between 81° and 83° E. long., and 23° and 23° N. lat.), the country rises to a considerable elevation, probably to more than 5000 ft. It is overtopped by numerous summits which rise 2000 ft. higher. This rugged country, which seems to constitute a mountain knot, from which ridges and rivers run out in all directions, is called Omerkuntak. The most considerable of these rivers is the Nerbudda, which runs westward in a deep valley, overhung on the N. by the steep acclivities of the Vindhya mountains, and bounded on the S. by another range, the S. Sautpoora mountains. This valley, which is wide, except at its eastern extremity, and of considerable fertility, is considered as the boundary line between Hindostan Proper, lying N., and the Deccan, extending S. to cape Comorin. The length of the valley, and of the river, is about 600 m. Similar is the valley in which the Tapty runs along the southern declivity of the Sautpoora mountains, parallel to the Nerbudda; but its course does not much exceed 300 m.

To the S. and S.E. of Omerkuntak, between the lower part of the plain of the Ganges, and as far S. as the course of the river Godavery, extends a tract of country whose elevation above the sea has not been determined; but the comparatively low temperature of the air, and the healthiness of the climate, seem to indicate that it must be between 3000 and 4000 ft. Its surface is broken; the hills rise to 2000 ft. above it, but they are separated from each other by wide valleys, and frequently by plains of moderate extent and indifferent fertility, except along the foot of the ridges, where the soil commonly is rich. The eastern border of this rugged table-land is formed by a chain of mountains, which does not seem to rise considerably above it, but they are so steep as to be almost impassable for horse or wheeled carriages. Their distance from the sea varies between 60 and 80 m. The narrow tract lying between them and the sea is called the Circars. It is not a level, but commonly a succession of hills and dales; though there occur some levels of considerable extent. Its soil along the sea coast is generally sandy, but it improves gradually towards the mountains, and produces abundant crops of cotton, tobacco, and grain, including rice, when artificially irrigated.

On the mountain knot of Omerkuntuk rises the river Manhanuddy, which traverses this broken country in an E.S.E. direction nearly in the middle. It falls into the bay of Bengal, after a course of more than 500 m., and forms at its mouth an extensive delta.

South of the mouth of the river Tapty, and nearly in its parallel, rises suddenly from the plain a continuous mountain range called the Ghauts, extending southward as far as the river Ponany (11° S. lat.), through 10° of lat. In some parts it is 30 or even 40 m. distant from the sea; in others it constitutes its very shores. It rises abruptly with a steep ascent from the low coast, and attains a mean elevation of from 4000 to 5000 feet; but some of its summits rise much higher. The highest portion are the Neilgherry hills (11° S. lat.), which are more than 9000 ft. above the sea; the Lillandumale (12° N. lat.) is above 5500 ft.; and the Subramuni (12° 30′) above 5400 ft. In many points, the range sinks down to less than 2000 ft., and over these depressions lead the *ghauts* or mountain passes, whose name has been transferred to the range itself.

The narrow tract of country which intervenes between this range and the sea coast is called Malabar. It is mostly occupied by the short offsets of the Ghauts, which preserve their character of steepness, but include small valleys which display a vigorous vegetation. The narrow tract of level land along the sea, which seldom exceeds 3 m. in width, and is in general much less, is separated from the sea by low downs; this gives them the advantage of irrigation during the rainy season. The fresh water descending from the mountains has no vent, and must therefore stagnate until it evaporates: hence these tracts produce much rice, though their soil is poor, consisting chiefly of sand.

The Neilgherry hills constitute the S. extremity of the Ghauts, which are called the W. Ghauts, to distinguish them from another chain of mountains, called the E. Ghauts. The last-mentioned mountains begin on the banks of the river Cavery (11° 20′ N. lat.) and extend thence, first in a N.E. direction, as far as 13° N. lat., where, opposite the town of Madras, they turn to the N., and continue so to the banks of the river Kistna (near 17° N. lat.) Between this river and the Godavery are a range of hills, which connects them with the mountains which separate the Circars from the elevated country lying further W. The E. Ghauts do not form an uninterrupted chain, being at several places broken by the rivers which rise on the E. declivities of the W. Ghauts, and descend to the Bay of Bengal. They also do not form one mass; but are frequently divided in several ridges, by longitudinal valleys. These mountains do not rise to the elevation of the W. Ghauts; yet to the W. of Madras, the Nalla Malla mountains attain 3000 ft. and more, and farther S. (near 12°) the Sherwahary mountains rise to 4935 ft.

The extensive country enclosed between the two ridges of the Ghauts is an elevated table-land. Its surface extends nearly in a level, which is only here and there broken by short ridges or groups of hills, rising a few hundred ft. above it. Its elevation above the level of the sea, where it is contiguous to the W. Ghauts, varies between 2000 and 3000 ft., and thus it may continue to the middle of the table-land; but it sinks in approaching the E. Ghauts, where, in most places, it has barely 1000 ft. or less of elevation. Its soil is rather fertile, and well adapted to the culture of rice, where it can be irrigated, and where not, it produces abundance of wheat and other grain. The S. part is called the table-land of Mysore, and the N. that of Balaghaut.

The eastern Ghauts are at a distance of about 150 m. from the sea, or coast of Coromandel. The surface of the intervening country extends mostly in wide plains, which here and there are interspersed by hills of no great elevation. The soil is dry, light, and sandy, but nevertheless it gives rich crops, wherever it is irrigated, which is rendered easy by the great number of rivers descending from the western Ghauts, or originating in the eastern Ghauts. The coast is low, sandy, and without harbours, surrounded by shoals, and exposed to a very heavy swell, which renders it extremely dangerous during the north-eastern monsoon. Europeans have, however, preferred it to other parts of India, having formed here more settlements than anywhere else. Three large rivers descend from the eastern declivity of the western Ghauts through the table-land of Mysore and Balaghaut, to this coast, and fall into the bay of Bengal. The most southerly is the Cavery, which runs about 450 m. Farther N. is the Kistna, or Krisha, and the Godavery, the former flowing about 600, the latter 700 m. These rivers, though in many parts very valuable for irrigating the contiguous lands, are only navigable in the low plain of the Carnatic. On the table-land they in general have little water, and where they

break through the eastern Ghauts, they are broken by numerous rapids and cataracts.

On the parallel of the embouchure of the Cavery river, (11° N. lat.), the peninsula may be traversed without passing any mountain. Here exists a great depression in the western Ghauts, called the Gap of Coimbatore. The narrowest passage is at the fortress of Animally (77° E. long.), where the level low country between two mountain ranges presents a valley about 12 m. wide. The elevation of the highest part of this gap is only 400 ft. above the sea level. The whole country in this district is covered with large forest trees, especially with teak; but during the rainy season it is converted into a swamp.

To the S. of the Gap of Coimbatore, the Ghauts rise again with a very abrupt ascent: they attain also a great elevation. The Permaul peak, situated W. of Dindigul, nearly in the middle between both seas, is 7367 ft. above the sea level, and according to the statements of the natives the mountains farther W. rise to the snow-line. The chain lies here farther from the sea, leaving a low tract from 30 to 40 m. across between them, and runs S.S.W. towards cape Comorin, terminating abruptly at a distance of about 20 En. m. from the cape with a huge mass of granite, 2000 ft. high: a low rocky ridge extends to the cape. The mountains are here covered with thick forests.

The country W. of these southern Ghauts is wonderfully intersected by inlets of the sea, which often run for a great length parallel to the coast, receiving the various mountain streams, and communicating with the ocean by different shallow and narrow openings. Between Cochin and Quilon these lakes form a continual series, being united to one another by short channels, and affording an easy means of communication. The low country, which extends for some miles inland from these lakes, has a good soil, and, being abundantly watered, gives very rich crops of rice and other tropical productions. Still more vigorous is the vegetation in the valleys which are enclosed by the offsets of the mountains, but they are not cultivated with equal care. The low coast is here exposed to a continual and very heavy swell from the ocean, and can only be visited by vessels during the N.E. monsoon (from Oct. to May.)

The plain and nearly level country, which on the E. of the southern Ghauts extends to an average width of between 70 and 80 m., is partly covered with extensive forests and partly with cultivated fields, yielding rich crops of rice: their irrigation is rendered easy by the numerous small rivers. Along the shores of the gulf of Manaar and of the Palk strait are a great number of salt swamps and lagunes, which mostly communicate with one another. Between them and the sea are sand downs, which in some places extend to several miles across. The stagnating water renders these places very unhealthy.

Deccan, being placed between two seas and the conflict of the monsoons, is always cooled by sea breezes. Its surface being formed by a series of terraces, and lying within the tropics, enjoys all the advantages of tropical countries, without partaking of their disadvantages. On the sultry coast the luxuriance of vegetation is displayed in the cocoa-palm, the mango-tree, the cinnamon-laurel, and the pine-apple; it thence passes through forests of teak-trees to the table-land of Mysore and of Balaghaut, and still higher, on the cool summit of the mountains, it offers the fruit-trees and corn-fields of Europe, flax-plantations, and rich meadows.

5. *The Hindoo-Coosh.*—The N.W. extremity of the plain of the Indus is only about 300 m. distant from the plains drained by the Daria Amu, which form the southern districts of the level country that extends S. of the great depression, in which the Caspian sea and the lake of Aral are placed. This tract, between the S. and N. plains, is occupied by a mountain system, called the Hindoo-Coosh, which, like an isthmus, connects the great table-land of eastern Asia with Iran, the most easterly of the table-lands of western Asia. The whole tract is occupied by high and steep ranges, running in every direction, but the principal of them runs E. and W., and seems to be a prolongation of that high chain which is called on the great table-land of eastern Asia, the Kuen-luen range. Many summits in this range rise far beyond the line of congelation. One of them, the Son Tchookesur, N.E. of the town of Peshawar, is at least 22,500 ft. high; but that snow-capped enormous mass, which properly is called the Hindoo-Coosh, seems to attain a much greater elevation. The valleys of this mountain region are but narrow, except that in which the river of Caubul flows, which is of considerable breadth. The mountains present mostly naked rocks on their steep declivities, but afford pasture ground where the slopes are more gentle. Some parts of them are well wooded.

Western Asia, or the countries lying west of the plain of the Indus, the Hindoo-Coosh mountains, and the plains of Bokhara, is, like Eastern Asia, an elevated table-land, but each differs considerably from the other. While in Eastern Asia the table-land forms one mass, extending in all directions, that of western Asia has nearly in its middle and in the direction of its greatest extent, from S.E. to N.W., a deep depression, which at its south-eastern extremity, where it is occupied by the gulf of Persia, varies between 30 and 208 m. in width, but farther to the N.W. extends over the basin of the river Euphrates and the adjacent desert, so as to be from 200 to 500 m. across. The whole length of this depression, from cape Ras el Had (Sat), the south-eastern point of Arabia, to Romkala, where the Euphrates issues from the mountains and enters the plain, does not fall short of 1500 m. in a straight line. On the N.E. of this depression is the table-land of Iran, the mountain-region of Armenia, and the table-land of Asia Minor; the latter projects far beyond the depression. On the S.W. of it is the table-land of Arabia, which latter is connected with the table-land of Asia Minor, by the mountain range of Sorkstan (Syria), whose mountains separate the north-western part of the lowlands from the Mediterranean sea. Besides, the table-lands of western Asia do not rise to so high an elevation as the southern portion of the table-land of eastern Asia; they attain only the height of the northern region, but being placed farther to the S., and nearer the sea, they enjoy a better climate and are more adapted to agricultural purposes. It is also to be observed that the table-lands of western Asia descend almost everywhere with a steep descent to the adjoining plains or seas, and are not surrounded as those of eastern Asia on all sides by low lands.

6. *The Table-land of Iran* (Persia) extends from E. to W. from the plain of the Indus to that of the Euphrates, and from S. to N. from the gulf of Persia to the Desert Kowar, or desert of Khiwa (39° N. lat.), and the southern shores of the Caspian sea. The interior of this great tract of country extends in large and level plains, only in a few places broken by rocky hills, mostly unconnected with one another. The elevation of these interior districts seems rarely to exceed 5000 ft. above the sea level, and as rarely to descend to less than 3000 ft. These plains are bounded on every side by a broad border of more elevated tracts, whose surface is diversified by mountain-ridges, valleys, and some table-lands of moderate extent.

The highest portion of this elevated border is at the eastern boundary of the table-land, contiguous to the plain of the Indus. From this plain the country rises in several steep ridges, running parallel to the plain, and including deep and narrow valleys. These mountains are called, S. of 29°, Hala mountains, and N. of this, Soliman mountains. The former are somewhat lower than the latter, which seem to preserve in the greatest part of their extent more than 10,000 ft. of elevation, its highest summit, the Takht Soliman (the throne of Soliman), attaining 12,636 ft. Adjacent to these parallel ridges, on the W. side, are several elevated plains of moderate extent, especially the plains of Kelat (29°), Kwella (31°), and Ghizni (33° and 34° N. lat.); of which the former is elevated between 7000 and 8000 ft., and the latter probably more than 9000 ft.: yet they are cultivated, especially towards the hills that surround them, and the depressions of their surface, which frequently descend some hundred feet: the higher districts afford good pasture. All these tracts are very cold, and covered by deep snow during the winter.

The southern border of the table-land of Iran, extending from the plain of the Indus as far W. as the strait of Ormus, does not rise to a great elevation. From the sea, however, the mountains rise rapidly, having only a narrow low stripe along the shores, but their height probably does not exceed 2000 ft. North of this ridge is a mostly level plain, which, as it contains extensive plantations of date-trees, cannot have a great elevation; it is otherwise sterile, and has few spots which can be cultivated. North of this plain is another much more elevated chain, the Wushutee mountains, which probably attain 5000 ft. In this part the mountainous border of the table-land is hardly 120 m. across; but towards its western extremity a mountain group projects northward (near 60° E. long.), the Surhad mountains (cold mountains), which seem to attain a higher elevation, but have several fertile valleys towards the E. From this mountain group issues northward a rocky ridge, which is narrow, and in general low, but has a few elevated summits. This ridge, advancing to the northern border, divides the interior plain of Iran in two parts, and forms the political boundary between Afghanistan, or East Iran, and Persia, or West Iran.

By far the greater part of the plain of East Iran is occupied by a sandy desert, which, from the Wushutee mountains, extends northward to the parallel of Ferrah. Ghirish, and Kandahar (from 27° to 32° 10′ N. lat.), nearly 400 m., and from E. to W. nearly the same distance. Its southern part, the desert of Beloochistan, is covered with fine sand, which, when moved by the wind, rises some feet above the solid surface. It is entirely uninhabited. The northern portion, the desert of Sigestan, or Seistan, has a few small oases, and considerable tracts of fertile and cultivated ground along

the banks of the river Heermind, which rises on the western declivity of the Hindoo-Coosh, and runs about 500 m. Half its course is through the desert, and it loses itself in the lake of Zareh, about 120 m. long and 50 m. wide, but when swelled by the melting of the snow in the more elevated regions, it occupies a space more than double these dimensions. Along the northern border of the desert lies a country whose surface is partly hilly and partly undulating, but its breadth is not considerable, being between 50 and 80 m. across.

The northern border of East Iran is formed by an extensive table-land of very broken surface; the upper part extends in wide level plains, but they are frequently intersected with deep valleys. This region, the Paropamisus of the ancients, has been called by modern geographers the mountain region of the Eimaks, and Hazareh, from the savage nations which inhabit it. It extends S. and N. about 400 m., and nearly double that extent E. and W. The ground is cultivated only in the narrow valleys, but the extensive pastures nourish large herds of cattle and sheep. On the N. it is separated from the plain of Bokhara by the Hazareh mountains.

The interior plain of West Iran is of greater extent, its length from the boundary of Afghanistan to the neighbourhood of the Caspian sea, N. of the town of Kasbin, exceeding considerably 500 m., while its mean width may be 400 m.; but towards the north-western extremity it narrows to 150 m. and less. Its middle is occupied by a desert, called the Salt desert, its surface being impregnated with nitre and other salts. Towards the boundary of Afghanistan it may be 250 m. across, but farther W. its width hardly exceeds 100 m. Its length is 400 m., or nearly so. It is entirely uninhabited. Those portions of the plain which extend on both sides the desert have a broken surface, but the level plains are extensive, and the hills, though sometimes high, do not occupy a great space. These districts, far from being infertile, are frequently well cultivated and abound in pastures. In many districts fine fruits are raised plentifully: but rocky plains also occur frequently.

The northern border of West Iran seems not to exceed 100 or 120 m. in width. It is likewise composed of different ridges, which mostly run in the direction of the table-land E. and W. Though very rugged and steep, the mountains do not rise to a great elevation above the elevated plains lying southward, before they arrive at the meridian of 56° or 55°. From hence, westward, they rise higher, but their width narrows to from 60 to 80 m. This more elevated part of the chain is called the Elburz mountains, and runs parallel to the southern shores of the Caspian sea, at an average distance of 20 m., descending to it with a descent which is extremely rapid. Its offsets, which are not less steep, though less elevated, fill up the space between the principal range and the sea, with the exception of a narrow stripe along its shores. The valleys, though not very wide, are very fertile. The mean elevation of the Elburz mountains may be 7000 or 8000 ft.: some summits rise higher: the highest is the Demawend, N.E. of Teheran, which exceeds 10,000 ft. above the sea.

The S.W. mountainous border of the plains of West Iran is still more distinctly marked. The mountain tract, about 80 or 90 m. wide, extends from the straits of Ormuz along the gulf of Persia, and farther N. along the plain of the Euphrates, to the place where the Tigris, breaking through the mountains, enters the low plains N. of the town of Mosul. This mountain tract consists of from three to seven ridges, running parallel to each other, and separated by as many narrow longitudinal valleys, which sometimes are many days' journey in length. They are separated from the sea by a narrow low coast called the Gurmsir (warm region), and rise in the form of terraces towards the interior. The valleys in the southern portion of this region are cultivated, but N. of the parallel of 30° N. lat. they are inhabited by different tribes of Kurds, who prefer a nomadic life and the rearing of cattle. This northern range was anciently called Zagros, but is now known under the general name of mountains of Kurdistan. Their elevation has not been ascertained, but some summits rise to the snow-line.

The great commercial road which connects the western countries of Asia with India, traverses the table-land of Iran. It runs between the deserts and the northern mountain border, through the fertile and cultivated district between them, and passes from the town of Tabriz in Azerbijan through Casbin to Teheran, and thence to Nishaboor, Meshed, and Herat. Thence it declines from its eastern direction to the S. to avoid the mountain region of the Eimak and Hazareh, and leads to Kandahar, where it passes over part of the table-land of Ghizni to Caubul. It then follows the valley of the river Caubul to Peshawer and Attock, where it passes the Indus, and traversing the Penj-ab, enters the plains of the Ganges.

7. *The Mountain Region of Armenia.*—The most northerly and narrow extremity of the interior plain of Iran reaches to the vicinity of the river Kizil Ozein, and N. of it extends a country filled with mountain-masses, which rise higher and higher as they proceed northward. East of Tabris is Mount Sellevan, which attains an elevation of 12,000 or perhaps 13,000 ft. above the sea level, and other summits seem not to be much lower. Between these mountains are numerous deep valleys, which are partly cultivated, but the inhabitants mostly depend on their herds of cattle and sheep for subsistence. A few plains lie embosomed between the mountains: the most extensive are those which are filled up by the lakes Urmia and Van. The former is 200 m. in circumference, and its waters are salt, more salt than those of the sea, but they are perfectly clear. The lake of Van is somewhat less in extent, and its waters are likewise salt, but not to such a degree. N.E. of the lake of Van the mountain-region attains its highest elevation in mount Ararat, whose summit is 17,230 ft. above the sea level, and the country which extends W. of it to the sources of the river Aras and the two upper branches of the Euphrates, the Kara-su and Murad, has at least 6000 ft. of absolute elevation, as the town of Erzeroum is 5500 ft. above the sea level. Four mountain ranges, rising from 4000 to 5000 ft. above their bases, run E. and W. between 38° and 41° N. lat., and the most northerly descends to the Black sea with great steepness, and so close to its shores that no road can be made along the coast E. of Trebizond. Though the mountains occupy the greater portion of its surface, the valleys along the large rivers are so wide that they may be taken for plains, being from 10 to 15 miles across. These valleys, though cold, are mostly very fertile, and yield rich crops of corn, whilst the declivities of the mountains afford abundance of pasture. The farthest south of the above-mentioned mountain ranges, that which, branching off from mount Ararat, contains the sources of the Murad river, or eastern branch of the Euphrates, and which farther W. is broken through by this river, after its two upper branches have united, is to be considered as the continuation of mount Taurus, which traverses Asia Minor. But it does not constitute the southern boundary of the mountain-region of Armenia: this is constituted by a much less elevated mountain ridge running E. and W. between the rivers Euphrates and Tigris, about 37° 20′ N. lat., and on whose southern declivity the town of Merdin is built. After breaking through this range at Romkala, the Euphrates enters the plain; the Tigris does the same N. of Mosul.

8. *Natolia, Nadoli,* or *Asia Minor.*—This extensive peninsula is to be considered as a western continuation of the mountain region of Armenia. It is nearly of the same breadth, and lies between the same parallels (37° and 41°); but there is doubtless some change in the direction of the mountains where both regions border on each other. From the gulf of Iskenderoon, on the side of the Mediterranean, to the town of Trebizond on the Black sea, the ranges run from S.W. to N.E., as is also clearly indicated by the south-western course of the Euphrates between 39° and 36° N. lat. It would therefore seem that these ranges are only a prolongation of those of Soristan, which continue southward in the same direction. The middle part of this tract, between the towns of Sivas, Malatiah, and Cæsaria (Kaisariyyeh), seems to form a table-land of considerable elevation, as the winters are severe and snow falls abundantly; the summers are short and not warm. Probably its height above the sea is from 5000 to 6000 feet. Its surface is a succession of levels, divided from each other by ridges of low elevation; the plains are fertile, and produce rich crops of corn. The southern border of this table-land is mount Taurus (near 38° N. lat.), which seems to rise to a great height, and sends off some branches to the Mediterranean, among which the Alma mountains (Mons Amanni), which enclose the gulf of Iskenderoon on the E., seem to attain the highest elevation. A northern offset of the Taurus, the Ali Tagh mountains, terminates near Cæsaria with mount Erjish, which is always covered with snow, and probably rises to 12,000 feet above the sea level. The mountains extending from Sivas to Trebizond are also high, but we know very little of them.

From this eastern and much elevated border the peninsula extends nearly 500 m. westward. Along the Mediterranean, as well as along the Black sea, it is traversed by ranges of mountains. That which runs along the Mediterranean constitutes a continual range of elevated mountains, the Mons Taurus of the ancients. The average distance of the highest part of it from the sea may vary between 30 and 70 m.; but the whole tract lying between them is filled up by mountains of considerable elevation. They attain the greatest elevation on the broad peninsula between the gulfs of Adalia and Makry (29° and 31° E. long.), where mount Taghtalu is 7800 ft. high. But the mountains farther inland are even in August covered with snow for a fourth part of the way down their sides, which indicates an elevation of at least 15,000 ft. above the sea level. Farther W. the mountains rapidly decrease in height, and are only of moderate elevation where they terminate on the shores of the Ægean

sea, on both sides of the gulf of Kos. The rocky masses of this chain press so closely on the shore of the sea, that commonly only a narrow stripe of low or hilly surface intervenes, except along the innermost part of the gulf of Adalia, and along the N. shores of that of Iskenderoon, where low plains of moderate extent occur. In some places high mountains constitute the very shores of the sea, for many miles together.

The mountains which occur along the Black sea do not form a continual range, being frequently broken by deep, and commonly open valleys, by which several larger or smaller rivulets find their way to the sea. They therefore constitute several separated ranges, and have neither in ancient nor in modern times been designated by a general name. The several ridges which lie between these valleys run E. and W., parallel to each other, forming commonly a wider mountain border on the N. of the peninsula, than the higher chain of the Taurus on the S.; their mean breadth may be 100 m. None of their summits seem to pass the snow-line; the highest which has been measured is Daimaun-Tagh, the Mons Olympus of the ancients, S.E. of Brusa, more than 9000 ft. above the sea level. The wide and extensive valleys which lie between the mountain ranges of this tract contain much cultivated land, which sometimes extend, even on the gentle slopes of the mountains themselves, whose higher parts are used as pastures, while nearly the whole of mount Taurus is only available for the latter purpose.

The country which lies between these two mountain-districts, and the meridians of Cæsaria (35° 30′) and Kutahiya (30° 20′) is, properly speaking, a plain whose elevation has not been determined, but it does not seem to be much above or below 2000 ft. above the sea. Its surface is not everywhere level, but it exhibits extensive level plains, and the ranges of hills which occasionally occur do not occupy much space, nor are they commonly much elevated above their base. The soil is dry, but not sandy: and along the water-courses, or where water for irrigation can be got, rather fertile; but the tracts where no water can be procured are very extensive, and serve in winter as pasture grounds to several nomadic tribes, who in summer retreat to mount Taurus, or the high lands E. of Cæsaria: even the fertile tracts are not cultivated, because exposed to the continual robberies of these tribes. The soil in the S. districts is strongly impregnated with nitre and other salts, and hence in these parts a considerable number of lakes occur whose waters are salt, and from which great quantities of salt are procured. These lakes have, as is commonly the case with salt lakes, no outlet. The most important of the rivers which drain this table-land is the Kizil-ermak, which rises at a short distance E. of Sivar, and runs 200 m. westward, and afterward nearly 300 m. N.E. and N. It is the Halys of the ancients.

The table-land seems to extend even W. of the meridian of Kutahiya, but in these parts its surface begins to be broken in hills and dales. The hills seem to increase in height as they proceed westward, and the valleys to sink deeper, and to become wider. Both the hills and valleys continue to the shores of the Ægean sea, which is indicated by the indented sea coast, which consists of boldly projecting promontories and deep bays between them, forming excellent harbours. This is by far the best portion of Asia Minor, the cultivated land extending over the valleys, and on the sides of the mountains, and yielding rich crops of rice, cotton, and corn, whilst the gardens produce many kinds of excellent fruits. This region is also the most populous, and contains, probably, more than half the population of the peninsula.

9. *Soristan*, or *Syria*, which unites the table-land of Nadoli with that of Arabia, is a country which has a very peculiar physical constitution. Two elevated ranges run from its northern extremity (37° N. lat.) through its whole length, and terminate on both sides the gulf of Akaba, (28° N. lat.) the farthest E. of the two gulfs which the Red sea forms at its northern extremity. But both mountain ranges, with the intervening valley and the adjacent shores of the Mediterranean, occupy only a space from 60 to 70 m. across. The most easterly of the two mountain chains lowers considerably soon after having branched off from the Alma Tagh; and in the parallel of Aleppo (36° 10′ N. lat.) it sinks down to hills of moderate elevation, nor does it rise much higher until it reaches 37° 20′, where it rises to a considerable height, probably 5000 feet and more: it is called Jebel Esshark, the Antilibanus of the ancients. It preserves a considerable elevation as far S. as 32° 55′, where it lowers again, but soon widens in an extensive mountain region, called El Kura, which extends to 32° 10′. Hence it continues as a rocky ridge of moderate elevation on the eastern side of the Dead sea, to its southern extremity E. of the gulf of Akaba. The western chain is much higher, at least in the northern districts. As a high mountain range, it skirts the eastern sides of the gulf of Iskenderoon, and at some distance S. from it is broken by the river Aazsy (Orontes), but S. of that river it again rises to a considerable elevation. Its highest portion, however, is between 34° 30′ and 33° 20′: this is the famous Libanus of the ancients, its northern and more elevated portion still retaining the name of Jebel Libân: but towards the S. it is called Jebel el Drus, from its being inhabited by the Druses. The highest summits of the Jebel Libân are always covered with snow, and that which bears the name of Jebel Makmel (34° 12′) attains to 12,000 ft. above the sea. S. of 33° 20′ the mountains sink much lower, and these low ridges continue to its southern extremity, on the rocky peninsula between the gulfs of Akaba and Suez. Near the most southerly point they terminate with the stupendous and famous mountain-mass of mount Sinai, whose highest summit is probably more than 9000 ft. above the sea.

The valley, which extends between the two ranges, has nowhere a great width. N. of 39° N. lat. it may vary between 8 and 20 m., but is much wider N. of 34° N. lat. than between the two ranges of the Libanus. From the southern extremity of the Dead sea to the gulf of Akaba it is reduced to a narrow, rocky, and waterless cleft in the mountains, probably not more than 1 m. or 1½ across. The northern and wider part of the valley is watered by the river Aazsy (the Orontes of the ancients); the middle and highest part, lying between the two ranges of the Libanus, by a small river, the Liettanie: this district is probably 2000 ft. above the sea. S. of the Liettanie, the valley is watered by the Jordan, which traverses the lake of Tiberias, and empties itself in the Dead sea, after a course of about 100 m. The Dead sea, called by the Arabians Bahr-el-Loot, is about 30 m. long, and nearly 15 m. broad where widest; it is remarkable for the asphalt or bitumen found on its shores, and for the remarkable events and associations connected with its history.

Between the western mountain-range and the shores of the Mediterranean are some extensive plains, S. of 33°, where the country for many miles inland is low and sandy, but without harbours. Between 33° and 35° is the country of the ancient Phœnicians, lying between the sea and the Libanus. The whole tract from the sea to the mountains is filled with hills, and, in advancing to the shores, these hills form numerous small harbours: the country farther N. is of the same description.

The southern part of the region just described is nearly a desert. S. of the Dead sea the surface is mostly nothing but bare rocks, destitute of vegetable mould and water. It is therefore called Arabia Petræa, or Stony Arabia. N. of it is Palestine, whose plain towards the Mediterranean is nearly a desert, on account of its sandy surface: but the higher portion, between this plain and the Jordan, is rather fertile where cultivated, though some districts have a stony soil. The valley of the Jordan is not distinguished by fertility. The country W. of the Libanus is more fertile, especially along the range, and in its small valleys, and even on its declivities; but on its side some of the valleys are sterile, and the E. declivity of Libanus is a naked rock. N. of Libanus the country improves, and is in general fertile, and partly well cultivated. E. of the mountain region is the Syrian desert, which belongs to the great depression in the interior of western Asia; but this desolated country does not advance to the foot of the ranges: it is divided from them by a tract of most fertile country, intermixed with sandy spots. This tract may be 50 or 60 m. across, but it becomes more sandy and sterile in advancing farther E.

10. *Arabia* is a table-land of considerable elevation, but we are unable to determine the line where it begins to rise from the low plain of the Syrian desert. Probably this line is a good way S. of the caravan road leading from Damascus to Bussorah, but not far from a line drawn from the most northerly corner of the gulf Akaba to the mouth of the Euphrates. The table-land rises abruptly on the other three sides, at a distance of from 3 to 40 m. from the sea, except along the northern coast of the gulf of Persia, to which it descends with a gentle declivity. The low, narrow border, with which the table-land is encompassed on all sides, is called the Tehâma, and the table-land itself Nejd, or Nedjed. The rocky and uneven border, which divides the Nejd from the Tehâma, is mostly called Jebel (mountain), or Hedjaz.

The Nedjed is divided into two parts by a rocky ridge, which cuts the tropic circle with an angle of about 30°. It begins on the W. near 22° N. lat., and terminates near the gulf of Persia, near 25°. This ridge, called Jebel Aared, divides the table-land into two parts, of which the southern is nearly a complete desert, and seems almost uninhabited. North of the Jebel Aared, sand also covers by far the greater part of the Nedjed, but is in numerous places interspersed with rocky tracts and some hilly grounds; where, during the rainy season, water collects and forms small streams, by which these tracts become inhabitable, and even fit for the culture of some kinds of grain; especially

dhourra, a kind of millet. There occur also extensive plantations of fruit-trees, especially dates. The sandy desert which separates these habitable spots is also covered, after the rainy season, with grass and flowers, and the Bedouins, or wandering Arabs, find there all the year round subsistence for their horses, camels, and sheep. It has not been determined to what elevation above the sea level any part of the Nedjed rises, but its cold climate in winter seems to indicate that it exceeds the general elevation of the table-land of Iran, though probably not that of Ghizni or Kelat.

The Hedjaz, or rocky edge of the Nedjed, is narrow N. of the tropic, where it probably never exceeds 15, or at the utmost 20 m., except in two or three places, where it is contiguous to a rocky district of the Nedjed. S. of the tropic it considerably widens, and here its mean breadth may be about 50 m. S. of Mekka the Tehâma and Hedjaz together extend more than 100 m. from the Red sea. The Hedjaz resembles much the rocky tracts enclosed by the Nedjed, except that water is more abundant, and that therefore it is better adapted to agriculture. In it are extensive plantations of coffee.

The low plains of the Tehâma have a sandy soil, which it is supposed has been deposed by the sea along the foot of the great mountain mass, by which the Hedjaz and Nedjed are supported; and it is maintained that it is still increasing in width. As it does not rain, frequently for many consecutive years, it could not be cultivated but for the water-courses, which, during the rainy season, descend from the adjacent Hedjaz. Irrigated by them, with the addition of some artificial means, these sultry dry plains yield good crops of some kinds of grain, and are rich in fruits, dates especially.

11. *The Plain of the Euphrates* comprises the whole of the great depression in the interior of western Asia, except that portion which is occupied by the gulf of Persia. Its northern boundary is formed by that range of mountains which, on the W. of the Tigris, begins a little above Mosul, and running westward near the towns of Merdin and Orfa, terminates on the banks of the Euphrates, near Rumkola. On the W. it is bounded by the table-land of Iran, on the E. by the mountain region of Syria, and on the S. by the northern declivity of the Nedjed. That portion of it which lies contiguous to the Nedjed and Syria, up to the eastern banks of the Euphrates, is a complete desert, mostly covered with sand, and subject to the pestiferous blast of the *simoom* or *samiel*. It is, however, inhabited by some wandering tribes of Arabs; and through it run the roads which lead from Aleppo and Damascus to Bussorah. It is called the Syrian desert. It spreads even beyond the Euphrates to a considerable distance from the river in its middle course, where its banks are hardly better inhabited than the desert itself. In the northern districts of the plain sand also prevails, but it is frequently interspersed by extensive tracts of rocky ground; and as these patches have commonly mould on them, they are cultivated and planted with trees. This tract, through which runs the road from Aleppo to Bagdad, extends on the banks of the Tigris to the last-mentioned place. S. of Bagdad the country between the two rivers is fertile, when irrigated, which is done by water derived from the rivers themselves, and from several canals; but those tracts, which lie to the E. and W. of these rivers, are only cultivated along their banks, sandy deserts beginning at a short distance from them. The two rivers which water this great plain, the Euphrates and Tigris, rise nearly in the same parallel, between 38° 30′ and 39° 30′ N. lat., on the declivities of the same mountain range in Armenia; but the Euphrates, running first W., has already had a course of 500 m. before it arrives at the parallel of the sources of the Tigris. It then by degrees turns S.E., and continues in that direction, approaching gradually nearer to that river, and unites with it about 100 m. from its mouth. The united river is called the Shat-el-Arab, and falls in the northern extremity of the gulf of Persia.

12. *Mount Caucasus*, which at present is considered as the boundary between Asia and Europe, does not constitute a part of the table-lands and mountain regions of Western Asia, being separated from the mountain masses of Armenia by a kind of valley, about 100 m. across. This valley is a level plain, where it approaches the Caspian sea, and at a distance of about 100 or 150 m. from it. Farther W. the surface of the valley is hilly, intermixed with some undulating plains, of moderate extent. It rises in higher hills between 43° and 44° E. long., where a ridge of low mountains forms the watershed between the river Kur (the Cyrus of the ancients) and the Rioni (the Phasis of the ancients). The most westerly district of the valley, which is watered by the Rioni, is almost entirely filled with hills, the valleys and level tracts occupying only a small part of its surface.

Mount Caucasus itself rises from this valley, with a rather steep descent, and forms a continual mass of high rocks, running from E.S.E. to W.N.W., from the shores of the peninsula of Absheron, on the Caspian sea, to the small town of Anapa, on the Black sea, a distance hardly less than 700 m. Its width does not exceed 120 m. where widest, and hardly more than 60 or 70 m. where narrowest. This mass of rocks covers 56,000 sq. m., or nearly the surface of England and Wales. Its highest summit, mount Elbrooz, or Elborus, attains an elevation of 17,785 ft., and is situated nearly in the centre of the range. The portion of the range, which extends W. of that high pinnacle, nowhere rises to the snow-line, but several snow-peaks occur to the E. of it, among which mount Kazbeck is 14,500 ft. high. Traces of agriculture are met with in but few of its valleys, the inhabitants living almost exclusively on the produce of their flocks. This mountain system is remarkable for the great number of nations, belonging to different races, which inhabit its elevated valleys. At both extremities of mount Caucasus are places where the soil is impregnated with naphtha or bitumen, especially in the peninsula of Abcharon.

13. *The Islands of Asia.*—The *Aleutian* islands, which extend between the peninsula of Kamtschatka and the peninsula of Alashka in America, as well as the *Kurile* islands, which lie S. of cape Lopatka, and terminate near the eastern shores of Jesso, are of volcanic origin, and in some of them are still found active volcanoes. Their soil is mostly rocky, and destitute of wood, but the most southerly islands of the last-mentioned group are cultivated on the lower grounds.

The large islands, which, between 45° and 55° N. lat., extends along the coast of Manchooria, called *Sakhalien*, *Tarakai*, or *Karafto*, is very little known, except that it forms an enormous mass of rocks, which rise towards its centre probably to the height of 3000 or 4000 feet, and perhaps even higher. It is mostly destitute of trees, and no part of it is cultivated: its scanty population subsist on the produce of their fisheries.

The islands of *Japan*, consisting of four large (*Yeso*, *Niphon*, *Sitkokf*, and *Kioosioo*) and a considerable number of smaller ones, are also formed by immense masses of rocks, which, especially on Niphon, rise above the snow-line. In most places the steep or gentle declivities of the rocks extend to the very shores of the sea, but at others plains of considerable extent extend between them. Though the soil does not seem to be distinguished for fertility, it is rendered productive by the great care with which it is everywhere cultivated; corn-fields extend on the slopes of the mountains to a considerable elevation. In many districts the surface consists of lava.

The island of *Formosa*, divided from the continent by a channel about 70 or 80 m. wide, extends from N. to S. more than 200 m. Its southern extremity is a level, but not of great extent, for not far from it rises that mountain range which traverses the island in its whole length, and which in its higher parts seems to attain an elevation of from 10,000 to 12,000 ft. above the sea. Its valleys towards the western shores, and the small level spots which occur along the sea, are fertile and well cultivated. The country E. of the range is not known.

The island of *Hainan*, near the S. coast of China, is separated from the mainland by a strait hardly more than 10 m. across. It extends from S.W. to N.E. more than 180 m.; its average width is about 100 m., or somewhat more. In its centre rises a mountain mass to a considerable height, from which some lateral ridges branch off, but they do not reach the shores, except in some parts on the E. coast. Everywhere else a low flat country separates the mountain from the sea. The flat districts are either sandy, or covered with grass and without trees, like the savannah; in some places they are cultivated and fertile, as are also the valleys.

The extensive group of the Philippines, which lies between 18° 30′ and 5° 30′ N. lat., comprises more than 100 islands; of which, however, most of the smaller ones are uninhabited. Most of them are mountainous, and the smaller ones naked rocks; but the larger islands contain many plains of considerable extent, and of a very fertile soil. They are well watered—perhaps too much so; some of them are volcanic.

The *Sooloo* islands, between Magindanao and the eastern coast of Borneo, have a rocky and uneven soil, but it is very fertile, being covered with a thick vegetable mould. But the large island of Palawan, lying farther N., is a rocky mass, rising in the middle to a high range, in which some summits attain a great height. The rocks are commonly bare; in some parts the sides of the mountains are covered with trees; but agriculture is confined to a few small spots on the coast.

Borneo, the largest of the Asiatic islands, and not much inferior to France in extent, is nowhere mountainous except in the peninsula which projects N.E. from the main body of the island; and even there, as it appears, the mountains do not attain a great elevation. The remainder, which comprises at least four fifths of its whole surface, seems to be a

plain, on which a few ridges occur at great distances. This plain has an alluvial soil, to a distance of several miles from the shores, and afterward the country rises gradually, perhaps 200 or 300 feet. The whole of this plain, as far as it is known, seems to possess great fertility; and the want of culture, which everywhere is visible, is probably the effect of the too great abundance of water, as the island is subject to continual rains. All kinds of productions and fruits, commonly met with between the tropics, grow to perfection.

The island of *Celebes*, divided from Borneo by the strait of Macassar, is traversed by four ranges of mountains, which, however, do not attain a great elevation, except where the four mountain ranges and the four peninsulas, of which the island consists, meet together; in this part the mountains are of considerable height. The surface of the whole island is hilly or mountainous, the flat tracts along the coast being of small extent. Its soil is rather sandy, and not distinguished by fertility. Its produce in rice is not equal to the consumption of the inhabitants; but it produces many tropical fruits, and sago in great abundance.

The *Moluccas*, lying W. of Celebes, consist of some hundred of smaller and larger islands, divided in several groups between 5° N. lat. and 8° S. lat. They rise mostly with a steep ascent from the sea shore, but rarely to a considerable elevation. Many of them seem to owe their origin to volcanoes; and on eight still exist volcanoes in activity. Their soil, though mostly sandy and stony, is fertile, and particularly adapted for some productions. Amboyna has large plantations of cloves, and the Banda group furnishes muscat nuts and mace. The culture of rice and other grains is very limited, as the soil seems not favourable to their growth; but this want is supplied by the extensive plantations of sago-trees.

That series of mostly considerable islands which begins on the E. with the island of Timour and terminates on the W. with that of Bali, including the islands of Rotti, Savoo, and Sandelbosh, which lie S. of the series, are called by geographers the *Lesser Sunda Islands*, to distinguish them from the group of the *Larger Sunda Islands*, comprising Borneo, Celebes, Java, and Sumatra. The Lesser Sunday islands are mountainous; and in some of them the mountains rise to 8000 or 9000 feet above the sea, and probably higher. Several of them are active volcanoes, which frequently bring destruction over the islands in which they are situated. We are not well acquainted with these islands, nor with the degree of fertility they possess; but from the few indications we have received, it may be inferred that, in general, they are as far from being sterile, as from an exuberant productiveness. Many of the tropical productions grow to perfection.

Java, the most important of the islands of the Indian ocean, is properly a continuation of the former series. It extends in length nearly 700 m., but its breadth hardly exceeds 100 m., where widest. A continuous chain of mountains runs through the island in its whole length, lowering more rapidly towards the N. than the S., where the coast is high and nearly inaccessible. Some summits of this chain rise to more than 12,000 or 13,000 feet. The highest are the Semeero and T'agal. Most of these summits are volcanoes, either extinct or still active, and their frequent eruptions have in later times laid waste several districts. The more fertile tracts lie along the northern shores, which are low, and from which a flat country extends several miles inland. Their fertility is very great, and produces rich crops of every kind of grain or roots cultivated between the tropics. But part of these flat lands are so low and so badly drained, that they are converted into swamps during the rainy season. Some tracts preserve their swampy soil all the year round; and hence arises the insalubrity of these coasts.

Sumatra, only second to Borneo in extent, is 900 m. long and from 150 to 230 m. wide. In its length it is traversed by a mountain chain of great elevation, several of its summits exceeding 12,000 ft. of elevation; mount Ophir exceeds even 13,000 feet. Many of these summits are volcanoes, but most of them appear to be extinct. The volcano Gunong Dempo is more than 11,000, those of Ber Api and Barawi more than 12,000 feet high. The declivities of these mountains extend in many places to the western shores, which therefore afford several good harbours. The eastern shores are flat and sandy, and the adjacent plains extend in some places 100 m. and more inland. Some tracts of these plains are swampy, and others sterile and covered with sand. Still a great part of its surface is fertile, and affords many valuable productions. The western districts, being more uneven and consequently better drained, are more fertile and much more healthy In the extensive woods, which cover the declivities of the mountain, the camphor-tree is frequent, and yields the best camphor. From the eastern shore extensive shoals extend far into the straits of Malacca, and render the navigation tedious and difficult. East of this island, and towards its southern extremity, is the island of Banca, famous for its inexhaustible mines of tin.

Ceylon, divided from the peninsula of the Deccan by the gulf of Manaar and Palk strait, is from S. to N. 280 m. long, but its greatest breadth does not exceed 140 m. In the middle of the island, and towards its southern extremity, on both sides of 7° N. lat., is a mountain mass, which extends over nearly an eighth part of its surface. The mean elevation of this mass may exceed 1000 feet above the sea, though some of its more elevated valleys rise to nearly 4000 feet. This mountain mass is overtopped by several high summits, among which the Adam's peak attains 6152 feet; but Pedrotallagalla, the highest pinnacle, is 8280 feet above the sea. This mountain region is surrounded by a hilly country, to a distance of 10 or 12 m. and more. Its mean elevation above the sea varies from 400 to 1000 feet. This hilly region may in some degree be said to extend to the very shores of the sea in the S. districts; for the country contiguous to the coast between Batticaloa, on the E. coast, and Negumbo, on the W., is not level and undulating, and the coast itself is rather high. The northern half of the island is a level plain, and it is supposed, that even in the interior, it does not rise above 300 feet. Its coast is everywhere flat and sandy, and remarkable for the great number of lagunes, with which it is skirted. These lagunes increase in size during the rainy season, so as to flow into one another, affording an inland navigation for boats, in some places for 60 or 80 miles. Along the whole of the eastern coast, from point Pedro to Dondrah head, and hence to Negumbo, the sea is deep, and may be navigated by vessels of any burden; but the W. coast, N. of Negumbo, as far as point Pedro, is surrounded by a shallow sea, in which only vessels of 100 tons can be used; and the common vessels employed in this trade vary between 25 and 50 tons. The fertility of the island is very great; sandy tracts indeed occur, but they are not extensive, and produce commonly good crops, when irrigated. Swamps, which in the other islands of the Indian ocean, cover great tracts of the low country, are rare in Ceylon, and of small extent.

II. Botany of Asia.—Temperature, soil, humidity, and light are the principal agents in the geographical distribution of plants. These elements exist under greater variety in Asia than in any other region; and hence the amount and diversity of Asiatic vegetation are absolutely without a parallel. It is not alone the extent in lat. of this vast continent, though stretching from the equator to the highest N. parallels; it is not simply the different elevations of its surface, though of these the greatest and least are respectively 27,000 feet above and 110 feet below the level of the sea; it is not even the abundance of water in one district, and its almost total absence in another—which will or can account for this amount and diversity. Powerful as are these causes in influencing the physical conditions of any region, one still more powerful exists in Asia, viz., the very peculiar nature of its conformation. The centre is a high table-land, varying from 6000 to perhaps 15,000 feet of elevation, bounded on every side by high mountains, which effectually shut it out from the sea, and on the exterior sides of which the kingdoms of Asia are arranged in every variety of inclination. The difference of aspect thus induced, still more than either lat. or elevation, serves to divide the whole continent into five great botanical regions, which, however subject to division among themselves, are distinguished from each other by peculiarities as striking as though the Atlantic or Pacific rolled between them. N. from the great table-land, the vast country of Siberia slopes to the Arctic ocean. The intensity and duration of the cold in this dreary region prevent the thriving of any but the most hardy plants, except in the S. districts; where, in addition to the effects of lower lat., vegetation is protected by mountain ranges, which screen it from the freezing N.E. winds. The oak and hazel are found in Daouria, on the border of the country of the Manchoos (*Gmelin, Flor. Sib.*, i., 50); but their size is diminutive, their vegetation languid; nor are they met with in any other district N. of the Altai mountains. (*Pallas, Flor. Russ.*, i., 3.) Yet the well-watered lands of S. Siberia abound in thick forests, consisting of birch, willow, juniper, maple, ash, pine, alder, fir, larch, poplar, aspen, and elm trees. (*Gmelin*, i., 150–180; iii., 150; *Pallas, Flor. Russ.*; and *Voy. en Russ., pass.*) Of fruits there are the Siberian cedar (*Pinus cembra*), the nut of which is an article of commerce; two or three species of raspberries, blackberries, and other brambled fruits; a species of cherry (*Prunus fruticosus*), from which is distilled a wine; bilberries, whortleberries, and the Siberian apricot. Gmelin (iii., 173) gives a list of four species of currants; and Pallas (*Flor. Russ.*, i., 20–23) one of five species of pears; but the fruit of these is valueless, with the exception of one species of currant, which is confined to the banks of the Argoon, a tributary of the Saghalien, in the S.E. corner of Daouria. During the short but powerful summer, the Siberian soil is covered with flowering and aromatic plants in immense profusion. (*Gmelin* and *Pallas, passim*. See also *Georgi's Phys. Geog.*, vol. iii.) But these, as well as the tim-

ber, gradually diminish towards the N.; till above the 60th parallel scarcely anything remains but the hardy beech and a few of the more vigorous lichens and mosses. Gmelin remarks (*Preface*, xliii.), that vegetation undergoes a marked change E. of the Yenisei; and, as it is a well-known fact that temperature decreases towards the E., it is not surprising that this should be the case; but the unproductive nature of the soil seems to have been overrated; for, in 1830, an agricultural society was founded at St. Peter and St. Paul, in Kamtschatka, from whose paper (of Nov. 20, 1830) it appears that the return of wheat, raised in that district, was 13½ for 1, of rye 21 for 1; and that the cultivation of buckwheat, Himalaya barley, and other grains had proved equally successful. The potato, cabbage, onion, beet-root, chicory, and melon had also thriven; and though the cucumber had failed, its failure was owing not to the impracticability of the soil, but to the vines having been destroyed by rot.

The second botanical kingdom of Asia is contained in the great central table-land itself. This is unquestionably the highest and most extensive plateau in the world, having for its bearers the mountains of Altai and Yablonoi to the N.; the Manchoorian mountains E.; the Himalayas and the mountains of China to the S.; and on the W. the Beloi Tagh, the Elburz, and the Persian mountains. Lying at a great though not equal elevation, bounded and intersected by lofty mountain ranges, and without a single natural outlet to the ocean, the climate, soil, hydrography, and general physical features of this vast region (occupying more than ⅓ths of Asia), are all of a very peculiar kind. The characteristics of the first are dryness and coldness; the second consists of a dry sand, sometimes broken by patches of verdure, at others stretching out into immense deserts, like that of Gobi or Shamo; and the water system consists of lakes without outlets, the final recipients of many rivers, some of them very respectable for length and magnitude. Many of the streams are, however, absorbed in the sandy soil. From these circumstances it may be reasonably imagined that the vegetation is also peculiar; but unfortunately little is known upon this subject, and the investigations of Rubruquis, Marco Paulo, and others in the 13th century, and of the Jesuit missionaries in the 17th, were till very lately the only sources from which knowledge could be gained; and though Lord Macartney (*Embassy to China*) and Timkouski (*Voyage à Peking à travers la Mongolie*) afford more recent, they scarcely afford more extensive, information concerning a region which is still, in a great degree, a *terra incognita* to science. Wood of all kinds is extremely scarce in these high and consequently bleak regions; so scarce that the nomadic inhabitants use the dung of their cattle for fuel (*Du Halde*, iv., 18), and similar materials not unfrequently serve for the groundwork of their gilded idols. (*Marco Paulo*, lib. i., c. 49.) On the S. slopes of the table-land are found oaks, aspens, elms, hazels, and walnut trees; but all, even on the immediate confines of China, diminished to mere shrubs; while on the high lands and N. slopes of the same frontier the only wood consists of some wretched thorny brambles. (*Lord Macartney*, ii., 200.) This remarkable absence of timber throughout so great an extent of country is owing, probably (even more than to the nature of the soil), to violent and cold tornadoes, which are extremely frequent, especially during the summer.* (*Carpin*, cap. xvi., art. 1.) In the N. parts of Mongolia the timber approaches in character to that of S. Siberia, but is still very inferior both in kind and quantity. (*Timkouski*, i., 44; ii., 290, &c.) Considering the vast number of beasts that traverse these plains (see *Zoology*), there must be, notwithstanding the extensive deserts, a great variety of grazing herbs and grasses; but except in the E. (*Timkouski*, ii., 229) agriculture is not practised, and the vegetable food of man unknown. The natives live exclusively on flesh and milk (*Carpin*, c. xxvi., art. 4; *Rubruquis*, cap. v.; *M. Paulo*, liv. i, cap. 57, &c.); and when questioned as to why they so totally neglect the earth, their reply is, that "God made herbs for beasts, but the flesh of beasts for men." (*Du Halde*, iv., 22.) Timkouski saw in the N. parts of this region red currants, peaches, hemp, and flax, all growing wild. (ii., 290.) There is also here a very remarkable fungus, called, from its resemblance to the animal, the Tartar lamb; and there can be little do ubt but that the flowering and aromatic plants of this region are numerous and peculiar.

The E. slope of the table-land, comprising the basin of the Saghalien (or Amoor) and other great rivers which flow into the Pacific ocean, forms the third great kingdom of Asiatic botany; and is, in every respect, strongly contrasted with its immediate neighbour. Here are immense forests; so extensive that it required nine days to traverse one of them, and so thick that it was necessary to fell several trees in order to take an observation of the sun's meridian. (*Du Halde*, iv., 7.) The cold is very severe to as low a lat. as 43°; and consequently the trees are of the kind usually met with in the more N. parallels of Europe. Of fruits, this district possesses apples, pears, nuts, chesnuts, and filberts, all in great abundance; and of grain, wheat, oats, and millet, are produced, together with a peculiar species, unknown in Europe, called *mai-se-mi*, partaking of the nature of both wheat and rice. Rice itself is grown, though in no great quantities; and, in fact, from the little that is known of this great region, it would appear that there is no large district of the earth better adapted for the residence of an agricultural population. Its capabilities are, however, wholly neglected by the Chinese government; while the natives of the soil (the Manchoos), though they do not, like the great majority of the Mongols, utterly neglect the pursuits of husbandry, yet, in general, they may be described as a race of hunters, resembling strongly in habits and manners the aboriginal inhabitants of America. The cotton shrub grows here; but owing to the low temperature (the lat. being remembered), it does not thrive well. Esculent roots of very many kinds are, however, plentiful; and the medicinal herb ginseng is found nowhere but in this country and N. America. The Chinese believe this plant to be an infallible remedy for every disease, mental and bodily; and it is sought amid incredible fatigues and dangers by parties who are marshalled under officers, almost in the manner of an army. Ginseng has no reputation with European physicians; but this may arise from their having used the American species only, which the Chinese declare to be greatly inferior to their own. One attempt was made, by the Jesuit Lourino, to raise the Asiatic plant in Europe; but the result was a complete failure, the seeds, though sown under circumstances of soil and temperature precisely resembling those natural to them, refusing to germinate. Some parts of the soil are swampy and full of wild desert marshes; but sand is almost unknown, and, in general, the ground bears a strong resemblance to the best parts of N. Europe in the thickness and vivid colouring of its grasses, and the variety of its flowering plants. It is a curious fact that the roses, lilies, and other flowers of this part of Asia, excel greatly those of Europe in beauty, but are very deficient in point of odour. The pines and oaks that clothe the mountains are of great size, but diminish rapidly as they approach the sea. (*Du Halde*, iv., 5–7, &c.; *La Perouse*, iii., 16, 17, 21, 75, &c.; *Muller*, *Bot. Dict.*, iii., art. *Panax*.)

The three foregoing districts of Asia, though very extensive, are each remarkably uniform in their productions and general physical appearance. It is true they are comparatively little known, and future discoveries may, it is not unlikely, bring to light many and important deviations from this uniformity; but, at present, wherever surveyed, the variations in different parts of each have been of degree, not of kind; and whatever peculiarity of vegetation marks any one part of any region, appears to mark the whole, and to distinguish it from both its adjoining neighbours. The case is different on the W. slope of the great table-land, the fourth botanical kingdom of Asia. The region is uniform as far W. as the deep depression of the Caspian sea, but beyond this all becomes changed: the face of the country, the direction of the rivers, the natural productions, everything constituting the physical geography of a region, puts on a new appearance; and the Caspian seems placed by the hand of nature on the precise spot where it could most decidedly mark the limits of two large districts possessing few things in common. The great plain of Tartary (the only true W. slope from the table-land) is very productive in its E. parts; that is, in the countries of Kokhan, Badakshan, and Bokhara. The description of Ebn Haukel, an Arab geographer, is particularly vivid. "The cultivated plains of Bokhara," he says, "extend above 13 farsang by 12 farsang; and the Soghd (the *Sogdiana* of ancient geography) is, for eight days' journey, full of gardens and orchards; corn fields and running streams, reservoirs and fountains, both on the right hand and the left." (*Ouseley's Trans.*, 237.) Corn of all kinds and rice are here very prolific; so much so that, according to Hadgi Khalfa, a field of one or two *dunes* (acres) is amply sufficient to support a family. (*D'Herbelot*, 207.) Of fruit, grapes, melons, pears, apples, figs, &c., grow to such perfection, and in such abundance, that they are exported to Persia, and even to the more fertile region of Hindostan. The pasture grounds are also extremely luxuriant; but it may be gathered that timber is scarce, and the whole country deteriorates as it recedes W. and N. The soil of the Kirghiz country N. of the Sihon is chiefly of a saline character, but the pasturage must still be good, since immense numbers of animals, wild and domestic, are fed in the extensive steppes. Trees of the hardier kinds, larch, beech, and firs, appear also on the banks of the rivers. (*Pallas*, i., 618, 630, &c.) In journeying W. the country for a time exhibits the extremes of richness and desolation (*Burnes*, i., 333); the former, however, gradually diminishing till the whole soil becomes a wretched, unproductive sand, except in the immediate neighbourhood of

* Timkouski (i., 600) remarks the frequency of these winds, but denies their violence.

rivers. (*Burnes*, ii., 1, 10, 16, 46, &c.) There is not, perhaps, in the world a more sterile district than that between the Aral and Caspian seas. In the countries W. of the latter, a strange contrast is presented: on the N. slopes of the Caucasus, indeed, a constantly deteriorating country terminates at last in the wretched wastes of Astrakhan; but even here corn fields and rich pasture grounds dispute the soil with the tamarisk, the camel's thorn, the absynthium, and other desert plants; while on the E., W., and S. declivities of the same mountains magnificent forests of cedars, cypresses, savins, red junipers, beeches, oaks, &c., flourish in great luxuriance; while, of fruit, the soil boasts the almond, fig, peach, quince, apricot, pear, date, jujube, olive, &c.; and of flowers, the rhododendron, Christ's thorn, ponticum, asolia pontica, laurel, seringa, jessamine, lily, Caucasian rose, and a whole host of others. The bread corns and the most useful roots are also produced in most parts of this mountainous country. (*Guldenstadt, Com. Petrop.*, xx., 49, 435, 483, &c.; *Pallas*, ditto, 1779, ii., 274.) With regard to Asia Minor, Mesopotamia, and Syria, it is impossible to give, within any reasonable limits, the slightest sketch of their numerous productions; though the two last be partially desert, and their deserts be of the most sterile character, yet their fertile spots are scarcely inferior to any on the earth's surface. Rice and barley yield a return of 100 fold; the cotton shrub flourishes, and indigo, sugar, and tobacco are among the useful productions. Lemons, oranges, tamarinds, apricots, dates, and grapes are a very few among the fruits of these regions; which produce in great abundance also nearly all the esculent roots, pulses, and grains. Wood is extremely scarce in Mesopotamia (the date palm is the only tree known there), but in Syria the majestic cedar of Lebanon maintains the fame which it acquired in the days of Jewish greatness; while majestic oaks, cypresses, planes, sycamores, savins, olives, mulberry trees, pistachios, junipers, and fig trees clothe the sides of the Anatolian and Syrian mountains, and spread their arms over plains where flourish almost every species of flowering roots and shrubs. Among the oaks of Asia Minor is the *Quercus infectoria*, the gall of which is an important article in dyeing. The pistachio is rarely found beyond the neighbourhood of Aleppo. (*Volney*, ii., *passim*; *Niebuhr, Voy. en Ar.*, ii., 250, &c.; *Olivier*, iv., 26, 134, 197, &c.; *Leake, passim*; also in *Walpole*, ii., 202, &c.; *Belon*, 79, 165, 166, &c.)

The fifth kingdom of Asiatic botany remains to be noticed. It comprises the S. slope of the central plateau, and contains the three great peninsulas of Arabia, India, and Malaya, together with the extensive territory of China proper, and the S. shore of Persia and Beloochistan.* The W. part of this region is badly watered (see ARABIA, LARISTAN, BELOOCHISTAN), and consequently consists chiefly of deserts, or of pasture grounds depending on rain for their fertility. The vicinities of the few and small rivers are, however, even here, crowded with vegetation; and from the Indus eastward (where the hydrography is on a scale of the most profuse luxuriance) a district is comprised unequalled, for the abundance and variety of its productions, by any other part of the world. Nearly every plant of the E. continent is indigenous, or can be raised in some part of S. Asia. The following is an imperfect list of the trees alone; and these are not, in general, confined to particular localities, but, in most cases, spread over the whole region:

	Forest Trees.		
Bamboo.	Fir.	Oak.	Poeua.
Birch.	Larch.	Palm.	Poplar.
Chestnut.	Mangrove.	Pine.	Teak.
Cypress.	Myrtle.	Plantain.	Willow.
	Hard Woods.		
Aloes.	Ebony.	Lingoa.	Sandal-wood.
Eagle-wood.	Iron-wood.	Rose-wood.	
	Fruits.		
Almond.	Citron.	Jamboo.	Peach.
Apple.	Cocoa.	Lemon.	Pear.
Apricot.	Coffee.	Lime.	Plum.
Banana.	Date.	Mangostein.	Pomegranate.
Banyan.	Dunoa.	Mulberry.	Shaddock.
Betel.	Fig.	Olive.	Tamarind.
Bignonia.	Guava.	Orange.	Vine.
Bread Fruit.	Guava.	Pandanus.	Walnut.
Cashew.			
	Spice Trees.		
Camphor.	Cinnamon.		Mace.
Cassia.	Clove.		Nutmeg.

Many of these trees yield gums, resins, odoriferous blossoms, or are otherwise useful beyond the generality of their class. There are also several species which cannot be conveniently classed under either of the four foregoing heads; as the champaka, malor, and tanjang, flower-bearing trees; the touki, from the bark of which the Asiatics manufacture a paper: the faang, which yields a rich red dye; the tallow tree, which exudes an unctuous matter, whence its name; the upas, the most deadly of vegetable poisons; the cotton tree; and, above all, the tea plant.

The other kinds of vegetation are not less abundant. Grain of every kind, including twenty-seven species of rice; and some varieties of dhourrah and barley, scarcely known in other regions, is grown with little labour to the cultivator, the richness of the earth in many places precluding the necessity and even the possibility of using manure, though two crops are produced annually. The leguminous plants now common in Europe came, in most instances, originally from S. Asia; but, in addition to the peas, beans, lentils, &c., there are here a whole host which have never found their way W., as the lotus, moong, murhus, tanna, tour, toll, &c. (See INDIA, CHINA, &c.) A root called katchill supplies the place of the American potatoe; but this last root, as well as the yam, is abundantly cultivated, especially in China and the E. peninsula of India. This is also the native home of the arrow-root, galanga, jalap, sarsaparilla, datura, anise, opium, and other drugs. The fields abound in flax, hemp, tobacco (a native plant, according to *Lord Macartney*, ii., 174), together with flowers of every kind and dye; though it is remarkable that those of powerful scent are confined to the N. parts. The fine rose that yields the attar is rarely found S. of 26°, and is chiefly limited to the plains of the upper Ganges and Penjab. (See LUCKNOW and CASHMERE.) Dye plants are very numerous; the sugar cane grows luxuriantly, and among the numerous strongly-odoriferous gums attempts have been made to identify the spikenard, bdellium, malabathrum, sepachra, and other precious ointments of the ancients, but without much success. (*Du Halde*, i., 14, &c., ii., 64, &c.; *Lord Macartney*, ii., 43, 165, &c.; *Crawf., Emb. to Siam, passim*; *Russell's Int. to Roxburgh's Plants of Coromandel*, 1-66; *Finlayson's Mission to Siam, passim*; *Asiatic Researches*, and *Journal of Asiat. Soc. Beng., passim.*)

With regard to the number of species in each order of plants, it is to be remarked that Humboldt gives the Cryptogams as 1-15th of the whole vegetation for equinoctial plains; as ½ for equinoctial mountains; as ⅓ (on an average) for the regions of the temperate zone; and as the *sole* vegetation of mountains in polar lands. The same authority gives the Monocotyledons (of the old continent) as ⅕th for the torrid, ⅓th for the temperate, and ⅓d (on an average) for the frigid zone. (*Dict. des Sci. Nat.*, xviii., 436.) De Candolle, following Persoon, makes the proportions somewhat different; namely (for the whole world), Cryp. ⅕th, Monoc. ⅓th, Dico. 4-6ths of the whole vegetation. (*Idem*, 395.) From these data, and the various authorities cited throughout this article, the following approximative table of Asiatic botany is deduced. But it is necessary to observe, that the absolute number of known species is very uncertain. In 1806 there were but 27,000; Brown's splendid addition of Australian plants increased the amount by nearly one sixth, and since that time discovery has been rapidly at work. It may, however, be doubted whether the very love of science has not betrayed some of its followers into too nice distinctions. De Candolle thinks that Persoon's 27,000 species should be increased to 56,000, and that the number of plants yet unknown or unclassified would swell the list to 110,000 or 120,000. (*Dict. Sci. Nat.*, xviii., 420.) Lindley is more moderate; he makes the gross number of species 86,000. (*Intro. to Botany*, 504.) That assigned in the table (44,000), is from Humboldt's data.

Orders.	Whole No. of known species.	Whole No. of known Asiatic species.	No. of species common to Asia and other regions.	No. of species peculiar to Asia.
Cryptogamous	6,000	1,527	930	597
Monocotyledonous	6,900	1,960	875	1,075
Dicotyledonous	31,091	4,050	2,169	1,881
Total	44,000	7,537	3,944	3,594

III. ZOOLOGY OF ASIA.—Asia is the native home of all the more useful species of animals; with the exception, perhaps, of the sheep. From some district or other of this continent came, originally, the ox, horse, camel, goat, ass, together with the whole race of domestic poultry, except the turkey, which is a denizen of the New Continent. Utility may, indeed, be regarded as the leading characteristic of Asiatic zoology; for, though its carnivorous mammalia be numerous as compared with the whole number of species, the majority are not merely harmless to man, but in a considerable degree useful to him, consisting of several kinds of seals, and the fur-bearing quadrupeds of the north. Birds of prey are remarkably scarce, when the great extent of mountain land is taken into consideration; and of those existences which have little but peculiar or anomalous for-

* The high lands of Persia and Caubul, though directly S. of W. Tartary, appear to belong naturally to the second kingdom; that, namely, of the central table-land. They have the same physical conformation, the same peculiar hydrography and vegetation, and are connected with the Mongolian plateau by a mountain *isthmus* (the Hindoo-Coosh), which divides the low levels of Bokhara and the Punjaub, in a manner very similar to that in which the Atlantic and Pacific oceans are divided by the mountain ridge of Panama. (See *Mongolia, Caubul, India*, &c.)

nation to distinguish them, Asia is all but destitute. The truth of these remarks will be at once evident from the following tables, constructed, with as much care as possible, from *Cuvier's Règne Animal; Shaw's Zoology; Pennant's Hist. of Quad., Genera of Birds, Arctic Zoology*, and *View of Hindostan; Du Halde's China; La Perouse's Voyages; Georgi's Geog., Phys. and Nat.*, vi. and vii.; *Pallas's Spicelegia Zoologica, Travels, &c.; Gmelin's Reise der Sibirien, Reise der Russland, &c. &c.*

Mammalia.

Orders.	Whole No. of known species.	Whole No. of Asiatic species.	No. of species common to Asia and other regions.	No. of species peculiar to Asia.
Quadrumana	155	44	11	33
Cheiroptera	126	60	15	45
Insectivora	27	9	5	4
Carnivora	177	77	42	35
Marsupialia	9	2	0	2
Rodentia	192	73	20	53
Edentata	21	1	0	1
Pachydermata	24	11	4	7
Ruminantia	142	57	16	41
Cetacea	27	14	11	3
Total	900	348	124	224

Aves (Birds).

Orders.	Whole No. of known species.	Whole No. of known Asiatic species.	Species common to Asia and other regions.	Species peculiar to Asia.
Accipitres	251	49	13	36
Dentirostres	1,373	247	77	170
Fissirostres	127	30	14	16
Conirostres	440	87	42	45
Tenuirostres	211	49	17	32
Syndactyles	116	53	18	35
Scansores	481	101	25	76
Gallinæ	344	136	20	116
Grallæ	281	107	49	58
Palmipedes	299	78	41	37
Total	3,968	937	316	621

Reptilia.

Orders.	Whole No. of known genera.	Whole No. of known Asiatic genera.	Genera common to Asia and other regions.	Genera peculiar to Asia.
Chelonia	60	16	9	7
Saurii	117	36	12	26
Ophidians	93	20	4	16
Batrachians	35	2?	2?	0?
Total	305	76	27	49

The Reptilia are divided into *genera*, not *species*, according to the text of Cuvier. The list of species is sufficiently long in some other authors; but the French naturalist warns his readers to receive them with extreme caution, as they abound with repetitions of the same species under different names and in transpositions of synonyms (ix., 263). Similar considerations forbid the attempt to classify the Pisces, Insecta, or Mollusca, a tabular arrangement of which classes would not, indeed, possess much interest.

A glance at these tables will exhibit, at one view, the zoological riches of Asia. Of the class Mammalia, more than a third of the whole number of species are found upon its soil, and nearly a fourth (accurately 7-30ths) are peculiar to it. In the more important species, these proportions are considerably increased. The Asiatic Ruminantia are nearly two fifths of the whole; those peculiar to the soil, nearly two sevenths. The Pachydermata are in a still higher ratio; the Rodentia and Carnivora, which two orders include the more useful fur-bearing animals, in nearly the same. The strong-winged Cheiroptera are indeed almost equally numerous; but the Quadrumana are reduced to little more than a fourth of the whole, and the anomalous orders of Marsupialia and Edentata can scarcely be said to have a place in Asiatic mammalogy. But it is not either the actual or relative amount of animal life that constitutes the chief advantage of Asia in this respect; among its numerous species of the more important orders it reckons the most important of the species themselves. Of these, the first in rank, with reference to its locality, is, perhaps, the camel. Other animals are more generally useful to man; but without this patient and intelligent servant, a large, perhaps the largest, part of Asia would be no home for the human race. Expressly formed for existence in a desert, it has been domesticated for a period long antecedent to all history, and for countless generations has been the means of connecting districts otherwise effectually separated, and has formed the principal wealth of their inhabitants. The camel has this peculiarity to distinguish it from other domestic animals, that it does not follow its master in his wanderings. The other tribes, with one exception (the rein-deer), have become denizens of every corner of the earth, however remote from their native home. It seems, indeed, a law that the lower animals which herd with man shall follow him, with these two exceptions; but these, though fully as subservient and as useful as any others, have never become naturalized beyond the limits where they were first found. The attempts to establish the camel in Greece, Italy, Jamaica, and Barbadoes, have been signal and decisive failures. Yet the animal can support as great a range of climate as most others, being found in N. Tartary, as far as the shores of lake Baikal (from 50° to 55° N. lat.), where the average temperature is scarcely, if at all, higher than that of Lapland, and where the winter's cold is frightfully severe, as well as under the scorching sun of intertropical countries. It is true, in these N. lands, its size becomes diminutive; but it preserves its hardy character, multiplies abundantly, and forms the wealth of the Burat and Mongol not less than of the Arab and Syrian. (*Marco Paulo*, ii., 139; *Pallas's Spic. Zool.*, xi., 4; *Du Halde*, iii., 483; *Pennant's Hist. Quad.*, 120; *Cuv.*, iv., 8, *&c.*)

Of the ox tribe, the most useful species are Asiatic, as the common ox (Bos Taurus of Linnæus), the aurochs, the buffalo, and the yaik. Their varieties are almost numberless; but those enumerated are considered by Cuvier (iv., 28–31), as the only distinct species, with the exception of those not found in Asia, such as the American bison, the Cape buffalo of Africa, and the musk ox. The most striking distinction between the Asiatic and non-Asiatic species of this genus, is, that the former only are domesticated, or appear capable of domestication. In all other respects they exhibit a general resemblance, amounting almost to identity; their gregarious habits, their food, their internal formation, all are extremely similar; nay, they breed promiscuously, and the issue of a cross are prolific: but while the Asiatic species have been domesticated as long as society has existed, the others remain to this day as untamed as when they first took possession of their native woods. A natural result of this distinction has been the distribution of the common ox from the Arctic circle to New-Zealand, and round the whole world in longitude; while the American and African species appear incapable of multiplying beyond their original limits. The buffaloes, or humped, are less dispersed than the straight-backed species, and appear to be less capable of supporting a low temperature; but wherever the climate is at all adapted to them, they, like the others, are found to be naturalized, and thus they have spread from India (apparently their native home) over N. Africa and S. Europe; nor can there exist any reasonable doubt but that they would equally thrive in Australia, Polynesia, and Temperate America, were the experiment tried.

The auroch and the yaik (or grunting ox) are only partially reclaimed, if, indeed, the former do not still exist in all his original wildness; but Cuvier seems to be mistaken when he limits his locality to the Carpathians and Caucasus. Tartarian travellers describe the breed as existing in a state of semi-domestication on the plateau of Mongolia, and breeding with the domestic cow, thereby producing a cross much stronger and more fit for labour than the common ox. (*Marco Paulo*, ch. lxii., p. 52; *Rubriquis*, ch. xviii., p. 57.) This creature is, next to the rhinoceros, the largest of land animals. It has been by some naturalists supposed to be the original specimen of the domestic variety; but Cuvier has pointed out some osteological differences, which plainly refer it to a different species. It has also the grunting voice of the yaik, which might by possibility be regarded as a small variety of the aurochs, were it not for the tail, which in the yaik resembles that of the horse, and is the same which composes the standards of the Turkish officers. The number of cattle fed by the wandering Tartar nations seems almost incredible: every fertile plain, and some plains that are almost sterile, are covered by them; and some one or other of the species thrive upon the sides and even upon the summits of the wintry mountains of Tibet and Daouria. The domestic ox was unknown in Kamtschatka till introduced there by the Russians; and the musk ox appears to be unknown in Arctic Asia, though remains of the creature have been occasionally found, especially a scull (not fossil), near the mouth of the Obi, in the latter end of the last century. (*Pallas's Nov. Com. Pet.*, xvii., 601; *Gmelin's N. C. P.*, v., 331, *&c.*; *Du Halde*, iv., *passim*, *&c.*; *Timkouski*, ii., 289, *&c.*; *Pennant's Hist. Quad.*, i., 15–27; *Cuvier*, iv., 28–31.) Nor are sheep less plentiful in Asia than cattle, though it may perhaps be doubted whether this useful creature be not one of the very few treasures which belong originally to Europe; the derivation of the various woolly species is doubtful between the Mouflon of Italy and the Argali of Siberia. (*Cuvier*, iv., 27.) There is no race of animals, except the dog, so subject to vary; and amid the multitude of breeds now distributed all over the world, it is probably useless to attempt to identify the original. The Argali, found in Siberia and all the mountainous regions of Asia, is, like the European varieties, distinguished by its short tail. Like other arctic animals, the Argali, also, changes its covering, which is rather fur than wool in the winter. In India the sheep are long-tailed; and

in Persia, Tartary, China, and Syria, the tail is not only elongated, but loaded with a mass of fat. The power which this creature possesses to accommodate itself to climate seems almost unlimited: in the hot plains of Asia its covering becomes coarse and scanty; while in the frozen regions of Tibet its thick wool has an underlining of the finest kind, forming an important article in manufactures and commerce. (*Pallas's Spic. Zool.*, xi., 3–31, 58–82; *Gmelin's Reise durch Rußland*, iii., 486, *et seq.*; *Reise durch Siberien*, i., 168, *et seq.*; *Du Halde*, iv., *pass.*; *Pennant*, 33–46; *Cuvier*, iv., 25–28.) There can be little doubt but that the *Capra Egagrus* of Gmelin, the *Ibex Alpium Sibericarum* of Pallas, is the original stock whence all the varieties of the goat tribe are derived. It herds in the mountains of Taurus, Tartary, Persia, China, E. Siberia, and Kamtschatka. In inhabits indifferently all climates, but assumes a very different appearance under different circumstances. The Angora goat of Cappadocia, the Tibet goat, the Bousquetin or Ibex, and the domestic species, *Capra Hircus*, are the most noted varieties. The animal is in a very high degree serviceable to man, especially to the nomadic races of its native country; its coat furnishing an important article of manufacture, its skin the leather of which the wanderer makes his water-bottles and packing-cases: its milk is salutary in many complaints; and, when young, it affords a nutritious and agreeable food. (*Pallas' Spic. Zool.*, xi., 31–57; *Pennant's Hist. Quad.*, 49–56; *Cuvier*, iv., 23–25.) The rein deer is common to the arctic regions of Asia, Europe, and America. It runs wild in the snowy wastes of Siberia and Kamtschatka, but is likewise domesticated, and supplies to the tenants of these dreary regions the place of the horse, cow, sheep, goat, and camel. It is not, however, so extensively domesticated in N. Asia as in Lapland. (*Hist. Kamtschatka*, 228; *Bell's Travels*, i., 213; *Cuvier*, iv., 9.) The elk is also common to Asia, Europe, and America; it inhabits the cold regions of Siberia and Mongolia, where, though undomesticated, it is highly useful as an animal of chase, the flesh furnishing a good species of food, the tongue especially being esteemed a great delicacy, and the skin making a buff leather, capable, according to good authority, of turning a musket ball. (*Pennant's Hist. Quad.*, i., 93–98; *Cuvier*, iv., 9.)

Of other ruminants, Asia has the musk, apparently throughout its whole extent from Siberia to Ceylon (*N. C. Pet.*, iv., 393; *Pallas's Spic. Zool.*, xiii., 3–45; *Bell's Travels*, i., 249; ii., 88; *Du Halde*, i., 63, 324; *Hamilton's Voy. E. Ind.*, i., 261), together with a great variety of deers and antelopes; it is, however, among these, with the llamas of America and the giraffe of Africa, unquestionably the least useful of the order, that the only Ruminantia wanting in Asia will be found. (*Pallas's Spic. Zool.*, i., 3–44; xii., 3–71; *Cuvier*, iv., 5, 8–23.)

In its Pachydermatous tribes, Asia exhibits the same superiority over other regions: the elephant, horse, ass, and hog, have their home in its forests and plains; while the animals of this order absent from its soil are the useless hippopotamus, and the inferior species Tapir, Peccory, Phaco, Damans, &c. The elephant rarely propagates in a domestic state; but it is an error to suppose that this never takes place: the tame females sometimes escape to the woods in breeding-time, and, after coupling with the wild males, return to the herd, or are brought back, and produce their young at the end of nine months. The locality of the Asiatic elephant is limited: it does not appear to be found W. of India or N. of the Himalaya mountains; but in India, Malaya, Birmah, China, and the islands of the Eastern Archipelago, it is numerous both in its wild and domesticated state; and, besides its utility as a beast of burden, and the value of its tusks as an article of commerce, it is held in great regard for many occult medicinal properties supposed to exist in its flesh, eyes, bones, &c. (*Du Halde*, iii., 480; *Crawfurd's Em. Si.*, 429, 479; *Pennant's Hist. Quad.*, 150–161; *Cuvier*, iii., 326.) The horse and ass are both indigenous to Asia, and originally peculiar to that continent. Species of the same genus are indeed found in Africa, but, as in other similar cases, they seem incapable of domestication; while the Asiatic species, especially the Arabian variety, have supplied the whole world with two of the most useful quadrupeds that wait on man. The Dzigguetai, a creature intermediate in size between the horse and ass, still runs wild in the Asiatic deserts; like his congeners, he is gregarious, and, like them too, his numbers seem almost unlimited; a similar remark will apply to the Koulan or wild ass. (*Du Halde*, ii., 17, 50; iv., 30, *et passim*; *Bell*, i., 225; *Pennant*, 1–13; *Cuvier*, iii., 340–343.) The hog is so spread over the world that it is difficult to assign its original locality; the fact that the species *now* peculiar are all African and undomesticated, seems, however, to imply that the original stock of the domestic swine is Asiatic; the more especially as the creature is dispersed over every part of the continent from its S. extremity to the N. shores of lake Baikal in 55° N. lat. (*Bell's Travels*, i., 279; *Pallas's Spic. Zool.*, ii., 3; *Crawfurd's Embassy to Siam*, 479: *Cuvier*, 330–332.) Two species of the rhinoceros are peculiar to Asia and the Indian islands, the latter distinguished by a double horn like the *Rh. Africanus*. (*Du Halde*, i., 239; *Crawfurd*, 429, 478; *Pennant's Hist. Quad.*, i., 138; *Cuvier*, iii., 336.) Tropical Asia possesses most of the fiercer Carnivora: lions, tigers, leopards, black panthers, ounces, and tiger cats, of the cat genus; wolves, hyenas, and jackals, of the dog tribe. They do not, however, all exist in equal numbers, nor equally in every part. The lion is becoming very rare in Asia; he is now found only in the deserts of Mesopotamia, Persia, and India, and, perhaps, in some parts of China. He does not appear to be heard of in Siam or Cochin China; to which districts, the wolf, hyena, and jackal, as far as is yet known, are also strangers. (*Crawfurd's Em. Si.*, 428.) The manul, lynx, and wild cat are most numerous in temperate Asia; the first extending, however, almost to the arctic regions, the second stretching into both the frigid and torrid zones; but the last (scarcely ever met with beyond the Caucasian mountains) appears originally to have been European. The dog and fox, in all their varieties, are common to all the continent; the former, in some parts (as Kamtschatka), supplying the place of a beast of burden, in others being used as an article of food. The Angora and Persian cat are celebrated for the fineness of their fur, as is also the blue cat of Siberia; though the last, if not the two former, seem to have been derived, as well as the domestic cat, from Europe. Formidable as are some of these creatures, they constitute a considerable portion of the wealth of the countries which they inhabit; their skins form an important article of commerce; and what is remarkable, the *bones* of the tiger are supposed, like those of the elephant, to possess medicinal qualities, and are highly valued accordingly. (*Crawfurd's Em. Si.*, 428.) The smaller Carnivora are also found in great abundance, as the different species of martens, among which the ermine and sable stand pre-eminent for their fur; the Asiatic civets, which possess the odour, though not the glandular excretion of the African species; and the Mangousti or ichneumon, which attacks and destroys the most dangerous serpents: bears, badgers, gluttons, sea otters, morses, walruses, seals, complete the list of the Asiatic Carnivora. (*Bell*, i., 100; ii., 81, *et pass.*; *Du Halde*, *pass.*; *Pallas's Spic. Zool.*, xiv., 29, *et seq.*; *Crawfurd's Em. Si.*, 428, 478; *Pennant's View of Hindostan*, i., 193–197, *et pass.*; *Hist. Quad.*, 219–380; *Cuvier*, ii., 23–61.) The Insectivora and Rodentia consist, the first, of hedgehogs, shrew mice, and moles in their various species; the latter, of the more important animals, beavers, hares, rabbits, lemmings, marmots, squirrels, dormice, porcupines, jerboas, rats, mice, &c. Of these, the Asiatic species are very numerous, and they form, with the smaller Carnivora, the principal wealth of Siberia, since among them are found many that afford some of the richest furs, especially in the winter, when the covering of the creatures become thicker in texture, finer in quality, and generally superior in colour. Animals of this order do not appear to be numerous in S. Asia. Crawfurd remarks, that the hare and rabbit are unknown in the lower parts of Siam. The porcupines, on the other hand, are not found in the N. regions; and the jerboas seem peculiar to the wide, open plains. (*Gmelin's Reise durch Sib.*, *passim*; *Crawfurd's Em. Si.*, 428, 478; *Cuvier*, iii., 63–95; *Pennant's Hist. Quad.*, 368–469; *Pallas's Stir.*, *pass.*; *Com. Pet.*, *pass.*) Of the Quadrumana the principal Asiatic species are the orang outang and the gibbons; the smaller apes and monkeys are numerous in the S., especially in India, China, and the islands. As a general fact, the Asiatic monkeys are inferior in structure and intelligence to the African, but much superior to those of America. (*Cuvier*, i., 207–220.) The Cheiroptera are numerous all over the world; they seem, however, to abound more in the Asiatic islands than on the continent: some of them, as the Roussette of the Sunda and Molucca isles, are accounted delicate food; others, as the Timor bat, rather large and destructive; but the more powerful and mischievous species of this order appear to be American, and strangers to the soil of Asia. (*Pallas's Spic. Zool.*, iii., 3–35; *Pennant's Hist. Quad.*, 548–563; *Cuvier*, ii., 4–15.) The Marsupialia of this continent consist of but two Phalangers, *Phal. Rufus* and *Phal. Chrysorrhos*. (*Buffon*, xiii., 10; *Temminck*, 12.) They are peculiar to the Moluccas, Java, and Celebes, exhibiting thus, at the extremity of Asia, the first indication of the anomalous Mammalogy of Australia. The single Edentata is the short-tailed Manis, which, like the last order, is peculiar to the Indian islands, except some few instances found in Bengal. (*Pennant*, 505.) Marsden (*Sumatra*, p. 18) seems to imply that the African long-tailed Manis is sometimes found in that island. Lastly, the Cetacea consists of dolphins, manati, porpoises, sea unicorns, and whales, of which some one or other species is found on all the coasts of Asia. (*Pennant*, 536–545; *Cuvier*, iv., 430–443.)

A single glance at the table will exhibit the fact, that the Ornithology of Asia is less rich than its Mammalogy; the former containing considerably less than a fourth of all the known species, while the latter possesses very much more than one third: the continent maintaining, however, in this

respect, as in the former, the peculiar character of utility in its possessions; for of the Gallinæ, unquestionably the most useful order to man, the number of its species is between a third and a half of the whole, and fully a third of the whole is peculiar to its soil. Among these species are reckoned the original stock of all the domestic poultry, except the turkey, which is American; the pheasants, partridges, peacocks, and whole flights of pigeons. The species in which it is most deficient are among the grouse, quails, and pintados; but there is scarcely a genus of this useful order of which Asia is wholly destitute. Of other birds, the order Grallæ furnishes the ostrich, crane, heron, stork, bittern, plover, spoonbill, ibis, &c., many of which are highly useful in tropical climates as destroyers of serpents and other dangerous reptiles: the Scansores consist of those climbing birds, parrots, parroquets, woodpeckers, macaws, &c., the beautiful plumage of which adds so much to the splendour of equinoctial forests; and the Syndactyles (the smaller order of bright plumages), of bee-eaters, kingfishers, and hornbills; which last, from their greater size and peculiar habits, have far less resemblance to the other genera of the order than they have to each other. In all these orders, it will be observed that Asia is relatively rich, except with regard to the Scansores, which, having little but their beauty to recommend them, are the least useful of any yet-enumerated. In the others the proportion becomes still lower; and though among the palmipede, petrels, albatrosses, pelicans, gulls, geese, ducks, swans, &c., Asia has some which the natives have turned to account, as the great cormorant, taught by the Chinese to fish: yet the great home of this order of birds lies in other quarters; America, Africa, Australia, and even Europe. Of birds of prey (Accipitres) Asia has its eagles, vultures, falcons, owls, and hawks; but here, again, the number of species is comparatively small, though in some cases the individuals of a species are very numerous: and in the four remaining orders, consisting of all the tribes of graniverous and insectiverous birds, shrikes, pies, thrushes, crows, swallows, goatsuckers, birds of paradise, and the various songsters, the Asiatic woods are very poor; their chief tenants, of these orders, being generally such as are distinguished for beauty of plumage. Song birds are very scarce. (*Pallas's Spic. Zool.*, iv., v., vi.; *Gmelin*, i., 48–76, 152; ii., 163–193; iii., 86–106, 249–251, 364, 378, &c.; *Pennant's Gen. Birds, pass.*; *Crawfurd's Em. Si.*, 439–480; *Du Halde, pass.*; *Cuvier*, vi.–viii.)

In Reptiles, as in birds, Asia is less abundant than some other regions. Of the Chelonia it has several fine species of edible turtle, and others that are chiefly valuable for their shell. Lizards are very numerous in individuals, though not in genera, and probably not in species; among these, two or three kinds of alligators are very destructive in the rivers of India. Of serpents, the most dangerous is the Indian Python (improperly confounded with the boa constrictor); but there are many others highly venomous, and some which are extremely beautiful and quite harmless. Frogs and toads abound in all marshy places, and it seems doubtful whether they be of many different kinds. (*Pallas's Spic. Zool.*, vii.; *Gmelin*, iii., 58, &c.; *Pennant's View of Hindoostan, pass.*; *Du Halde, passim*; *Cuvier*, ix.).

The seas and rivers appear to possess every known kind of fish, and some that are peculiar (*Pallas*, vii., viii.): and the insect tribe are numerous throughout the whole continent: the ravages of some, as the locust, in Arabia, Syria, and Persia, being far more dreaded than the attacks of carnivorous animals. (*Pallas*, ix., x.; *Cuvier*, ix., xiv., xv.)

IV. Races of People and Languages.—Not only the majority of the human race in number, but also the greatest variety in the species, is found within the limits of Asia. The subject, as well from extent, nature, and, in many respects, deficiency of information, is one of great difficulty; but we shall, nevertheless, offer some observations upon it, founded on the physical form, intellectual character, and genius of the language of the races. Some of these families or races consist of many millions, while others embrace but a few thousands; a circumstance which has naturally arisen from the favourable or unfavourable position in which they have been located on their original distribution, and perhaps also from an intrinsic difference in the capacity of the races themselves—causes which have multiplied some into numerous, powerful, and civilized nations, and kept others in the condition of petty and rude tribes. We begin our classification from the west.

The first family, which may be called the *Caucasian*, comprises all the original inhabitants of the mountainous region lying between the Black sea and the Caspian, from about the 39th to the 42d degree of N. lat. It includes the mountaineers of the valleys of the Caucasus—such as the Abasians, Ossetes or Iron, Leghians, and Kisti; and, in the more level country, or wider valleys lying to the south of the Caucasus, the Georgians, Mingrelians, and Armenians. In personal form this family may be described as European, but in mind Asiatic. The face is of an oval form: the forehead high and expanded; the nose elevated, with a slight convexity; the mouth small; the lips moderate in size, and the chin full and round. The complexion is fair, without, however, the clearness of the European; the eyes are generally dark, and the hair of the head rarely of any other colour than black or brown; and, indeed, it may here be, once for all, observed, that the great variety in the colour of this tegument, with which we are familiar, is confined to Europe—black being nearly universal in every other part of the world. The hair on other parts of the body, with the Caucasian family, is abundant: the stature is nearly equal to that of the European, and the form of the whole person is symmetrical and handsome. The personal beauty of this race has induced Blumenbach and some other eminent naturalists, to assume its form as the type of the European, or first of the *five* great varieties into which they have, fancifully enough, divided the whole of mankind. They have even gone the length of fancying that the entire European family sprung from the mountaineers of the Caucasus; a hypothesis for which it is almost unnecessary to say that there is not a little of historical, philological, or any other evidence. Notwithstanding undoubted advantages of physical form, no nation of this family has ever made any eminent advance in civilization. Many of them, with a country not unlike Switzerland, though with a better soil and climate, are, at the present day, not more advanced in civilization than the Swiss or Germans, as described by Cæsar near 2000 years ago. The Armenians alone of the whole family have made a considerable, though far from a distinguished progress. About five centuries before the Christian æra they constituted an extensive society, and even exercised some influence in the political events of Western Asia: they alone of all the nations and tribes composing the Caucasian family, possess a national literature; but even their invention of alphabetic writing dates only from A.D. 406, for previously to that time they used the characters of the Greeks and Persians: always acting a secondary and subordinate part, they have been successively subdued by Persians, Greeks, Romans, Arabs, Turks, and Russians. Language, it should here be observed, considered as the test of unity of race, must be viewed, as respects its genius and the general character of its formation, and not by the identity or dissimilarity of individual words, which, through the accidents of conquest, settlement, religion, and commerce, often find their way even into languages of very opposite genius. As happens in rude and early stages of society, in every part of the world without exception, the number of languages spoken by the nations of the *Caucasian* family is very great. The tribes inhabiting the valleys and mountains of the Caucasus are said to speak seven distinct languages, besides many dialects; a number, however, which falls far short of those spoken within a similar extent of territory in many parts of America as well as of the islands of the Indian ocean. The only language of the Caucasian family, of which Europeans have any critical knowledge, is the Armenian, of which we possess dictionaries and grammars: those who have examined it consider it as quite peculiar and distinct from all other known tongues: it abounds in rough consonants: its structure is exceedingly complex: it has an article at the end of nouns: its nouns and adjectives have each ten inflections in the singular and as many in the plural, and the verb is agreeably varied by corresponding changes. All this, which applies, however, more especially to the ancient language, implies that the Armenian is a primitive and original tongue, which, like the Sanscrit, Arabic, Greek, the Latin generally, and, for the most part, the German, has suffered little change in structure from the commixture of foreign nations and their languages. The modern Armenian has been simplified in its grammatical structure by the mixture of the people with foreign nations, especially the Persians and Turks; changes similar to, but not so extensive as, the Latin language, has undergone in its conversion into Italian, Spanish, French, &c., &c. From this account of the Armenian language, taken together with differences in the physical form and mental qualities of this people, it is not improbable but that, on a better acquaintance with both, it may be found a family entitled to be classed separately from the inhabitants of the Caucasus.

The second Asiatic family has been called by philologists and naturalists the *Arabian* or Semitic, the last name being given to it on the hypothesis that the whole is derived from the eldest son of Noah: it embraces all the aboriginal inhabitants of Palestine, Asia Minor, Syria, and Arabia from the east coast of the Mediterranean and Red sea, up to the west coast of the Persian gulf. A brunette complexion; more or less intense black or dark brown eyes; long, lank, and almost always black crinal hair; bushy large beards, generally black, but sometimes of a reddish tinge; an oval face in bold and distinct relief, with a nose always elevated, and not unfrequently aquiline; high forehead, and stature nearly of the European mean—are among the most promi-

neat characteristics of this family, as we occasionally see it exhibited in one of its handsomest forms, the Jewish: we say occasionally, for the differences existing between the Jews settled in different foreign nations show plainly enough that they have more or less mixed their blood with the people among whom they have established themselves; for they are fair in Germany, brown in Poland, and nearly black in India. Compared with the European, the whole form of the Arabian is spare, slender, and of small bulk and weight. The wrists are comparatively slender, the hand small, and the fibre throughout soft and flexible. These last characters, however, it is to be observed, belong more or less to the inhabitants of all warm climates. In intellectual power and energy, the Arabian family stands unquestionably next to the European. The history, institutions, and literature of the Jews; the early civilization of the Assyrians; the commerce and colonies of the Phœnicians; and the conquests, settlements, and literature of the Arabs, attest the truth of this assertion. The influence of the Hebrew institutions has pervaded the whole civilized world; while the language, literature, and religion of the Arabs may be traced from the western confines of Spain and Africa to the Philippine islands over 130 degrees of longitude, and from the tropic of Capricorn to Tartary, over 70 degrees of latitude. Among a race, so energetic, civilization made a very early progress, and it is not improbable but that 4000 years ago the Phœnicians, Hebrews, Assyrians, and Arabs had already domesticated many of the useful animals, cultivated many valuable plants, and were acquainted with the useful and even precious metals. Several of the nations of this family had invented alphabetic writing, in times far beyond the memory of history—as the Jews, Phœnicians, Arabians, and Assyrians. Their literature has always been of a more vigorous and masculine character than that of any other Asiatic people, but still has never evinced the taste, sound judgment, and practical common sense displayed by several European nations in various periods of the history of the latter people. For the fine arts, if we except architecture, they have not exhibited a glimmering of capacity. There is one circumstance, however, in the position of this family, which has always proved a serious obstacle to its advancement in civilization—the unsuitableness of much of the country which it inhabits for any other than the pastoral state of society, owing to its heat, drought, and sterility. Hence the people are necessarily divided into two opposite and hostile classes, a roving and predatory, and a settled and industrious one; the first incapable of advancing itself, and sure to oppose the advancement of the last. In the genius and structure of the languages of the Arabian family, there is a common affinity. They possess sounds which no other people can articulate: while their neighbours have sounds in their languages, which they, in their turn, cannot imitate. In grammatical structure they resemble each other, and the words of their language are readily interchanged, while they rarely, if ever, admit those of neighbouring tongues. While the dead language of India, for example, has found its way into the ultra-Gangetic languages as far even as New-Guinea—into many of the Mongolic and Turkish languages, and into most of the ancient and modern languages of Europe: it has made no impression whatever on the languages of the Arabian stock of nations; so that in the Arabic, the most copious of them all, Sir William Jones could point out but a single word (one of the many synonymes of the *sun*), as common to it and the Sanscrit.

Between the Caspian sea and Persian gulf to the west, the ocean to the south, India to the east, and an indefinite line to the north, extending at least to 50° of latitude, there are several races which have much resemblance, but which differ enough in person, mind, and language, to entitle us to class them as different families. The first of these, beginning in a westerly direction, is the *Persian*. With this family, the complexion is fair without transparency; there is little or no colour in the cheek. The hair is long, straight, and almost always jet black; the beard abundant, bushy, generally black, but now and then with a reddish tinge. The features, according to European notions, are regular and handsome, though generally minute; and, beard excepted, rather effeminate. The stature is little short of the European standard; and the body gracefully, but not strongly formed, being altogether less robust than that of the European. The present inhabitants of Persia are much mixed with the blood of Arabian and Turkish settlers; and probably, therefore, the purest sample of the genuine Persian will be found in the emigrants established in foreign countries, called Parsees, who scrupulously abstain from intermixture with the people among whom they are settled. The Persians were among the earliest civilized nations of mankind; but their progress has not been in proportion to their precocity. It is probable that a thousand years before the Christian æra they had tamed the useful animals, cultivated useful plants, were acquainted with the useful metals, and constituted a considerable community. That they had at an early period a written language, and that it was national, is attested by the existence of the undecyphered and peculiar characters, of unquestionable antiquity, still found at Persepolis and other places. When the Arabs conquered and converted the Persians about the middle of the seventh century, they found three spoken languages, viz., the Parsee, Pehlvi, and Deri, besides the Zend, or language dedicated to religion. The first of these has superseded the rest, which are known only by name, and become the universal language of the country. The modern Persian is of simple structure, like English, French, or Italian, that is, it possesses few or no inflections, prepositions governing its cases, and auxiliary verbs its times and modes. Many of its roots can be readily traced to the Sanscrit. Since the Arabian conquest, it has received a large accession of Arabic words easily discovered by their exotic sounds, for there are many sounds peculiar to one people which are foreign to the utterance of the other. The entire literature of the Persians dates since the Arabic conquest, and, therefore, the earliest portion is little more than 1000 years old, while the great bulk belongs to the fifteenth and sixteenth centuries. It consists of songs of considerable merit; of poetical romances, wild and extravagant; of loose chronicles without date, founded on tradition alone; and of treatises on morals, written to little purpose, for one of the most sensual, mendacious, and astute, but also one of the cleverest people of Asia. For the history of the Persians, for 1500 years before the Arabian conquest, we possess, from themselves, nothing but incongruous fable; and were it not for the occasional, but always unsatisfactory information respecting them communicated by the Greeks first, and then by the Romans, we should have known as little of their early history as we do of that of the Hindoos or Mexicans. The intellectual capacity of the race may be judged of by such facts as these. For 2500 years they have certainly not been wholly stationary; but, measured by the European standard, they have made surprisingly little progress. It is just, however, to state, that the physical geography of their country is not propitious to civilization. Much of it, like Arabia, is, from drought and sterility, unfit for agriculture, and fitted only for occasional pasture; and hence, at all times, the roving and predatory habits of a large portion of its population; while the same character belonging also, and even to a greater degree, to the countries which surround it, the progress of industry and civilization has not only been obstructed by internal, but also by foreign enemies. The Persian family has never been distinguished for the bold spirit of enterprise, or capacity for social improvement, which has characterized the Arabians.

It made some early but temporary conquests in northern India, and often mastered some of the Turkish tribes; but it never made any settlement in Europe, and a few petty Greek states were sufficient to baffle it in its utmost strength. Very different from the Jews and Arabs, such has always been the mediocrity of talent among the Persians, that they have no name which belongs to history, except that of Zoroaster.

The next family of nations we shall notice is the *Turkish* or Scythian. The extensive country in which this family is found, or rather its parent country, lies between the 35th and 60th degrees of latitude from the Hindoo Koosh, a continuation of the Himalaya, to the Belur Tagh, a spur of the Altai chain, and from the Caspian sea to the western boundary of the desert of Cobi, where they are mixed with the Mongols. The family consists of the Scythians and Parthians of antiquity, and of the true Tartars and Turcomans, with the eastern and western Turks, of the moderns—the Usbecks, Tadjuks, and Kirgis. To the west it has, probably, been considerably intermixed with Greek and Caucasian blood; to the east and north, with Mongolian; and to the south, with Persian. The complexion of this race is a light brunette. The hair generally black, strong, and long; but when the complexion is remarkable for its fairness, it is brown, and also of a more delicate texture. The colour of the eye is a light brown, but the form somewhat contracted. The skull is remarkably globular, the forehead broad, and the space between the brows very prominent; the proportions of the face are symmetrical; the upper jaw-bone is singularly short, and the basis of the lower jaw, is also remarkable for its shortness: the facial line is nearly vertical. The body is stout, but the stature shorter than the European. Abstracting hair, complexion, colour, form of the eye, and stature, with the intellectual powers as they have been hitherto developed, the Turk is in fact a European. The Turkish language is one of simple structure, like the Persian or English; and its sounds, but not its words, resemble those of the former. By the conquests of the various nations who speak it, it has been spread from Greece to Chinese Tartary, and from Persia to the 55th degree of latitude; but, unlike the Arabic or Persian, the more cultivated languages of a more civilized

people, it has nowhere superseded or much mixed itself up with the dialects of the conquered people; nor in the government of a conquered people have the Turks ever exhibited the skill or tolerance of the Arabs or Mongols. What has been said of the character of the physical geography of the native country of the Arabian and Persian families, is still more applicable to the Turkish. A great portion of it is mere desert, without trees and water; and the cultivable portions are, in fact, but so many patches along the banks of rivers, thinly scattered over a boundless waste of sand. In these patches industry and civilization spring up, surrounded in every direction by robbers and freebooters, and liable at every moment to be crushed by them. To use the words of Mr. Erskine, in his excellent introduction to the "Translation of the Memoirs of the Emperor Baber," we find among the Turkish family "tribes who, down to the present day, wander over their extensive regions, as their forefathers did, little, if at all, more refined than they appear to have been at the dawn of history. Their flocks are still their wealth,—their camp their city; and the same government exists of separate chiefs, who are not much exalted in luxury or information above the commonest of their subjects around them." This cause, however, it must be admitted, will not account for the backward civilization of the Osmanli Turks, who have now for centuries occupied some of the finest regions of Asia and Europe, and been during the same time in close communication with the civilized nations of the latter.

That some nations of the true Turkish family were early civilized to a certain extent, is not to be doubted. It was among them that Alexander, more than three centuries before the Christian æra, found the principal materials for founding his Greek kingdom of Bactria; and from time immemorial the horse, ox, camel, and dromedary, ass, hog, and dog, have probably been domesticated among them. The ass and hog are still wild animals of the country; and, in early times, it is not improbable the others were so also.

The Turkish or Scythian family seems to have invented no written character, and hence, in early times, to have had no literature. The evidence of some Bactrian coins, shows, that when the more improved nations among them had advanced to writing, they used the alphabetic characters of ancient Persia. The best and most fertile portion of the country of the Turks was conquered by the Arabs towards the end of the seventh century, and this was followed by the adoption of the Arabian alphabet, and by much of the language and literature both of the Arabs and Persians. It was not, however, until the establishment of a firm government under Jaghatai, the son of Jenghis Khan, that the Turkish language—from him called the Jaghatai Turkish—began to assume the character of a polished speech, and to be written; and its most flourishing period is comprised in the short time from the death of Timur, in 1405, to the death of Baber, in 1530. Its literature consists chiefly of popular poetry, in the form of odes or songs: but there are also some prose compositions, religious and chronological; of which last the most remarkable are the memoirs of Timur and Baber. Turkish composition, as described by Mr. Erskine, is less inflated and rhetorical than Persian and Arabian; and, judging by his own translation of the last of the works above mentioned, we should be disposed to consider Turkish literature as making a nearer approach, on the whole, to the good sense, taste, and simplicity of that of Europe, than any other literature of Asia.

In the south-eastern angle of what is commonly considered Persia, and now known by the name of Beloochistan, we have three races of men, distinct in person and language, living in the same country, and dwelling together, yet not often intermixing their blood—a circumstance which will frequently be found in what remains of our review of the "Races of Asia." These are the Belochees, Brahoos, and Dehwars. The *Belochees* have dark-brown complexions, black hair, long visages, elevated features, with tall and active, but not robust persons. Half their language is a corrupted Persian; and, although the nature of the other be not ascertained, we have little doubt of its being primitive and original. The *Brahoos* are described by Pottinger as wholly unlike the Belochees. They have, according to him, thick short bones—are, in fact, a squab instead of a tall people. Their faces are round, and their features flat, instead of being raised. Frequently they have brown hair and beard, from which we should augur a fairer complexion than is ascribed to them. The language of the Brahoos is entirely different from that of the Belochees; it contains no Persian, and but a few words of the neighbouring dialects of the Hindoos. The *Dehwars* have blunt features, high cheek-bones, bluff cheeks, and short persons, being altogether rather an ill-favoured race. What is remarkable of them is, that their language is that of a people to whom they bear no personal resemblance, the Persians. This, it may here be observed, is also the case with the Tadjuks of the Turkish family, who claim to be the aboriginal inhabitants of Bokhara; but then the Tadjuks, though stout in stature, have elevated features, and a ruddy brown complexion. None of these nations have a national literature, or seem ever to have invented an alphabet. Even in the time of Alexander, although rude barbarians, they were far from being savages; for they had oxen, goats, and camels, and cultivated wheat, barley, and several fruits.

To the N. of the races now described, and in the N.E. angle of Persia in its widest acceptation, we find another race, the *Afghan*. This family is marked by a brown complexion, black hair, sometimes brown, a profusion of beard of the same colour, high noses, high cheek-bones, long faces, a robust person, and a stature short of the European. Their language, called Pushtoo, is peculiar; it contains few Sanscrit words, but a good many of those of the popular language of upper India, or Hindi; the sounds are rough, and some of the consonants are such as have no existence in the Persian. They have no alphabet, and use the Arabic characters; and their national literature, consisting chiefly of lyrics, is said not to be above 150 years old. In the time of Alexander these people were rude barbarians, but not savages, for they had towns, and corn, and cattle, and were probably on a level with the Germans and Britons in the time of Cæsar. It is only in comparatively late times that they have made any figure in history. Conquered by a Turkish nation, in the last years of the 10th century, they continued, by their military enterprises and invasions, to exercise great influence over the affairs of Hindostan, and some even over the affairs of Persia, down to the middle of the 18th century.

Among the high mountains and narrow elevated valleys, which lie E. of the country of the Afghans, exists a people, of whom little is known beyond their names: these are the Kaffers, or infidels, so called by their Mohammedan neighbours, the Dards, Tibet-baltai, Chitral, Hazaras, and Aimaks. These people are described as remarkable for their fairness; the possession, occasionally, of light hair, and blue eyes, and great personal beauty. They speak many languages, which are absolutely unknown to Europeans. According to a most judicious writer, Mr. Erskine, they constitute "a series of nations, who appear never to have attained the arts, the ease, or the civilization of the southern states; but who, at the same time, unlike those to the north, have, in general, settled on some particular spot, built villages and towns, and cultivated the soil." Letters seem to be unknown to these people: they cultivate small quantities of wheat and millet, but their principal wealth consists in oxen and goats. The mountain barriers which surround them have protected them from invasion; and the narrow valleys which comprise their country, divides them into numerous tribes, and hinders their civilization. For want of a better name, this may be called the Dard family.

Proceeding eastward, we come to a great and numerous family, the *Hindoos*, spread from the 7th to the 35th degree of N. lat., and from the 68th to the 95th of E. long. Correctly speaking, this is, perhaps, not one family, but an aggregate of races, bearing such a general resemblance to each other, as the European varieties do among themselves, although wider in degree. The colour is commonly black, or at least a deep brown; and hence the name of Hindoo, applied to them by their fairer Turkish and Persian invaders: for that word, in the Persian language, is equivalent to negro in ours. The hair is always long, coarse, and black; the beard of the same colour, and not deficient; the eye invariably black, or deep brown; the face oval, and the features well raised, symmetrical, and handsome; so far, at least, as the absence of colour and transparency will allow, but generally with an effeminate cast: with some defect in the lower limbs, the person is well formed. The stature is generally short of the European; the body is spare, and deficient in strength and capacity of enduring toil, if compared with the surrounding families; but the want of force is in some measure compensated by lightness, flexibility, and dexterity. Judging by the form of the skull, modern naturalists have placed the Hindoos, or, still more whimsically, "the higher orders" of them, in the same class with the natives of Europe. This is but an ingenious philosophical dream; and Orme, who knew them well, and who never suspected the possibility of placing them in the same category with men of white skins, robust frames, and high enterprise, justly describes them as having been "from the earliest ages of antiquity a people who have no resemblance, either in figure or manners, with any of the nations contiguous to them." Their general appearance to a stranger is truly and graphically described by Mr. Ford, chaplain to the factory at Surat in the commencement of the 17th century. "A people," says he, "presented themselves to mine eyes, clothed in linen garments, somewhat low-descending; of a gesture and garb, as I may say, maidenly, and wellnigh effeminate; of a countenance shy, and somewhat estranged, yet smiling out a glozed and bashful familiarity." Clearness and subtlety, rather than depth with vigour, characterize the intel-

lectual capacity of the Hindoo. In practical good sense they are below the Chinese; in energy, vigour, and enterprise, below the Arabs, Persians, and Turks; but they are equally astute with any of these, if, indeed, they do not, in this respect, surpass them all. They have been repeatedly, and, for so numerous a people, easily conquered; but, on their side, they have never gone abroad for conquest.

The Hindoos were probably among the earliest civilized of the families of mankind. Nearly 2200 years ago the Greeks found them composing communities, whose advance in the arts of life was equal to that of the Persians of the same period: and to have attained such a state must have been the work of many previous centuries. The country they inhabit has a favourable climate and fruitful soil, and nature presented to the exercise of their natural ingenuity many valuable products in the animal, vegetable, and mineral kingdoms, such as the useful animals, many of which are still found in a wild state in the country, with several descriptions of corn, esculent roots, cotton, and silk. All the languages of the Hindoos are of simple grammatical structure, except one, the dead Sanscrit, as complex as the Greek or Arabic. There are at least ten alphabets, which we hold to have been each separately invented, but afterward more or less improved by borrowing from that of the Sanscrit, the most comprehensive of them all, particularly in the adoption of its regular and almost philosophical arrangement. We know as little of the people whose language the Sanscrit was, as we should of the Romans, if we had no writings in Latin but what were mythological, dramatic, or poetical; that is, if we had neither Roman history nor Roman monuments. We should, in that case, point to the modern language which approached the nearest to the Latin, and certainly decide upon Italy as the native country of the Romans. The Hindoo language which contains the greatest amount of Sanscrit is the modern Hindi; and at the close of the 10th century, on the first Mohammedan invasion, a language was spoken at Delhi and its vicinity as nearly resembling it as Saxon does English. The nation then, of which the Sanscrit was the vernacular language, probably had for its primitive seat the countries on both banks of the Jumna, about the 28th degree of N. lat.; and this is, indeed, pointed out by many intelligent Hindoos as the locality of the ancient people whose language and institutions have exerted so great an influence over a large portion of mankind. As we diverge from this focus, the proportion of Sanscrit found in the dialects of India becomes less and less; and in some of the languages of the South, not more of it is to be found, nor in any other shape, than that in which we find Latin in English. Hindoo literature, notwithstanding the unquestionable antiquity of its culture, is extravagant, rhapsodical, puerile, and destitute both of instruction and amusement. In ingenuity and invention it can bear no comparison with that of the Hebrews, Arabs, or Persians; nor in common sense or authenticity with that of the Chinese, tame and mechanical as is the latter. The authentic records of the Hindoos cannot be carried back by any ingenuity beyond eleven centuries; and even this much is the work of European antiquaries. That period, then, carries Hindoo chronology only to the middle ages of European history, corresponds with the Arab conquest of Spain, and is long posterior to the conquest of England by the Saxons, of France by the Franks, and of Italy by the Lombards. The capacity of the Hindoo family, then, tried by the test of literature, stands lower than that of any of its considerable neighbours. We have already said, that though in colour, form, and feature, a common character belongs to the whole Hindoo family, there exist also striking differences. We shall endeavour to point out a few of these. Beginning from the N.W., we have the *Cashmerians*, with genuine Hindoo features, brunette complexions, and rather stouter and taller persons than the inhabitants of the plains of Hindostan. They have a peculiar language and a national alphabet. South of these, and on the plain, we have the more numerous and powerful nation of the *Seiks*, or *Singhs*. "The features of the whole nation," says Burnes, the traveller who has most recently described them, "are now as distinct from those of their neighbours as the Indian and Chinese. With an extreme regularity of physiognomy, and elongation of countenance, they may be readily distinguished from the other tribes." We shall add to this, that they are a tall, active, handsome race; of very dark complexions, but of features strongly marked by the genuine Hindoo character. Their language is a dialect of the Hindi. Between the 25th and 33d degree of N. lat, and the 72d and 87th degree of E. long., exists a numerous people, now, for the most part, speaking also a dialect of the Hindi, which has, in consequence of the Mohammedan conquest, received a large admixture of Persian, just as the Saxon did of French, and almost at the same period. They are generally taller and fairer than the people of the south, and of all the Hindoo family may be considered as having made the greatest advance in civilization. Their language is written in the same alphabet as that used in writing Sanscrit. Throughout India they are known as *Hindostanees*. To the east of these, and inhabiting the extreme eastern portion of the country of the Hindoos, we have the Bengallee race, distinguished by dark complexions, low stature, and feeble and slender frames beyond any other Hindoo people. The Bengallees have a peculiar language of simple structure, without inflexions, the parts of speech being formed by the use of particles and auxiliaries. Sanscrit words and roots enter largely into its composition, and it has been alleged of this, and of most of the other vernacular languages of India, that Sanscrit forms their groundwork, as Latin forms that of Italian, French, and Spanish. This, however, is unquestionably not true of all the languages of the south of India; and we think it very doubtful if it be so even of that of the Bengallees. This last has a peculiar alphabet, formed on the principle of the Dewanagari, an alphabet of the Sanscrit, the basis most probably having been a rude character of indigenous invention. There is no Bengallee literature which goes farther back than the 15th century, and very little even of this. The Bengallees, like the other Hindoos, have no history: and the first authentic date in their chronology is the year 1203, when the country was invaded and conquered by the Turko-Persians, from Delhi. Upon the whole, the Bengallee race may be looked upon as the least energetic, physically and mentally, of the Hindoo family. Even within Hindostan, they have never ventured, as conquerors or emigrants, beyond the limits of their own country; while, from the earliest ages, they seem to have been invaded and subdued by all their western neighbours. In flexibility and acuteness, however, they equal any other Hindoos, and in our times have exhibited a capacity for improvement beyond them all.

To the south of the Bengallees, we find the *Oria* race, or Orias, taller and stronger than the former, but still with slight and delicate figures. This race is remarkable, even among Hindoos, for a lack of spirit and intelligence. They have a peculiar language, of simple structure, into the composition of which both Sanscrit and Bengallee enter largely, but its foundation is most probably native. The alphabet is founded on the principle of the Dewanagari, and the literature consists almost wholly of translations and paraphrases from the Sanscrit.

To the south of the Nerbudda river, and of the Orias, we have the populous race of the *Telingas*, stouter, taller, and much more energetic. These are the people called by the earlier European settlers Gentoos. Their language is inharmonious, harsh, not very simple in its structure, and is written in a peculiar national alphabet; following, however, as all the Indian alphabets do, the convenient classification of the Dewanagari. Sanscrit is found in it, as French exists in English, Greek in Latin, Arabic in Persian, or Turkish and Persian in the dialects of northern India. Their national literature is considerable in extent, but that is all that can be safely asserted of it. This is the only Hindoo race which has exhibited any thing like a spirit of foreign enterprise, and that enterprise is wholly mercantile. Their commerce and their migrations at present extend, and seem from very remote periods to have extended, to the islands of the Indian ocean, and the countries beyond India and China. The spread of the language and institutions of the Hindoos, indeed, to these countries, was most probably in a great measure their work.

To the west of the Telingas we find the *Mahratta* race, smaller in person; indeed, rather of meagre and diminutive form, of ungraceful make, and capacious aspect. The Mahratta language is peculiar; and in reference to the admixture of Sanscrit found in it, the same observations apply as to the Telinga. Among all the considerable races of the Hindoo family, the Mahratta had long been the most backward in civilization, and were totally unknown to history as a people, until the beginning of last century, when they suddenly entered on a career of conquest, which threatened, and, but for the presence of an European power, would probably have effected, the subjugation of all India.

The south of India, beyond the Telinga and Mahratta races, is occupied by four distinct races, differing in language, and, in some respects, in physical form and intellectual character; but as in both respects it would be difficult to define the differences with precision, we shall content ourselves with their simple enumeration. Of all of them it may be observed, that they are (the inhabitants of Bengal excepted) of shorter stature, but of more compact form than the Hindoos of the north. They are commonly also of darker complexions. Immediately to the east of the Telinga is the *Tamul* race, occupying the whole of the level country below and to the east of the great table-land of the peninsula as far as cape Comorin. South of the river Krishna, and occupying the table-land, is the *Karnata* or Cannarese race, considerably civilized, and wide spread in this part of India. Below the table land, and on the western coast, we have two races, the *Malabar*, and the *Tulava*,

to the south, peculiar in their physical organization, intellectual character, and language. Besides these well ascertained races, there are evidences of the existence of distinct races also in the peninsulas of Gujrat and Kutch, and in the territory of Sinde; in all of which there seem to have been peculiar languages, reduced at present to dialects by the admixture of conquerors and settlers from the north. Among the Hindoo races must be included the aboriginal inhabitants of Ceylon, or *Cingalese*, who resemble the Hindoo, and no other family, in their colour, the form of their persons, the character of their features, and the texture of their minds. They have a peculiar language, an indigenous alphabet, following the Sanscrit arrangement, and their speech contains an abundance of Sanscrit words.

But besides these more considerable races of the Hindoo family, there are a good many rude tribes, differing essentially in language, and often in person, from their more civilized neighbours, and from each other. If we reckon these last at not more than half a dozen, we shall find that the whole Hindoo family of nations does not consist of less than eighteen different races, differing more or less from each other in stature, strength, mein, and intellectual endowment. If we carry our minds back to a period of Hindoo history when society was in as rude a state as in America on its discovery; before the time when some of the races, by their superior energy, and more favourable position, had destroyed or absorbed those that were more feeble, or less auspiciously situated, we shall probably be led to conclude that the number of races and languages was, in proportion to extent, as great in India as we have found it to be in the New World, uniform as the Hindoo physical form and mind is commonly considered to be.

From the eastern limits of the country of the Hindoos to the western limit of China, and from the 7th to the 26th degree of N. latitude, there exists a great family, which has a common character, that is, the different races, or nations, or tribes composing it, agree as much among themselves as Europeans, Hindoos, or Chinese. We shall give this family a name which has been already applied to it, viz. the *Hindoo-Chinese*, though perhaps it would be better to apply to it that of one of its leading varieties. The following is an outline of its physical form. Head generally well proportioned, but of remarkable flatness in the occipital part. Features never bold, prominent, or well defined, as in the nations of central Asia. Nose small, round at the point, but not flattened; and the nostrils, instead of being parallel, diverge greatly. Mouth wide, but the lower part of the face does not project; lips rather thick; eyes small and black. Eyebrows not prominent, nor well marked. The face, instead of being oval, as in the Hindoo, Persian, Turkish, Arabian, and European families, is of a lozenge form; arising from its great breadth across the cheeks, and the prominence of the latter. Complexion a light brown; much fairer than the Hindoo, but darker than the Chinese. It is never black, as in many Hindoos and most negroes. The people described are themselves aware that they are a fairer race than the Hindoos; and, like the Turks and Persians, call the latter "black men." The hair of the head is always black, lank, coarse, and abundant. On every other part it is scanty; and the beard is throughout thin and defective. The average stature may be taken at five feet three inches; so that they are shorter than the Hindoos and Chinese, but rather taller than the Malayan family. The lower limbs are better formed than in the Hindoo family, and the hands larger and less effeminate. The whole person is robust, but without the lightness, flexibility, and grace of the Hindoo form. It is at the same time more vigorous, strong, and hardy. The languages of this family of nations are for the most part monosyllabic, and as we approach China wholly so. Even the polysyllabic words of foreign languages naturalized among them are pronounced as if each syllable were a distinct word. It follows, of necessity, that they are extremely simple in their structure, particles supplying the places of inflexions in all parts of speech, and words following each other in the natural order of ideas. There are, besides the Pali, or character of the religious language, six alphabets employed by as many distinct nations, which, however, on examination, may be reduced to three. The Birmese, Peguans, and Aracanese write in the same alphabet, with trifling modifications. The Siamese, Cambojans, and, for the most part, the Laos, write in one alphabet—that usually called the Siamese. But a portion of the people of Lao also write in an alphabet distinct from these two. The Birmese and Siamese have adopted the classification of the Sanscrit, but not so the peculiar alphabet of Lao. We hold all three to be of native invention, and the introduction of the Sanscrit classification to be only recent and incidental. The fourth alphabet, or Pali, in which religious works are generally written is common to all the nations now mentioned, and is the same which is now used in Ceylon for a similar purpose, and which was once used in Java and other regions remote from India, the country in which it unquestionably originated. The languages of the Hindoo-Chinese countries now mentioned have not only a common character as to sound, structure, and genius, but they contain also many words in common, the necessary effect of invasions, conquests, and settlements; the greater number of them, probably, in rude and early periods of society, and of which, with few exceptions, history has preserved no record. A large infusion of Sanscrit, through the medium of the Pali, is also common to them all. But what is the Pali itself? The common belief is, that it is the ancient language of Magadha or Bahar. It differs chiefly from Sanscrit in being more vocalic, more effeminate in its pronunciation, and less complex in its grammatical structure; and, in short, much in the same way that Romaic and Italian differ from Greek and Latin. Most probably it was a language which arose on the ruins of the Sanscrit; and was the result of a conquest of the people who spoke the latter, effected by some other Hindoo nation, the principal seat of whose government was Magadha or Bahar. This theory would confirm the common and rational opinion, that the religion of Buddha is of more recent origin than that of Brahma. The Pali is not an intrinsic portion of the Hindoo-Chinese languages, but it is found to exist in them, as Arabic does in Persian or Turkish. It in fact embellishes them, but is not essential. The mind of this family, as exhibited in their literary efforts, ranks them below that of the Hindoos. In enterprise they rank also below the latter. Their wars and enterprises have been wholly confined among themselves; and they have never exercised the slightest influence over the other great families of mankind; nor have they produced a single great name known to history, or one remembered even by themselves a century after his death. Still their civilization must be of considerable antiquity, for the elements to promote an early advance unquestionably exist in their country, and these have never been presented to any family of mankind without begetting early improvement. The ox, the buffalo, and the elephant, are natives of their countries throughout; and very probably the horse and dog were so in early times. The soil too is generally of remarkable fertility; is well watered; and, in all likelihood, rice and some smaller grains, with some farinaceous roots and useful fruits, are indigenous. Inferior to the Hindoos, and still more to the Persians, Arabs, and Chinese, their superiority over all the negro and American nations is in a still greater proportion. Their progress in agriculture, in the common arts of life, the character of their religious and civil institutions, and their possession of a written character and a literature, to which they have been little indebted to foreigners, attest, in short, an early and considerable progress in society. Birmese temples, with every appearance of authenticity, can be traced back to the 9th century, corresponding to the ages of Charlemagne and Haroun-al-Raschid. This, to be sure, is no great antiquity, but the people who constructed such buildings were already far removed from being savages.

We shall now offer a brief sketch of the races or varieties of the Hindoo-Chinese family, beginning our examination from the westward. After leaving the country of the Hindoo family—of the men of black complexion, fine prominent features, slender person, and graceful form—we approach the men of brown complexion, flat features, and strong-built but squab persons. Still the Hindoo form, whether from admixture of races or original constitutional difference, has not wholly disappeared; and the half-civilized people of Cassay, Cachar, and Assam, with about a dozen small tribes in a wild and half-savage state, may be described as partaking of the physical form of both Hindoo and Hindoo-Chinese. All these speak different languages, and the more civilized write, some with the alphabet of the Bengalees, and some with that of the Birmese. Among a few, language is polysyllabic, but monosyllabic dialects prevail.

To the south and east of the savage, semi-barbarous or half-civilized tribes and nations now mentioned—extending to the south as far as the 7th degree of N. lat., and to the E. as far as the Anam race, we find six considerable nations, in which the physical character we have ascribed to the Hindoo-Chinese family is well marked, the genius of whose languages agrees, and who are nearly in the same state of social advancement. These are the Aracanese, Birmese, Peguans, Laos or Shans, Siamese, and Cambojans. Each of these has its own peculiar language; and there exists even in their physical form, especially as to size, strength, and feature, differences which, though not very obvious to a stranger, are sensible enough to themselves. Living among them in scattered communities, as far as European inquiry has extended, there exist no less than eight tribes, migratory or savage, speaking as many distinct languages.

From the eastern frontier of Camboja, to the western frontier of China, exists the Anam race, comprising the Cochin-Chinese and Tonquinese. These, though they have the common characters of the Hindoo-Chinese family, differ from the rest in so many particulars that they might proba-

bly have been considered, without impropriety, as a distinct family of the human race. In stature they are shorter than their neighbours, the Laos, Cambojans, and Siamese, and greatly shorter than the Chinese. Their persons are squat, but well-proportioned and active; their features are unseemly, their cheek-bones very high, and in that direction the face is very broad. Their language is purely monosyllabic, and in its terms has no admixture of the western languages. It has no alphabet; but, in lieu of it, uses, with little variation, the symbolic writing of the Chinese. Besides the Anam nation, there are two considerable tribes inhabiting the same country, the Vhampa and Moi, speaking their own distinct and peculiar idioms. Thus, throughout the whole of the Hindoo-Chinese countries, and among a people probably not by *one tenth* part so numerous as the Hindoos, we have thirty-two nations with distinct languages.

We now come to an important family, comprising, indeed, a very large portion of mankind, the *Chinese*. The outline of its physical character may be described as follows: Colour, a sickly white, or pale yellow; hair of the head lank, black, coarse, and shining; beard always black, thin, and deficient; there is but little hair on any other part of the body; eye invariably black, or dark; eyes and eyebrows oblique, turning upwards externally; cheek-bones high, and face round, neither square, nor lozenge-formed, nor angular in its outline. Nose small, depressed at its extremity, and thick at the root; lips thicker than with Europeans, but moderate compared to those of the negro. The whole person is well built and symmetrical; there is not in it the lightness and agility of the Hindoo, but there is sufficient activity, and far greater strength. The hands are small and soft, like those of the other people of warm climates. The lower limbs are particularly well formed, far excelling in this respect those of all other Asiatic people. The languages of this people are purely monosyllabic; none of the nations comprising it having ever known how to put two syllables together. Three hundred and thirty poor monosyllables, beginning with a consonant, and ending in a vowel, a liquid, or a nasal, and each monosyllable admitting commonly of about four intonations, so as to make in all about 1300 words, make up the whole of their meagre colloquial dialects, which are no less than fifteen in number, corresponding with the ancient provincial divisions of the country, which, in early times, composed, probably, at least as many distinct nations. The Chinese monosyllables are neither affected by number, case, nor gender; by mood, tense, or person; but are designated by prefixed or affixed particles, about thirty in number. The language of the Hottentots is scarcely ruder, more uncouth, or inharmonious. The Chinese family never invented an alphabet. From knotted words they came to their present symbolic character, which bears no resemblance to the Egyptian or any other hieroglyphics. It is a language for the eye, and not the ear; a character which may be read in English, or in Arabic, as well as in any Chinese language, and probably, indeed, with more precision. The Chinese writing, in fact, is a universal character, like the Arabic numerals, and has, consequently, many conveniences; but it has also its inconveniences. It has prevented the culture of oral language; occasioned the continuance of many distinct languages in the same country; and these, wretchedly meagre in structure, sound, and comprehensiveness. The Chinese mind, as indicated by its literature, is frigid, mechanical, and unimaginative. For the fine arts, in which the Greeks and Etruscans had made such remarkable progress 2500 years ago, the Chinese have never, to the present day, exhibited any capacity. They are laborious, practical, orderly, a vast assemblage, in fact, of shopkeepers and mechanics. They are among those families that made the earliest progress in civilization. Whatever they have is, also, indigenous; for of all mankind they owe least to strangers. The Chinese carry their authentic history back to a period of near 3000 years; and their sage, Confucius, lived and wrote in the present character 2300 years ago; wrote, in short, his moral rhapsodies while Herodotus was writing history, and in the same age in which flourished Pericles, Phidias, Hippocrates, and Plato: so that China was obviously as inferior to Europe then as it is now. At that time, however, China, south of the Yellow river, which at present contains the greatest and most industrious portion of its population, was in a state of entire barbarism; and even the northern frontier was divided into many petty states: facts that only contribute, with many others, to prove the comparatively recent origin of the whole human race. Two hundred and fifteen years before Christ, or above two centuries and a half later, the Chinese built along their frontier a wall of 1500 miles in extent, some 20 feet high, and broad enough for half a dozen horsemen to ride abreast: the only human monument that makes "a conspicuous figure on the map of the globe." This was in the age of the Hannibals and Scipios, and in point of magnitude, but nothing else, far exceeded the power of the Romans and Carthaginians of the same period. We may infer from it that a people who could erect such a work, and who, 2000 years ago, had a frontier of 1500 miles to defend, were already numerous, and to a certain degree industrious. We may safely infer, then, that the Chinese, from their early progress in civilization, from their invention of printing, their discovery of silk and porcelain, their progress in useful works, such as domestic architecture, bridges, and canals, and their acquaintance with the art of civil administration, are, if not the most showy and brilliant, at least the most practical and useful, of the Asiatic races. One thing has been always common to this and the Hindoo family—an absence of the spirit of enterprise. In no age have the Chinese gone abroad in search of foreign conquests or adventures; and even their indirect influence on strangers has been confined to their own immediate neighbourhood, no doubt a wide circuit. Like all Asiatic people, too, they exhibit a disposition to stand still, after making certain advances in civilization, which, in their case, have undoubtedly been respectable. They, at all events, display none of that illimitable facility of expansion which, in the history of our race has hitherto alone characterized the European family. The Europeans of the 19th century bear very little resemblance to those of the 15th, except in spirit and enterprise; but we perceive that the Chinese of these two distant ages are in all respects very nearly the same. The European has advanced at the speed of the race-horse, while the utmost that can be said of the Chinese is, that its pace has been that of the tortoise.

Even in the apparently homogeneous population of China there is to be found considerable diversity, both physical and intellectual, probably as great as in the European family or the Hindoo. It has been already stated that there are fifteen languages, belonging to as many provinces; and, indeed, several provinces have more than one language. The inhabitants of the southern and eastern coast are commonly more athletic than those of the centre and north; and among the latter are found some who have less of the obliquity of eye which is so characteristic of the Chinese, and whose features altogether approach more nearly to the European. There are even races within the empire that are not Chinese, either in person or speech, and who still preserve their independence, as the Meaou-tse in the interior, the Lolos on the western frontier, with the mountaineers of Hainan and Formosa. These two islands, indeed, seem only to have been colonized by the Chinese, as the Saxons colonized Britain; while the aborigines, like the Welsh and Highlanders, have been confined to the mountains. The language of Formosa is, in fact, polysyllabic, and contains many of the words of the Malayan family of languages; and the Chinese colonization of this island we know to be only of two centuries' date.

Near the Chinese we have another great family, bearing it some resemblance, but still so distinct in physical and intellectual character that we are warranted in classing it separately. This is the *Japanese*, which occupies a country of great extent, in the fine and temperate climate from 30° to 45° N., and comprises a population inferior only to the Chinese. Their colour is tawny; stature short, but robust; noses flattish; eyelids thick, and, as it were, puffed; eyes, as usual, dark, but less sunk than those of the Chinese; lower limbs large and thick, not clean and well made, as with the latter. "In the main," says Kempfer, "they are of a very ugly appearance." The language of the Japanese, instead of being monosyllabic, is polysyllabic. The Chinese can pronounce the aspirate *h*; the Japanese have no such sound in their language. The Chinese have, as it were, a natural incapacity of pronouncing the consonants *r* and *d*, which they always convert into *l*. The Japanese pronounce them with the same facility as Europeans. The different pronunciation of the two people made a lively impression on Kempfer, who describes it as follows: "As to the pronunciation, that also is very different in both languages, whether we consider it in general, or with regard to particular letters; and this difference is so remarkable that it seems the very instruments of voice are differently formed in the Japanese from what they are in the Chinese. The pronunciation of the Japanese language in general is pure, articulate, and distinct, there being seldom more than two or three letters, according to our alphabet, combined together in one syllable: that of the Chinese, on the contrary, is nothing but a confused noise of many consonants, pronounced with a sort of singing accent, very disagreeable to the ear." He adds that, with the exception of a very few commercial terms, the language of Japan does not contain a single word borrowed from the dialects of China; and hence he argues, with justice, that the two nations are wholly of distinct origin. The Japanese, to a certain extent, have adopted the symbolic writing of the Chinese; but they have also an alphabet of their own, which is syllabic, like that of the Manchoos, and like it, too, written from top to bottom. A Hindoo alphabet has also been recently discovered among them, confined to the priesthood, whose

ritual is in the Sanscrit or Pali language. The Japanese, from the accounts we possess of them, are a race of considerable physical and intellectual energy; inferior to the Chinese in ingenuity, but superior to them in spirit and courage. Favoured by a country enjoying many advantages of soil, climate, extent, insular position, with most probably the possession, on the spot, of many of the most useful plants and animals, they could hardly fail to make an early progress in civilization. Their authentic history, according to themselves, dates 660 years B.C. This is probably greatly over-rating its real authenticity; for it would carry us back almost to the foundation of Rome, and would precede by nearly two centuries the age of Confucius and Pericles. In fact, they admit that they are a people of more recent civilization than the Chinese by twelve centuries. They have had, however, a long time for improvement, and for the last three centuries may be considered as having been absolutely stationary; if, indeed, as the result of their self-exclusion from strangers within that period, they may not rather be considered to be in a more unfavourable position than before it. While Chinese civilization has been repeatedly interrupted by the invasions of the shepherds of the North, no strangers have ever successfully invaded Japan; and the only attempt at conquest, made by the Mogul emperors of China, between five and six centuries ago, the elements, and the courage of the Japanese, repelled, and punished by the destruction of 100,000 of the invaders. An industrious, and in many respects an ingenious, culture of rice, barley, and wheat; respectable manufactures of silk, cotton, pottery, and lacquered ware; letters, literature, authentic records, the art of printing, and political institutions; prove the Japanese to be capable of a respectable civilization according to the Asiatic standard; but they prove also that, notwithstanding their more favourable position, both as to climate and political security, their natural genius is inferior to that of the Chinese. That they are a peculiar and original family, we think there can be no question. This is their own opinion; and Kempfer observes, in reference to this subject, that they "fancy themselves highly affronted by the endeavours of some who busy themselves to draw the original of their nation from the Chinese or others of their neighbours."

We have described the individuals of the Japanese family as if there existed among them no differences, physical or intellectual; but if we knew more of them, probably many considerable variations would be found in both respects. The inhabitants of Nipon, the principal island, are distinguished by "big heads, flat noses, and musculous, fleshy complexions," as Kempfer expresses it. Those of Saikokf are short in stature, of slender make, but well-shaped and handsome. The inhabitants of the Loochoo islands are described by our navigators as being neither Chinese nor Japanese, but partaking of both: they are most probably neither, nor yet a mixture of both, as they fancy, but an original and distinct race. Their stature does not exceed 5 feet 2 inches, so that they are a very diminutive race. Their language is peculiar, partaking equally of the monosyllabic and polysyllabic character. In fact, the Japanese empire is an aggregate of small hereditary principalities, in which a little acquaintance would probably discover much diversity. In language, too, probably much difference would be found to exist; although, in all likelihood, not to so great an extent as in China; owing to the existence of a more perfect oral language, a common alphabet, and, in general, the absence of the artificial medium of communication which is universal among the people of the latter country.

To the N.E. of China we have another family, the *Coreas*, occupying a peninsula equal to Britain in extent. The Coreans are described as superior in strength and stature to the Chinese and Japanese, but they are evidently a race very inferior in mental energy and capacity to either. Their language, or, most probably, languages, are peculiar, differing from those of their immediate neighbours, the Manchoos, Chinese, and Japanese. It would appear also, that they have a national alphabetic character, although occasionally having recourse also to the symbolic writing of China. In the useful arts they have made considerable progress; but the standard of their civilization is much below that of the Chinese and Japanese. Their authentic history goes back to 100 years B.C., or corresponds with the classic æra of Rome.

The inhabitants of two thirds of the superficies of Asia, from the seats of the families already specified to the Frozen ocean, remain to be described. These have a common resemblance in some important features; but it is only such a resemblance, colour alone excepted, as exists in all the families already mentioned from the eastern shore of the Atlantic to the eastern confines of Hindostan. Modern naturalists have described the whole, including in it the nations to the E. of the Hindoos, which we have just classed, as *one* of the five permanent varieties of the human race, under the name of the *Mongolian*. A classification of this description, which arranges under a single head people differing most widely in form of person, stature, strength, language, and mental capacity, appears to us of no value whatever, and we feel ourselves warranted in attempting a different one, though the materials before the public for such a purpose be exceedingly imperfect: and the subject itself, from its extent and variety, as well as the rude and wandering character of nearly the whole of the races concerned, is naturally of much complexity. We shall divide the races into those which inhabit the valleys or southern slopes of the Himalaya chain: those which dwell between the latter, the Chinese and Corean families, and the Altai mountains; and, lastly, those which dwell between the Altai range generally and the Northern ocean.

The first race, proceeding in the above order, and beginfrom the E., is the Bootea, or inhabitants of Bootan. "It is not possible to conceive," says Turner, who was perfectly well acquainted with both, "a greater dissimilarity between the most remote inhabitants of the globe, than that which distinguishes the feeble-bodied and meek-spirited natives of Bengal, and their active and Herculean neighbours, the mountaineers of Bootan." They have invariably black hair; the eye is a very remarkable feature of the face—small, black, with long, pointed corners, as though stretched and extended by artificial means; their eyelashes are so thin as to be scarcely perceptible, and the eyebrow is but slightly shaded. Below the eyes is the broadest part of the face, which is rather flat and narrow from the cheek-bones to the chin. The skin, about as fair as that of a southern European, is remarkable for its smoothness; and the beard does not present itself until a very advanced age, and then is scanty. The Booteas are a stout, active race, and their stature occasionally rises to 6 feet. Mr. Turner, indeed, describes them "as models of athletic strength." The Booteas are a long-settled, agricultural people, and have made considerable progress in the arts; have a peculiar language; an alphabet which follows the Hindoo arrangement; and in civilization, allowance being made for their remote, insulated, and mountainous country, may be considered on a par with the inhabitants of the countries lying between India and China.

Westward of the Booteas is the country of the Nepal, which, independent of Hindoo colonists and settlers from the S., who are sometimes of pure blood, but have often mixed it with that of the natives, contains eight aboriginal races, viz., the Gorkhas, Magars, Gurungs, Jariyas, Newars, Murmis, Kirauts, and Lapchas. This, from the predominant race, may be called the *Gorkha* family. These are a short, robust people, of an olive complexion, and of features less Mongolian than those of the Booteas. Their languages are, for the most part, distinct from each other, and polysyllabic, and the greater number of them have a knowledge of letters. There is, among one of the races at least, the rudiments of a native alphabet; but the Dewanagari, adapted by additions and omissions to their native pronunciation, has been adopted by the greater number. Their state of civilization is nearly the same as that of the Booteas; but they have, recently at least, exhibited a greater spirit of enterprise.

To the N. of Bootan and Nepal, and on the terrace of the grand chain of the Himalaya, at an elevation of 12,000 or 13,000 ft. above the sea, in a cold and dry climate, and an ungenial soil, are found the Tibetian family; which, as far as our knowledge goes, extends over 26 degrees of longitude, or from the 74th to the 100th. The Tibetians have what is commonly called the Tartar countenance—a face angular and broad across the cheek-bones, and small black eyes, with very little beard. Instead of being tall, like the Booteas, they are short, squat, broad-shouldered, but slow and sluggish in mind as well as body. They are mild in disposition, and have never exhibited the mental energy or enterprise of their neighbours either to the N. or S. The horse and ass, two species of the ox, the goat, and sheep, are domesticated among them. All these are probably natives of the country, and the two first are said still to exist in the wild state. Their language is guttural, nasal, and harsh, and in a great measure polysyllabic. They possess a peculiar alphabet, which bears some resemblance to that of the Hindoos in their neighbourhood, but does not follow its arrangement. For religious purposes they have another alphabet, much resembling the Pali, and which they no doubt received along with the religion of Buddha or Fo, which they have been the medium of communicating to many of the tribes of Tartary, including the two which have conquered China. They have long possessed the art of printing with immovable wooden blocks, which they use, however, only for the multiplication of religious works.

We come now to far more important races: those inhabiting generally the vast *plateaux* and extensive ascents between the Himalaya and Altai ranges, as far as the 140th deg. of long., and then between the former and the right bank of the Amur or Amour. This is the *Mongolian* family, and may be described as being generally comprised be-

tween the 40th and 50th degrees of lat., and ranging over 80° of long., or from the 60th to the 140th deg. E., although, in some situations, exceeding these limits N. and S. by a few degrees. We shall first give the general description of the whole family. Forehead low and slanting; head altogether of a square form. The cheek-bones stand out widely on either side; the *glabella* and *ossa nasi*, which are flat and very small, are placed nearly in the same plane with the malar bones; there are scarcely any superciliary ridges; entrance of the nose narrow; the malar *fossa* forms but a slight excavation; the ulvular edge of the jaws is obtusely arched in front; chin rather prominent; body short of the European stature, broad, square, and robust; extremities short, but slender; shoulders high; neck thick and strong. Hair always black, and the eye invariably black or dark brown. Hair of the head long and lank; and there is a paucity of beard, as well as hair over the rest of the body.

There are two great divisions of this family known to Europeans, under the name of Eastern and Western Tartars. The first comprise chiefly the Manchoos, sometimes called also Manshurs and Manjurs. These are the present lords of China, of which their parent country constitutes but a dependency, though a favoured one. Those that are seen in China are not always easily distinguished from the Chinese. They are described as shorter and squatter than the Chinese, and having a more angular countenance and harsher features. It must be recollected, however, that a perfect similarity of dress and costume is apt to mislead the observer, and that most of the first conquerors marrying Chinese women, the nominal Manchoos of China are in reality, in a great measure, a mixed race. Inhabiting a more genial climate and a better soil than the Mongols or western Tartars, the Manchoos are a more civilized people than the latter. They have, for the most part, habitations, and some agriculture, though flocks and herds constitute their chief wealth. The great river Amur, or Saghalien, and its many branches, which abound in fish, passing through their territory, many exist as fishermen. The Manchoo language is quite national and peculiar; it is polysyllabic, full, and sonorous. It has the sort of copiousness which characterizes the Sanscrit and Arabic, and which, in a perfect language, ought rather to be called redundancy. The number of words for the horse, ox, and dog, according to age, sex, size, colour, and other qualities, is, for example, overwhelming. The present alphabet of the Manchoos is syllabic, written in columns from the top to the bottom of the page, like the Chinese, but, contrary to the practice of that character, from left to right. It is said to have been invented only during the present dynasty, the Manchoos having previously used the same character as the Mongols. The Manchoos, though they have acted a considerable, have by no means acted an equally distinguished, part on the great theatre of the world with their neighbours the Mongols. In the 11th century, however, they established the great empire known in the middle ages by the name of Katay or Cathay, by uniting to their own country the northern half of China. This, after lasting 117 years, was subverted by the arms of Jenghis Khan; but in the year 1624, and at an interval of more than four centuries, the Manchoos again possessed themselves of China, and have now for more than two centuries governed that empire, and probably with a skill and wisdom never equalled by its native masters.

We come now to the true Mongols—to the race "whose rapid conquests," as Gibbon expresses it, "may be compared with the primitive convulsions of nature, which have agitated and altered the surface of the globe." They extend westward from the longitude of Pekin, or about 116°, to the sea of Aral, a sweep of at least 3000 miles, and with the same physical form, the same language, and no great variety of manners, embrace the communities or tribes known to us under the various denominations of Mongols, or Moghuls, Kalkas, Eluths, Ogurs, Kokonors, Kami, and Kalmucks. It is peculiarly to this family that the descriptions given by European writers of "the Tartars" is applicable. They are, in fact, the same men as the companions of Attila, Jenghis Khan, and for the most part of those of Timur, who, though priding himself on being a Turk, was in reality a Mongol, whose family had been long settled in a Turkish country, and whose myriads were a mixture of both races. Gibbon, on the authority of Jornandes, describes the person of Attila, and says that it exhibited "the genuine deformity of a modern Calmuck." An ecclesiastic, quoted by Matthew Paris, gives, in 1243, a picture of the Mongols who were the instruments of the conquests of Jenghis and his sons, which is evidently drawn by an eye-witness. "The Tartars," says he, "have firm and robust bodies, lean and pallid countenances, high and broad shoulders, short and distorted noses, pointed and prominent chins, a low and deep upper jaw, long teeth distant from each other, eyelids stretched out from the temple to the nose, eyes black and unsteady, an expression oblique and stern, extremities bony and nervous, large and muscular thighs, but short legs, with a stature equal to our own, the deficiency in the length of the lower limbs being made up in the rest of the body." The Catholic missionaries, who in the reign of the Chinese emperor Kang-hi repeatedly travelled over the country of the Mongols, and actually surveyed a portion of it, confirm this description. The Mongols, by their statement, are a stout, squat, swarthy, and ill-favoured people, with the common Tartar countenance expressed in its boldest lineaments. The language of the Mongols is polysyllabic, and differs wholly from that of the Manchoos. What is remarkable, and almost peculiar to this people, is, that the whole race speak the same language, from the longitude of Pekin almost to the Caspian, and in some situations even into the heart of Siberia, and westward within the confines of Europe. This arises, no doubt, from their being physically the same race, from their ever-wandering and unfixed habits, the frequent mixture arising from these habits, the practice of a universal hospitality, and their having been repeatedly united under the same government, though never very permanently. Something similar to this may be found among the islands of the Indian ocean, the languages of which have a vast number of words in common, a pacific sea constituting in this case a common medium of intercourse and communication, like the steppes and deserts of the Mongols, the *pros* and the canoe, in fact, taking the place of the horse, the ox, and the camel. The country of the Mongols is cold, elevated, and dry, few parts of it being fit for culture, and a great portion of it consisting of deserts, or "seas of sands," as the Chinese express it, in which there is neither herb nor water. It abounds, however, in game and wild animals. For the chace there is the tiger, leopard, deer, antelopes, hares, and many species of the gallinaceous family. The camel, ass, and even the horse, are still found in it, in their wild state; and no doubt the ox and sheep were so also before they were appropriated. Such a country necessarily made the Mongols early a nation of shepherds and hunters, and chained them down as it were to that condition.

The Mongols, with the exception of a very small number, live exclusively on animal food; and their clothing and dwellings, or tents, are for the most part of animal tegument or fibre. When urged to agricultural employment, their answer is, "Herbs were made for the beasts of the field, and the beasts of the field for man." (*Ibid.*, p. 178.)

Their whole employment consists in the tending of cattle, war, and the chace. Their knowledge of letters is of the humblest order, and applicable only to the purposes of superstition in the hands of their priests. One tribe, the Igurs or Ogurs, invented a meagre alphabet of 14 letters, which, improved and extended from that of Tibet, is still in use. Of their own history and important migrations, which civilized nations have recorded for more than 2000 years, they know as little as rats or marmots do of theirs. Jenghis Khan was wholly illiterate, and Timur and Baber had a knowledge only of Turkish and Persian letters. The immense country of the Mongols may be described as a vast nursery of soldiers, consisting of many camps, equipped, provisioned, and ready to march at a moment's notice, without inconvenience or expense. The people have strength and hardihood of body, and vigour and intelligence of mind, to avail themselves of these advantages; and whenever a leader of genius capable of uniting the tribes in a common adventure has sprung up among them, they have proved a pest and nuisance to all the civilized races of mankind within their reach. Such a union made it necessary for the Chinese to build their great wall more than two centuries before the Christian æra; occasioned about the same period the destruction of the Greek kingdom of Bactria; caused the settlement of the Huns within the confines of Europe, with their acts of destruction and rapine in the finest parts of it, in the 4th and 5th centuries; and the conquest of Turkestan, Persia, India, and China, achieved by Jenghis Khan, Timur, and their descendants in the 13th, 14th, and 15th centuries. The Mongolian family is at this day very nearly what it was 2000 years ago, and in all intermediate times. Are mankind likely, then, to be again harassed by any of their great military expeditions? Such an event is very unlikely with any nation, the Chinese excepted; and as far as the European family is concerned, the invention of gunpowder and firearms, with other improvements since the 15th century, have made it all but impossible. Asiatics, indeed, though sometimes obtaining temporary advantages, have never been a match for the Europeans, even when the latter were comparatively weak and semibarbarous. Attila was defeated in the plains of Chalons by an inferior army of the barbarians of northern Europe; and the whole of his adventures were, after all, but so many predatory inroads on a large scale. Jenghis Khan, his successor, effected only the conquest of the weakest and rudest nations of Europe, the Russians, Poles, and Hungarians, and even their subjugation was temporary. Timur did still less, and the Bosphorus was sufficient to stop the progress of a conqueror who had marched in triumph over 5000 miles of Asiatic territory.

The Franks defeated the Arabs in the height of their pride and power. A handful of Normans dispossessed them of Sicily, and the mountaineers of Biscay, after a long struggle, finally expelled them from Spain; so that within the memory of history no Asiatic people has formed anything better than a temporary establishment in Europe. Civilized Europeans have been conquered by barbarians of their own family; but not, since the historic age, by Orientalists. The researches of modern philologists, however, make us acquainted with the singular and apparently unaccountable fact, that the languages of India, the Manchoos, and Mongols, and of the Turkish, Persian, and European families, contain many words in common; not so much changed by the peculiar pronunciation of each people as not to be clearly identified; while the Arabic and other languages of the same family do not contain any such common words. It appears to us that this may be most rationally accounted for on the supposition of an invasion and settlement of Transoxiana, Persia, and Europe by the Mongols, in times far beyond the reach of history, before the invention of letters, when there were neither Greeks nor Romans to tell the story. How the Mongolian languages came to possess many words in common with the Hindoo, seems obvious enough. All the Mongolian nations at this day receive their religion, and the language in which that religion is explained, from the Tibetians; and the Tibetians, it is admitted, have received both from India. But what, it may be asked, could tempt the Mongolian nations to the invasion, conquest, and settlement of a country so rude and remote as Europe in the times we are supposing? The answer is, the same cause which produces constant international wars among themselves down to the present moment—the restless military habits engendered by their position—the constitutional animal courage of a race energetic and enterprising—the desire to find new pastures for horses, herds, and flocks, which a well-watered and (then) thinly-peopled country like Europe could well supply; and the victories of one tribe, forcing the conquered to abandon their own lands and seek new establishments. This was, in fact, the cause which drove the Huns of the 2d century B.C. upon the Greek kingdom of Bactria, and eventually brought that people to Europe in the 3d and 4th centuries after Christ, producing even their permanent settlement on its eastern confines. The conquests of Attila, and of Jenghis, it may be added, had similar objects in view, but took a different direction, and ended differently, owing to the resistance in their times of comparatively numerous, wealthy, and civilized people. Timur, with the strength which Europe had already attained, at the close of the 14th century, only threatened to invade it. Both he and Jenghis invaded and overran all the other countries of the West in the languages of which Indian words are to be found; but, like the remote invaders to whom our theory alludes, they never touched the Arabian peninsula, nor formed any permanent establishment in any country in which the Semitic class of languages is spoken.

The native capacity of the Mongolian family is sufficiently attested; by the production of such men as Attila, Jenghis, Timur, Baber, and Kublay Khan; as well as in the conquest, the retention for more than 200 years, and the skilful government during nearly the same time, of the vast empire of China. It is singular, indeed, that the most useful, if not the greatest public work in that country, the grand canal of 600 miles in length, was the work of the first Mongol emperor, who was the undisputed lord of the whole. Kublay Khan, the grandson of Jenghis, though born a shepherd, added to the enterprise and courage of his own race the learning and skill of the conquered people.

Between the Altai range and river Amur to the S. and the Frozen ocean to the N., there exist tribes almost as numerous as in any equal extent of the American continent, and far more distinct in physical form. Many of them are obviously distinct families: and others, not so considered, will, we are satisfied, be found to be such on a better acquaintance. The whole are so numerous, obscure, and unimportant, that it is difficult, or rather impossible, to classify them satisfactorily.

There are found near to, and on the banks of the Amur or Seghalien, four nations, called Soloni, Keriching, Daguri, and Natkis, all of which have languages wholly different from their immediate neighbours the Manchoos, while they differ also among themselves. They are rude, dull, and wholly without the knowledge of letters; live on fish; and with them we find the dog, from necessity, first substituted for the horse and the ox.

Sherbani, the grandson of Jenghis Khan, led a colony of Mongols into Siberia, amounting to 15,000 families, and his descendants reigned there for 300 years, or until the Russian *discovery* and conquest; so that the Mongols, although originally foreigners, now form a considerable portion of the population of Siberia, either pure or mixed up with the native tribes of the country. The *Tungoos* are said to be allied to the Manchoos. They are of middling stature, with features more distinct and more in relief than the Kalmucks or Mongols; well made, active, and courageous. The *Buriats*, it is pretended, also, are of the Mongolian race; but it is evident from their physical form that this cannot be the case, notwithstanding the existence of Mongolian words in their language. According to Pallas, an eyewitness, they are short in stature; and so effeminate that six of them hardly equal, in point of strength, a single Russian. These cannot be of the same stock with the powerful and intrepid people that, centuries ago, conquered these same Russians. The *Wagaul* constitutes a small family, dwelling between the Ouralian mountains and the Obi, of stature below the European, with black hair, scanty beard, and Tartarian face. The *Ostiaks* are a family small and feeble, with hair of a light colour and reddish tinge. They can count no farther than 10, and live almost exclusively on fish. The *Samoyeds* extend along the Frozen ocean from the 40th to the 115th deg. of E. long. The stature of this very distinct family is commonly from 4 feet to 5 feet, and consequently at least a foot short of the European standard. Head disproportionately large; face flat; mouth large; ears also large, and the lower portion of the face projecting. The *Tchouktchis*, *Yakagires*, and *Koriaks* occupy the extreme eastern angle of Asia fronting America, and are a coarse-featured, short people; without, however, the flat noses, or peculiarly small eyes of the Kamtschateadales. They resemble the Esquimaux of America; and speaking three distinct languages, are probably as many distinct races. The *Kamtschatcadales* are a very short race, with broad shoulders, a large head and a flat elongated countenance, thin lips, small eyes, and very little hair. The *Aleutians*, or inhabitants of the Aleutian islands, are a different race from these. They are swarthy, short, but stout and well-proportioned. The people occupying the great island of Saghalien at the mouth of the Amur, and the whole chain of the Kurile islands, from the cape of Kamtschatka, to Jess in Japan, are a distinct race from any of those abovementioned.

The stoutest and most vigorous of the people of this part of Asia, or those found to the S., dwell in moveable tents, like the Mongols; have horses and oxen; and are not wanting in stature, strength, and the military virtues. On the contrary, the inhabitants of the bleak and inhospitable regions towards and on the shores of the Polar sea all exchange the horse, ox, and sheep for the rein-deer and dog; live in cabins or caverns instead of moveable tents; are small, weak, and pusillanimous: "a race," as Gibbon expresses it, "of deformed and diminutive savages, who tremble at the sound of arms." Among all the native races to the N. of the Altai mountains, letters are wholly unknown, agriculture is scarcely practised; for war on a large scale the people have neither disposition, capacity, nor means; and, to obtain food and clothing, nearly their whole time is consumed in fishing and the chase.

V. Amount of Population.—Political Divisions.—There are no means whatever by which to form anything like a correct estimate either of the extent or population of the greater number of Asiatic states. The estimates of the population of China only vary from about 150 to about 368 millions; and the differences in the estimates of the population of other countries, though much less in absolute amount, are quite as great in degree. There are also great discrepancies in the estimates that have been formed of the area of the different states, originating partly in the want of correct measurements, and partly in the fluctuating and ill-defined nature of their boundaries. The estimate (*inserted on the following page*) is not, therefore, put forth as if it were exempted from error but we are inclined to think that it will be found to be more nearly accurate than most of those by which it has been preceded.

VI. Progress of Discovery.—The geographical knowledge of Asia may be considered as commencing with its western countries, and with Greece, the cradle of our present civilization. Judea and Phœnicia are the quarters from which the earliest information comes. The Jews scarcely recognised distinctly any object more easterly than the Euphrates, emphatically termed by them "the river;" beyond which, at a vague and uncertain distance, they placed "the ends of the earth." Tyre traded with several cities on its banks, but does not seem to have pushed her intercourse farther; though Dr. Vincent reasonably conjectures, that the chests of rich apparel, carefully bound with cords, brought by this channel, were from countries much more remote. A great traffic is mentioned with Dedan, a city of Arabia, which, from its many isles, and its merchandise of precious cloths, must have been in the vicinity of Ormuz, and have drawn these commodities from India. They were transported, by large caravans, across Arabia to Edom or Idumea, which was greatly enriched by this traffic. From the south of Arabia, Sheba, or Sabea, sent caravans laden with gold and incense, both probably obtained from the opposite coasts of Africa.

ASIA.

Estimate of the Area and Population of the different Asiatic States.

States.	Area in Sq. Miles (Engl.).		Population.	
Chinese Empire and dependant States		7,144,000		168,000,000
Russian Empire		5,846,000		3,600,000
Empire of Anam		98,000		5,000,000
Birman Empire		184,000		2,000,000
Siam		80,000		2,800,000
Malay Peninsula		58,000		600,000
Cassay		7,000		70,000
Beloochistan		200,000		1,000,000
Afghanistan, &c.		200,000		5,000,000
Independent Tartary, or Turkestan		727,000		5,000,000
a. Khanat of Bokhara	263,940		2,000,000	
b. Khanat of Kokan	135,680		1,000,000	
c. Khanat of Khiva	6,880		800,000	
d. Independent Kirghiz and Tooriks	320,500		1,200,000	
Persia		482,000		9,000,000
Turkish dominions		447,000		12,900,000
Arabia		1,000,000		10,000,000
Hindostan, with Assam, and the British provinces beyond the Ganges		1,382,000		150,000,000
Independent States:				
a. Lahore (Punjab)	114,500		8,000,000	
b. Sinde	52,600		1,000,000	
c. Nepal	53,600		2,500,000	
d. Bootan	64,000		1,500,000	
e. Scindia's dominions	39,400		4,000,000	
States under British protection:				
Dominions of the Nizam, Berar, Oude, Mysore, Travancore, Cochin, Sattarah, the Guicowar, the Rajpoot and Bundlecund chiefs, Gwalior, &c.	433,670		41,100,000	
British dominions:				
A. Bengal Presidency, including Assam, Cachar-Jynteah, Aracan, and the ceded Birmese provinces	358,800		69,980,000	
B. Madras Presidency	129,900		14,895,000	
C. Bombay Presidency	68,100		6,940,000	
Portuguese, French, and Danish dominions	7,430		745,000	
Total of Continental Asia		17,865,000		375 230,000
ISLANDS		1,110,000		54,370,000
Empire of Japan	266,500		25,000,000	
Ceylon	24,700		1,000,000	
Borneo	282,500		4,000,000	
Sumatra	192,500		7,000,000	
Java	49,900		4,800,000	
Celebes	75,000		3,000,000	
Philippines	129,100		4,163,000	
Mindanao and Sooloos	101,400		1,280,000	
The remaining Islands in the E. Seas	78,400		4,127,000	
Total		18,975,000		429,600,000

The knowledge of the Greeks, in the nearly cotemporary age of Homer, was far more limited. He seems to have had no distinct knowledge of any country east of Asia Minor. Colchos, on the Euxine, being supposed to contain the chariot of the sun, must have been viewed as the eastern extremity of the earth: the voyage thither by Jason, in the ship Argo, was regarded as an almost superhuman achievement. The name Asia was then applied only to a part of the coast of Caria, whence it was extended to the peninsula, and ultimately to the whole continent; after which the other was named the Lesser Asia.*

The triumphant contest of Greece with Persia excited deep interest, and generated plans of conquest, which rendered every information respecting that empire acceptable. The most valuable contributor was Herodotus, who, during a residence at Babylon, collected materials for a description of the satrapies into which it was divided. To the north it extended over a part of the Caucasian provinces, enabling the writer to delineate tolerably the extent and boundaries of the Caspian. Margiana and Bactria probably reached to the Oxus, beyond which wandered the Scythian tribe named Massagetæ. India was the most easterly satrapy; but being described as containing no great river except the Indus, and bounded by an immense desert, it evidently contained only the western provinces, while the Gangetic and southern countries were entirely unknown. Herodotus gives a somewhat rude description of the inhabitants, suggested probably by the bordering mountaineer tribes. The fact of its affording a revenue four times that of Egypt, shows clearly that it was already opulent and improved. Darius is said to have employed Scylax, the Caryandrian, to descend the Indus, sail along the southern coast, and come up the Red sea; a voyage accomplished in two years.†

The next great source of information to the Greeks was the expedition of Alexander. It did not, indeed, extend much beyond the already known limits of the Persian empire; but the countries, before known only by vague report, were then carefully examined and described. Under his direction two engineers, Diognetus and Baeton, made surveys of each march, which were published by the latter, but are unfortunately lost. To the north, Alexander pushed beyond the Jaxartes, but without being able to bring under subjection the rude tribes who tenanted those regions. On the side of India, he learned the existence of the Ganges and the fine countries on its banks, to which he eagerly sought to penetrate; but the mutiny of his troops compelled him to stop at the Hyphasis. The Greeks had then an opportunity of observing some of the peculiarities of the Indian people; their division into castes; their fantastical religious austerities; and the merit attached to suicide. Alexander descended the Indus to its mouth, and sent thence a fleet under Nearchus, who traced the coast of Asia as far as the Persian gulf, which he ascended, and joined his master at Babylon. This voyage, now so easy, was then considered a most perilous achievement, and the party arrived in a state of distress and exhaustion. Alexander himself, in returning through the maritime provinces, became aware of their extremely desolate character, through which, indeed, his army was in danger of perishing.

On the partition of Alexander's empire, Seleucus obtained Syria, with as much of the countries to the eastward as his arms could hold in subjection. He is said to have attempted the conquest of India; but there is no distinct account how far he penetrated; probably it was not beyond Alexander's limit. He sent, however, an embassy, under Megasthenes, to Palibothra (Pataliputra) on the Ganges, capital of one of the most powerful kingdoms ever formed in India; and through this channel a good deal of additional information was obtained. He also employed his admiral, Patroclus, in an attempt to circumnavigate Asia; and rumour even represents him as having accomplished this vast circuit, and entered from the northern ocean into the Caspian; but the manifestly fabulous character of this report makes it impossible to conjecture how far he really penetrated.

* Voss, Cosmography of Homer, in Malte-Brun. Maritime and Inland Discovery. Cab. Cyclop., book i., ch. 2.

† Herodotus, lib. iii., iv. Rennell's Geography of Herodotus, sec. 11, 12.

All the materials thus collected were at the disposal of Eratosthenes, the learned librarian of Alexandria; and were employed by him in forming, on the astronomical principles of Hipparchus, the first systematic delineation of the globe. It is, however, as to Asia, extremely imperfect. The Ganges is made to fall into the eastern ocean, represented as bounding the habitable earth. The cape of the Collaci (Comorin) is made at once the most southerly and most easterly point of Asia. About ten degrees north of the Ganges, and a very little east, is placed, in the same ocean, the city of Thinæ, often alluded to as the extremity on that side of the habitable world; this appears the first very imperfect rumour, which reached the western nations of the Chinese empire. Not far from Thinæ, the coast turned westward, stretching along the great northern ocean, which bounds both Europe and Asia, but at so low a latitude that the Caspian was considered to be a gulf connected with it by a narrow strait. This was a retrograde step even from Herodotus, who had described it justly as an inland sea. Asia, thus wanting Tibet, China, the greater part of Tartary, and all Siberia, possessed little above a third part of its real dimensions.*

The Romans did not, by their conquests, obtain any accession to the knowledge of Asia. Before they reached Persia, that country had been occupied by the Parthians, a brave northern people, the attempts to subdue whom were not only fruitless, but most disastrous. But the boundless wealth accumulated in the imperial capital, from the spoils of conquered nations, brought all sorts of commodities, however distant the place of their production, and however high their price, to its markets. The *Serica vestis* (silk), then first introduced, became for some time quite the rage, and was readily paid for at its weight in gold. The fragrant malabathrum (betel, or tea), and the ornamented vessels, named murrhina (probably porcelain), brought also vast prices. The merchants of Alexandria and Byzantium were thus impelled, not only to embark large capitals, but to brave hardship and danger in reaching the remote extremities of the continent, where these commodities were produced.

Of the maritime route, Arrian, a merchant of Alexandria, has given a detailed and correct account, supposed to be written in the first century. He describes it as extending along Persia, Arabia, and India, as far as Nelisuram (Nelkanda), on the coast of Malabar. The Greek navigators had not then proceeded farther east, but found in that port supplies of the important articles of silk and malabathrum. This trade was carried on by ships that steered directly across the Indian ocean from the straits of Bab-el-Mandeb, by the route first discovered by Hippalus. Of the more easterly coasts, Arrian gives only hearsay accounts, becoming gradually fainter and more fabulous. But he distinctly indicates Masulipatam and the mouth of the Ganges, with the exquisitely fine cottons there fabricated. Even beyond this limit, he mentions Chryse, or the golden isle (Sumatra or Borneo). Thinæ is noticed, but in a manner still more confused than by Eratosthenes. But he gives a curious account of the collection of the leaves of malabathrum by a people, the form of whose visage shows them to be Tartars or Chinese, and of the manner in which they were picked, dried, and curled. Vossius, Vincent, and most other writers, conceive this to be the betel. Mr. Murray, however, has lately endeavoured to show, that this last, being only used for wrapping the areca nut, must for that purpose be used fresh, and would be destroyed by the above processes; that it cannot consequently be, and is not, an object of trade, though the areca is; and that the malabathrum alluded to was, therefore, most probably tea. The ancient accounts, however, give no distinct intimation how the article was used, nor any reason to think, supposing it to be tea, that it was by drinking the infusion, but rather, in some form, as an object of scent.†

About a century after, Ptolemy published his elaborate system of geography, which shows a very remarkable extension of knowledge in regard to Asia. He delineates, though rudely, a very large extent of coast from the mouth of the Ganges to Cattigara, on the coast of the Sinæ; chiefly from a pretty detailed route of his predecessor Marinus, partly furnished by Alexander, a mariner, who, from his name, was probably a Greek. His statement that it reached 1300 miles S.E., and then about as much N.E., could only consist with a voyage from the head of the bay of Bengal to China. Sada, the point where he turned north, must be at or near Singapore. Thence he described a coasting voyage of 3500 miles, when he crossed "the sea" (evidently the broad mouth of the gulf of Siam), and reached what he terms the golden Chersonese, a name very naturally suggested by the rich mines on the opposite coast of Borneo. Thence he had twenty days' coasting sail (along Cochin China and Tonquin); finally, a course, partly south, but more east, led to Cattigara, which must thus have been on the southern coast of China, and from its name probably Canton. Ptolemy, however, though he professedly made this the basis of his delineation, evidently adopted, and unskilfully combined with it, information from other quarters. In his tables, the golden Chersonese, from its vast extension southward, and containing the names Malayo colon and Coast of the Pirates, very clearly designates Malacca, conjoined probably with Sumatra, which is not separately mentioned. The extreme point of Cattigara, too, is placed on a coast, stretching, not east, as Alexander had described, but due south, with a view probably to harmonize with the strange theory, according to which the coasts of Africa and Asia formed a vast circuit, and met, enclosing the whole Indian ocean.*

The same geographer describes a caravan route, formed through Asia by the merchants of Byzantium. Proceeding due east, through Asia Minor and Persia, they made some circuits in order to include Hyrcania (Astrabad), Aria (Herat), and Margiana (Khorassan): they then reached Bactra (Balkh), which seems to have been the main centre of the inland trade of the continent. The route, which had hitherto been through immense and level plains, led then over those lofty mountain ranges that lie to the north of India. After a laborious ascent, they reached a station called the Stone Tower, where the merchants, destined for the remotest extremities of Asia, united for mutual aid and defence: thence, by a route of seven months, checkered by many perils and vicissitudes, brought them to Sera, the capital of Serica. That this country is China is now so generally admitted, that we need scarcely notice the theories which assign to it a less distant position, especially that of Gosselin, who, in profound ignorance of the localities, would make it Serinagur, in the north of India. The produce of silk, the character of the people, industrious, mild, pacific, timid, and shunning the intercourse of foreigners, all combine to exclude any other supposition. It is remarkable that northern China, reached by this route, is called Serica, while its southern coast is named that of the Sinæ. It is, in fact, uncertain, whether the two were then under one government; at all events, the names were probably those used by the neighbouring nations, as, at present, the term China, the same with Tsina or Sina, is received by us from the people of the Oriental archipelago. Ptolemy's knowledge did not reach to the Eastern ocean; and, unlike Eratosthenes, he did not assume its existence, but bounded Asia on that side, as well as on the north, by a vast expanse of "unknown land."†

This communication, opened by Rome during her highest prosperity, was gradually lost amid the distractions and weakness of the empire, and when all the intermediate countries were occupied by the hostile Saracen power. Stephen of Byzantium, and the Geographer of Ravenna, about the eighth century, show only the most imperfect knowledge of the countries beyond Bactriana, including them under the vague term of India-Serica.

A new people now arose, who, impelled by ambition and religious zeal, explored and civilized a great portion of the world. The Arabs, under the impulse given by Mohammed, rushed from their deserts, and conquered an empire more extensive than that of Rome. They penetrated even into Scythia, which had remained impervious both to the Persians and Greeks, and established flourishing kingdoms on the banks of the Oxus and the Jaxartes. During the enlightened æra of the caliphs, particular attention was paid to geographical knowledge. A number of leading positions were determined by astronomical observation, a process to which the Greeks had been almost strangers: India was well known to them, and ere long became subject to Mohammedan princes. China was never even approached by conquest, but commerce conveyed some pretty accurate ideas respecting that country; indeed, in the ninth century, two Arab merchants, Wahab and Abussid, visited it, and published an account, in some respects very accurate, and accordant with modern observation. They mention its great fertility and populousness; the production and general use of rice, silk, tea, and porcelain; the rigid watchfulness of the police; the general diffusion of reading, and the preference of written over spoken language. It is remarkable that Abulfeda and Edrisi, the most eminent of the Arabian geographers, appear ignorant of this work, and their account is meagre and defective. On the north, some imperfect notices were received of Siberia and the Arctic ocean. This region excited intense interest from its being supposed to contain the castle of two enormous giants, Gog and Magog, the search after which impelled the caliphs to expeditions of discovery. After several fruitless efforts, one was despatch-

* Arrian, Expeditio Alexandri et Historia Indica; Strabo, lib. i., ii., xv.; Vincent's Periplus of Nearchus; Gosselin, Geographie des Grecs.

† Arrian, Periplus Maris Erythrei, in Hudson; Geog. Graec. Minor., tom. iii.; Vincent on the Periplus, 4to, 1805; Murray, Historic. and Descript. Account of China, Edin., 1836.

* Ptolemæus, lib. i., ch. 13, 14; vii., 11; Vincent, Gosselin, &c.

† Ptolemæus, lib. i., ch. 12; vi, 14, 15, 16; Pliny, vi., ch. 17–23; Mela, iii., ch. 5, 7; Gosselin, Geographie des Grecs, tom. iii., iv.

ed, with strict orders not to return without having discovered this castle. Under this impulse they marched towards the Altai, and returned with a truly formidable description of the fortress, as surrounded by walls of iron, and with a gate fifty cubits high. This report was implicitly received, and the castle appears conspicuous in all the maps of the middle ages.*

Europe, mean time, was buried in the deepest ignorance as to all that related to the Eastern world. Attention, however, was at last powerfully attracted to it by the crusades. Some direct accounts were received, and lights were sought in Ptolemy and other ancients: the result was a very confused mass of notions, which are curiously exhibited by Sanudo, in the map prefixed to his narrative of these expeditions, entitled, *Gesta Dei per Francos*. The world is there represented as a great circular plain, in the centre of which stands Jerusalem. Sera is borrowed from Ptolemy; but India is placed partly beyond it, and, under the titles of Major, Minor, and Interior, is scattered through different and distant parts of Asia. The Indus, in the text, is made the boundary of that continent. To the north, Albania and Georgia stretch almost to the sea of darkness, and in the same quarter appears the castle of Gog and Magog.

Attention was about the same time forcibly drawn to another Asiatic region. The Mongol chief Jenghis, and his descendants, established an empire of immense extent, comprising on one side China, and on the other Russia, which was long held under Tartar sway. Thence they marched through Poland into Hungary and Silesia. The duke of that country, having ventured to encounter them, was defeated and slain. Circumstances deterred them from proceeding farther; but their numbers, ferocity, and conquests, struck Europe with terror. In hopes of averting future invasion, it was determined to send embassies from the pope, as the chief of Christendom; and two monks, Carpini and Rubruquis, were successively employed. They travelled by long journeys, of many months, over the vast plains of Tartary to Karrakarum, a rude capital, situated far east in that region. They were tolerably well received, as Oriental courts are fond of the attention and homage which missions imply; but the threatened invasion was prevented by quite different causes. Being probably the first who had penetrated into those remote regions, they communicated new ideas respecting their vast extent, and the countries situated both at their eastern and northern extremities.†

About the same time that this intercourse with the East was opened, and partly in consequence of it, the spirit of industry and commerce revived among the maritime cities of Italy. Venice and Genoa had established factories and carried on trade, not only over all the Levant, but on the coast of the Black sea. From this last quarter, two Venetian nobles of great enterprise, of the name of Polo, undertook to visit the court of a Tartar prince, descended from Jenghis, with a view to dispose of some valuable commodities. Various vicissitudes led them on to Bokhara; and they were there induced to accompany a mission to Cambalu, the court of Kublay, named the Great Khan, who inherited the most valuable of Jenghis's conquests in China and the neighbouring countries. Having returned to Venice, they again set out for the East, taking with them Marco, one of their sons, to whom we are indebted for a most interesting account of his and their travels. On their outward journey, they passed through Balkh, Kashgar, Khotun, Tangut, and other countries in that great table-land of middle Asia, which we name little Bucharia, and respecting which we have little better information than Marco communicated.

Cathay, as northern China was then called, with Cambalu, its capital, the modern Pekin, completely dazzled the travellers. The walls forming a square, each side of which measured six miles—the lofty ornamented gates—the spacious streets—the immense palace, with its painted halls—the beautifully ornamented gardens—the pomp of the imperial festivals—all these objects, nearly on the same scale as now, far surpassed any magnificence of which Europe could then boast. Being well received, and even officially employed, Marco made an extensive tour through the western provinces, visiting part of Tibet, and obtaining information respecting Mien (Ava). This was followed by a more interesting journey into Mangi, or southern China, which not long before had formed a separate kingdom, but happened then, as now, to be subject to a power resident in the north. He describes it justly as more fruitful and populous than the region first visited. Its capital, Quinsai, or the Celestial City, is painted quite in magic colours; its edifices, canals, ornamented bridges, spacious lake, and the palaces which embellished its shores. He indulges here in some exaggeration; yet Hangtchoofoo (as the place is now named, though it has long ceased to be a seat of empire), is described as nearly as large as London, and surrounded by delightful environs.

Marco heard also of Xipangu, or Japan, as a rich insular empire, which the Great Khan had made a vain attempt to subdue. Returning by sea the travellers touched at Tsiompa and Sumatra. They spent some time successively in Ceylon, Coromandel, and Malabar, and Marco gives a not unfaithful account of Indian manners and superstitions. Then sailing up the Persian gulf, they proceeded from Ormuz to Trebisond, whence they returned to Venice, 24 years after their departure. No travellers ever perhaps carried home so great a mass of important information; but the narrative, being tinctured with the marvellous, and resting on Marco's sole authority, became exposed to much of that scepticism, with which the first travellers into new regions are often unjustly assailed.*

The great discoveries thus made were not, however, neglected. In the beginning of the fourteenth century, Juan de Monte Corvino, a Minorite friar, undertook a religious mission into the east. He penetrated to Cambalu, where he was allowed to reside for a number of years, and made many converts; the city was even erected into a see, of which he was named archbishop. About the same time Pegoletti, an Italian merchant, traced the caravan route through Asia as far as Cambalu, and published his itinerary.† Another Minorite friar, Oderic of Portenau, narrated a voyage made to India, the oriental archipelago, and China, returning by way of Tibet. He describes some Chinese peculiarities, which could not seemingly have been copied from former writers; such as the pride taken by the female grandees in long nails and little feet; and the use of birds in fishing. He mentions, indeed, a country of pigmies, with other wonders, which have somewhat shaken his credit. These, however, being related only upon hearsay, indicate credulity rather than bad faith. This cannot be said of our countryman, Sir John Mandeville, whose relations for some time drew a much greater attention; his statements are mostly borrowed, and exaggerated, from Oderic, and, by pretending to have visited the pigmies, and seen other marvels, which the other stated only on report, he proves his work to be a complete forgery.‡

In the end of this century, the conquests and widely-extended empire of Timur, with his victory over Bajazet the Turkish sultan, resounded throughout Asia, and in some degree through Europe. Henry III. of Castile sent two successive embassies to the court of the Tartar conqueror, the last in 1403, under Clavijo, who spent some weeks at Samarcand, and though he has not added much to geographical knowledge, he gave an interesting account of the court and policy of that monarch.§

By these different means, a light, though somewhat dim, was thrown upon the farthest extremities of Asia; but it did not much avail the Italian republics, who were unable to reach its southern shores by sea, while the land route was too arduous and perilous to be much frequented. The period, however, was now at hand when the furthest extremities of Asia were to be the scene of European enterprise and adventure. In 1497, Vasco de Gama doubled the Cape of Good Hope, and reached the shores of India at Calicut. In the short space of twenty years the Portuguese, by a succession of victorious armaments, established forts and settlements in Hindostan, the Malayan peninsula, and most of the islands of the archipelago, and even attempted them in China. Although this career could not be said to be one of discovery, almost all these countries being to a certain degree known, the hitherto doubtful accounts were authenticated, and they were surveyed with much greater precision. In the seventeenth century, a body of French missionaries, eminent for mathematical and astronomical knowledge, obtained permission to reside in Pekin, and were even employed in making a survey of China and the adjacent countries. The materials thus collected were transmitted to France, and arranged by D'Anville. Through the like agency, a less perfect knowledge was obtained of Japan.‖

But though the south of Asia, including its finest regions, had thus become completely known, there remained north of the Altai mountains nearly a third part of the continent to which neither conquerors nor merchants had yet penetrated. Its discovery was reserved for Russia. After groaning for ages beneath the Tartar yoke, she emancipated herself, in the fifteenth century, under Joan Vassilievitch, and has ever since continued an active and increasing power. About the end of that century, having conquered the Cossacs, she had the address to engage that active and hardy race to explore and conquer for her the vast region

* Edrisi, Geogr. Nubiens., Paris, 1819; Notices et Extraits des Manuscrits du Roi de France. tom. ii.; Anciennes Relations, &c., traduites par Reinaudot, Paris, 1718.

† Hacklluyt, i., 46, 117; Purchas, iii., ch. 1.

* His narrative in Ramusio, tom. ii., copied or translated in almost every collection; with notes, by Marsden, 4to, 1818.

† Maritime and Inland Discovery, Cab. Cyclop. i., 310–315.

‡ Oderic in Hacklluyt, ii. 39–43. Mandeville, London, 1499. In Hacklluyt's 1st ed. 1589, omitted in 2d.

§ Clavijo, Historia del Gran Tamerlan, &c. fol. Seville, 1582.

‖ Di Barros, Decomta, Duhalde, &c.

of Siberia. They proceeded step by step, till, in 1639, fifty years after the commencement of the undertaking, Dimitrei Kopilof arrived at the gulf of Ochotsk, a branch of the Eastern ocean. Another division marched south-east upon the Amour, but there, having encountered the Chinese, were obliged to fall back. This progress, being along the southern part of the territory, did not bring them in contact with the coast forming the frozen boundary of the continent, which the English and Dutch were, in the meantime, exerting themselves to traverse as the nearest route to China. Middleton, Barentz, Hudson, and other navigators, engaged in this attempt; but none of them reached beyond the gulf of Obi, a little east of Nova Zembla. About 1640, however, the Cossacs sent expeditions down the rivers Lena, Indigirka, Alaska, and Kolima, tracing their mouths, and the coasts between them. In 1646, they reached the extreme north-east peninsula of Asia, inhabited by the Tchutchi; in 1648, Deschnew and another chief undertook to sail round it, and though the accounts are imperfect, seem to have accomplished their object. Towards the end of the century, Behring discovered the most easterly cape of Asia; he and Tchirikoff afterwards made voyages to America. Cook, in his third voyage, sailed through these straits, and appeared to ascertain the disjunction of the two continents. It was still possible, however, that their coasts, by a vast circuit, might join each other; but this idea has been completely removed by the voyages of Wrangel on one coast, and of Beechey, Dease, and Simpson on the other. We may observe also that Cook, Perouse, and Broughton did much to explore the eastern boundary of Asiatic Russia, and its connection with the large island of Jesso, with Japan and China.*

The entire coast of Asia has thus been explored, and in a great measure possessed, by Europeans. But the interior, never well described, and having ceased to be regarded in a commercial point of view, has continued comparatively unknown. The great range of the Himalaya, better described by Ptolemy than in many modern maps, has, however, been carefully surveyed, and its astonishing height ascertained. The expeditions of Turner and Moorcroft into Tibet, Elphinstone into Caubul, and Burnes into Bokhara, greatly extended our knowledge of these regions.† The embassies from Russia to China crossed Mongolia and the desert of Gobi; while Pallas and Humboldt, from that side, gained much information respecting these central regions. But Ferghanah, Yarcund, Kashgar, and the whole of Chinese Tartary, with its fine plains and lofty mountain ranges, are but little known, and would amply reward the enterprise of a traveller, who should elude the jealous policy by which they are shut against strangers.

ASIA-MINOR. See NATOLIA.

ASIAGO, a town of Austrian Italy, prov. Vicenza, 24 m. N. Vicenza. Pop. 4700. It is built on the summit of a hill, and is celebrated for its dye-works, and fabrics of straw hats. The annual value of the produce of the latter is supposed to exceed 150,000*l*.

Asiago is the chief town of a district containing seven communes, the inhabitants of which speak a corrupt dialect of the German. They are supposed, by some antiquaries, to be descended from fugitive Cimbri, escaped from the great battle in which that people were totally overthrown by Marius, 101 years B.C. Marco Pezzo, an ecclesiastic, and a native of the district in question, published a curious dissertation on this subject, a third edition of which appeared at Verona in 1763.

ASOLA, a town of Austrian Italy, on the Chiesa, 20 m. N. by E. Mantua. Pop. 3000. It is fortified, has a hospital, and a filature of silk. Its foundation dates from the remotest antiquity.

ASOLA, a town of Austrian Italy, 19 m. W.N.W. Treviso. Pop. 3000. It is finely situated on a hill, and is encircled by walls flanked with towers. It has an old cathedral, a public fountain, and some good houses. It is very ancient.

ASPE, a town of Spain, Valencia, 16 m. W. Alicant, in a mountainous country near the Taroffa. Pop. 5000. There are quarries of fine marble in its vicinity.

ASPERG, a town of Wirtemberg, 3 m. N.W. Ludwigsburg. Pop. 1400. Its church has some remarkable antiquities. At a little distance to the N. is the fort of Hohenasperg, on a steep rock 1105 feet above the level of the sea. It is at present used as a prison.

ASPERN, a small village of the arch-duchy of Austria, on the left bank of the Danube, opposite the island of Lobau, about 2 m. below Vienna. This and the neighbouring village of Essling were, in 1809, the scene of a tremendous conflict between the grand French army, commanded by Napoleon, and the Austrians, under the Archduke Charles. After two days' (21st and 22d May) continuous fighting, with vast loss on both sides, Napoleon was obliged to withdraw his troops from the field, and take refuge in the island of Lobau.

ASPET, a town of France, dep. Haute Garonne, cap. cant. 8 m. S.E. St. Gaudens. Pop. 2784. It has manufactures of nails, combs, and boxwood articles.

ASSAM, an inland territory of India beyond the Ganges, a dependency of the British empire, forming part of the E. frontier of our Indian possessions. It is included in the valley of the Brahmapoutra, between 25° 50′, and 28° 10′ N. lat., and 90° to 97° 35′ E. long.; having N. the Himalaya mountains, which separate it from Bhootan and Tibet; E. Tibet; S. the Naga and Garrows mountains, which divide it from the Birman and Munneepoor territories; and W. Bengal: length, E. to W., about 460 m.; area, 18,200 sq. m.; pop. (*Pemberton*, 1835) 602,500. (*Hamilton's Hindostan*, ii. p. 740).

It is divided into,—

	Area.	Pop.	Revenue.	Chief Town.
	sq. m.		Rupees.	
Upper Assam . .	10,000	202,500	120,000	Joorhath.
Central Assam .	5,635	400,000	4,000	Gergong.
Lower Assam . .	2,565		316,000	Gowhail.

The general aspect of Assam is that of fine and fertile lowlands, inclosed by ranges of undulating hills, and these again by loftier ones, the surface of which is mostly covered by forests, but their summits in winter, are often covered with snow. The geology of this region has not been much studied: the mountains which form its S. boundary, which increase in height as they proceed eastward, consist in part of a hard gray granular slate; and on the inferior heights there are many scattered boulders of granite: shell limestone is found in large quantity near Dhurmpoor. (*Pemberton Boileau, Report on the E. Frontier of British India.* Calcutta, 1836, p. 73).

The most remarkable natural feature of Assam is the number of rivers, in which it surpasses every other country of equal extent. Besides the Brahmapoutra, which runs through its centre in a S.W. direction, it has 34 rivers flowing from its N., and 24 from its S. mountains, all of which are navigable for trading vessels of some size! (*Hamilton, E. I. Gazetteer*, p. 39; *Pemberton, Report.*)

In Upper Assam, the Brahmapoutra divides into two streams, inclosing the considerable island of Dehing, one of the most fertile tracts in the country, having an area of 1800 sq. m., and a pop. of 25,000. The inundations which prevail during a part of the year (*see* BRAHMAPOUTRA), and give Assam the appearance of an extensive lake, and the great subsequent heats, render the climate most unwholesome and pestiferous both to Europeans and natives. The chief mineral products are gold dust in the sands of many of the rivers, the collection of which employs a great number of people, the produce of the Dhunseree river alone being estimated at 180,000 rup. a year; silver; iron; salt, chiefly from springs in Upper Assam; lead; coal; and petroleum. Throughout the whole length of the Assam valley, a forest 7 or 8 miles wide extends along the N. border, chiefly of a tropical character; but at the foot of the hill ranges, chesnut, alder, &c., are intermixed with the other trees. The timber is not remarkably fine, nor any of the trees large, excepting the caoutchouc (*Ficus elastica*, Roxburg), which grows solitary, sometimes to the height of 100 feet, and covering with its branches an area of 600 sq. ft. Tea, of a genuine kind, has been discovered in the region inhabited by the Singpho tribes, where it grows over a large tract of the peculiar yellowish soil so characteristically adapted to it: it has been brought to the London market, both black and green, and has fetched a high price; but it remains to be seen whether it can be produced as cheap and of as good a quality as in China. Our anticipations, we confess, are not very sanguine (January, 1839). This province is very favourable to the production of silk, which is of a very superior quality, but mostly made by wild insects, of which there are five different species; the sugar cane grows in Assam, but no sugar is made; a beautiful deep blue dye is obtained from *room*, a species of Ruellia, *Acanthaceæ*; and a powerful poison is procured from some plant by the Assamese, into which they dip their arrows. The hills along the bed of the Trolich are very steep, and covered with dense jungle nearly to their summits. There are no tigers, but many bears, monkeys, squirrels, &c. The chief object of culture is rice, and next to this mustard seed; wheat, rye, barley, and millet are rare; many sorts of pulse, the banana, orange, and other fruits, black pepper, ginger, tumeric, capsicum, onions, and garlic, are cultivated; and cotton by the hill tribes. Cattle and poultry are few; the buffalo is most used in agriculture. Villages rare, and the scattered huts mostly built of bamboo. There is some small trade with Bootan and Tibet: several remarkable roads or causeways intersect Assam. the origin of which is not known, but they appear to have been constructed at a distant period; one of

* Coxe, Muller, Burney, Cochrane, Cook, &c.
† Asiatic Researches, vol. 6, 10, 11, 12. Fraser's Tour in Himalaya mountains, &c.

these extends from Cooch Behar in Bengal to the extreme E. limits of this country. The land is tilled by *pykes*, or natives of four different classes, who are obliged, for a portion of the year, to give their services for the benefit of the rajah granting them their land. (*Pemberton*, p. 73.; *Hamilton*, *E. I. Gazetteer*, p. 40, 41).

The manufactures are those of silk velvet and cotton stuffs, and are carried on by the women: silks are in general use for clothing, and similar to those of China. The trade is mostly with Bengal, the imports from which are broadcloths, muslins, chintzes, &c., salt, opium, liquor, glass, crockery, tobacco, betel, and rice; the exports being gold dust, ivory, silver, amber, musk, daos, Birmese cloths, and a few Chinese cloths; in 1833, cotton was added to the exports from Assam. (*Pemberton*, p. 72). There is a duty of 10 per cent. on the value of all imports. The country is inhabited by a number of different tribes, who in central Assam are united under a rajah tributary to the British government. Upper and Lower Assam are in the direct occupation of the British, who keep at Suddya two companies of Assam light infantry under a British officer, and two gun-boats. (*Pemberton*, p. 71). Justice is administered by the heads of tribes and their punishments are of the most barbarous description, a capital crime involving the death, not only of the criminal, but also of all the members of his family! The religion is that of Brahma, introduced in the 17th century; before that period, the god Chang (probably the same as Boodh) was adored: the priests have great influence, and are intriguing and vicious. The people are active, hardy, and enterprising; but barbarous, revengeful, and deceitful: they consist of numerous different tribes, as the Bor-khamti, Singphos, Mishmees, &c., each under a separate chieftain. Principal food rice, but they also eat serpents, rats, locusts, dogs' flesh, &c.; they use an Hindostanee dialect, the language of Assam being nearly extinct. Some of the tribes go quite naked; others have a covering round their middle, and over the head and shoulders: they wear moustaches, but shave the scalp and chin. Their habitations, even in the principal towns, are mere huts, with a clay floor and conical roof of straw or bamboo. In every respect, this country is in a state of abject barbarism. Little is known of their history; in 1638, they invaded Bengal, but were repulsed by some of Shah Jehann's officers, and lost some of their own frontier provinces. A general of Aurungzebe subsequently led an army into Assam, which he lost before Gergong, during the rainy season, by disease and the resistance of the enemy. Assam is one of the provinces ceded to the British by the Birmese in 1826. (*Hamilton*, *Description of Hindostan*, p. 744, 745. *Hamilton*, *E. I. Gazetteer*, p. 41.)

ASSCHE, town of Belgium, prov. South Brabant, about half way between Brussels and Dendermonde. Pop. 4000. It has some trade in hops, flax, and corn.

ASSEERGHUR, a town and fortress of Hindostan, presid. Bombay, prov. Candeish, cap. distr. belonging chiefly to Sindia's dom., on a detached hill of the Sautpoorah range, 15 m. N. Boorhampoor, and 215 m. E.N.E. Surat. Lat. 21° 28′ N., long. 76° 23′ E. Pop. (1822) about 2000. The town, straggling and irregular, with one good bazar, stands at the base of the rocky hill on which the fortress is placed. The summit of this hill is about 1100 yds. from E. to W., by 600 yds. wide; it is enclosed by a wall, and surrounded by a precipice from 80 to 100 ft. in perpendicular height, so well scarped as to leave no means of ascent except at two spots, both of which are strongly fortified. A second line of works of excellent masonry protects it on the S.W. side, on the principal road to the fort; and a third line embraces the hill immediately above the town. It is, besides, protected by ravines and deep hollows on every side, and possesses the rare advantage of plenty of water. Magazines and a sally-port, easily blocked up by the garrison, are excavated within the rock. The approach from the N. is over a wild tract infested with tigers and wolves. Asseerghur is surrounded on every side except the S.W. by Sindia's dom., and is the nearest place in the Bombay presid. to Bengal. It was taken in 1803 and 1819 by the British, who have held it since the last-mentioned year. (*Hamilton's E. I. Gaz.*, i., 64.)

ASSENDELFT, a village of the Netherlands, prov. Holland, 7 m. N.N.E. Harlem. Pop. 2200.

ASSENEDE, a town of Belgium, prov. East Flanders, 13 m. N. Ghent. Pop. 3900. It has manufactures of wool and cotton, dye-works, breweries, soap-works, &c.

ASSENHEIM, a town of the G. duchy Hesse-Darmstadt, at the confluence of the Nidda and the Wetter, 13 m. N.E. Frankfort on the Mayne. Pop. 4600. A part of this town belongs to the duke of Issenburg Budingen. A good deal of wine is produced in its territory, and it has considerable coal mines.

ASSENS, a sea-port town of Denmark, W. coast of the island of Funen, on the channel called the Little Belt, 22 m. W.S.W. Odensee, lat. 55° 17′ N., long. 9° 54′ E. Pop. 1500. It has distilleries, and a considerable trade in corn. It is the usual point of departure for persons leaving Funen for Sleswick.

ASSISI, a town of Italy, states of the Church, 13 m. E.S.E. Perugia. Pop. 4000. It is situated on a mountain, is the seat of a bishopric, has a cathedral and several other churches, some of which are ornamented with fine pictures. Metastasio belonged to this town.

ASSOUAN. *See* SYENE.

ASSUMPTION, or ASUNCION, a city of S. America, cap. Paraguay, and residence of the dictator, finely situated on an eminence on the left bank or the great navigable river of that name, lat. 25° 16′ S., long. 57° 37′ W. Pop. circa 10,000. It was founded in 1535, and, from its advantageous situation, became of sufficient importance to be made a bishopric in 1547. It is miserably built; the streets being unpaved, and most of the houses no better than huts. The only good buildings are the convents. What has been called its "beautiful cathedral" is a paltry, white-washed fabric; and its government-house, with the title of palace, though extensive, is mean. The men are said to be well made and athletic, and the women handsome; the country round is comparatively well cultivated and populous. Assumption is the centre of a considerable trade in hides, tobacco, timber, *mattie*, or Paraguay tea, wax, &c. (*Robertson's Paraguay*, i., 288.)

ASSUMPTION, a small island of the Marianne archipelago, Pacific ocean, lat. 19° 45′ N., long. 145° 54′ E. It is cone-shaped, and consists almost entirely of lava and other volcanic products. It produces a few cocoa-nut trees, and is described by Perouse as a most wretched place.

ASSUMPTION, parish, La., situated in the S.E. part of the state, and contains 600 sq. m. The Mississippi bounds it on the N.E. Watered by Bayou La Fourche. It had in 1840, 6647 neat cattle, 1590 sheep, 6340 swine, and produced 265,650 bushels of Indian corn, 34,600 of potatoes, 2,105,700 pounds of cotton, 6,530,000 of sugar. It contained thirteen stores, one saw-mill, one college, 44 students. Pop.: whites, 4103; slaves, 2968; free-coloured, 50; total, 7141. Capital, Assumption C.H.

ASSUMPTION, C.H., or Napoleonville, p. v., capital of Assumption parish, La., 89 W. New-Orleans, 1261 W. Situated on the W. side of Bayou La Forche, and contains a court-house and several dwellings.

ASSUS, an ancient city of Asia Minor, in Troas, near the sea, whose ruins occupy a site contiguous to the modern and inconsiderable village of Beiram, 12 m. E. Cape Baba (an. *Lectum*), 35 m. W.S.W. mount Ida, and nearly opposite to Mollivo in Mytilene. It is said to have been founded by a colony from Lesbos, and was famous in the history of Grecian philosophy from its having been the birth-place of Cleanthes the stoic, and for a while the residence of Aristotle. Colonel Leake says of its ruins, that "they are extremely curious. There is a theatre in very perfect preservation; and the remains of several temples lying in confused heaps on the ground; an inscription upon an architrave on one of these buildings shows that it was dedicated to Augustus; but some figures in low relief on another architrave appear to be in a much more ancient style of art, and they are sculptured on the hard granite of mount Ida, which forms the materials of several of the buildings. On the W. side of the city the remains of the walls and towers, with a gate, are in complete preservation; and without the walls is seen the cemetery, with numerous sarcophagi still standing in their places, and an ancient causeway leading through them to the gate. Some of these sarcophagi are of gigantic dimensions. The whole gives, perhaps, the most perfect idea of a Greek city that anywhere exists." (*Leake's Asia Minor*, p. 128.)

ASSYE, a town of Hindostan, prov. Berar, in the Nizam's dom., 28 m. N. Jaulna. It is celebrated as the spot where the duke of Wellington commenced his career of victory. On the 23d of September, 1803, his grace, then General Wellesley, with 4500 men (of whom only 2000 were British), completely defeated the combined forces of Dowlut Row Sindia and the Nagpoor rajah, amounting to 30,000 men. The confederates fled from the field, leaving about 1200 slain, ninety-eight pieces of cannon, seven standards, their whole camp equipage, and much ammunition. The British-Indian army lost 1566 men, killed and wounded.

ASTAFORT, a town of France, dep. Lot-et-Garonne, cap. cant. on the Gers, 10 m. S. Agen. Pop. 2527.

ATCHAFALAYA, an outlet of the Mississippi, which passes out on the W. side, a little over a mile below the mouth of the Red river, of about the same width, and carrying off from the Mississippi about as much water as the Red river brings in. A curve in the Mississippi westward throws an immense amount of floating timber into the Atchafalaya, which forms large rafts, and effectually obstructs the navigation. The medial width of the bayou is over 200 yards; its course is winding, giving it a total length to the gulf of Mexico of nearly 200 miles, though in a direct

course it is about 130. It receives in its course the Fisquemine, another outlet of the Mississippi, and constitutes the W. boundary of the delta of the Mississippi. By a recent passage of the Mississippi across the isthmus formed by a bend of the river, it pursues a more direct course than formerly, not passing the outlet of the Atchafalaya, shortening the distance between Natchez and New-Orleans 30 miles.

ASTERABAD, or ASTRABAD, a city of Persia, cap. of a small prov. of the same name, on the Gourgan, about 12 m. from where it falls into the S.E. angle of the Caspian sea, denominated the bay of Asterabad, lat. 36° 50 N., long. 53° 23' E. Mr. Frazer says that it contains from 2000 to 3000 houses, so that its population may be estimated at from 12,000 to 18,000. It is surrounded by a low mud wall, about 3½ m. in circuit. Formerly it was much more extensive than at present; a great part of it being in ruins, and there being also within the wall extensive gardens and numerous trees. Houses, chiefly of wood, are said to be picturesque and pleasant, and are frequently furnished with verandahs resting on wooden pillars; their roofs project far beyond their walls. The streets are well paved and clean, and are furnished with drains to carry off the water, which in most other Persian cities is allowed to stagnate in pools. None of the public or private buildings deserve notice. The palace of the prince, or governor, is a miserable fabric. The bazars, or public markets, are tolerably extensive; but they contain little besides the articles required for the consumption of the place. Asterabad, though in fact a port, has but little trade. It is said to be unhealthy; a consequence, most probably, of thickets and forests being allowed to approach the very walls. (*Fraser's Caspian Sea, &c.*, p. 7.)

ASTI (an. *Asta* or *Hasta Pompeia*), a city of the Sardinian states, prov. Alexandria, on the Bourbo, near its confluence with the Tanaro, 28 m. E.S.E. Turin, lat. 44° 57' N., long. 8° 12' E. Pop. 22,000. It is surrounded by old walls in a ruinous condition, and was famous for its 100 towers, of which hardly thirty now remain. Streets narrow; but it is in general pretty well built. The cathedral, a modern building, occupies the site of a temple of Diana, and it has, besides, numerous parish churches and palaces. Asti is the seat of a bishopric, of a court of original jurisdiction, and a royal college, and has several silk filatures, with manufactures of silk, stuffs, &c. The vineyards in its vicinity furnish the best wines of Piedmont; and it carries on a considerable trade in them, in raw and manufactured silks, and other articles. One of the greatest poets of modern Italy, and, indeed, of modern Europe, Victor Alfieri, descended from an ancient and noble family of Asti, was born here on the 17th of January, 1749.

Asti is a very ancient city. In 1154 it was burned down by the emperor Frederic Barbarossa, but it had been previously evacuated by the inhabitants. (*Sismondi, Républiques Italiennes*, iii., p. 57.) It soon recovered its ancient grandeur, and in the 13th century was able to contend with the forces of Charles I. of Naples. In the 14th century it formed part of the territory of the lords of Milan, and was transferred, in 1387, as the dowry of a Milanese princess, to the duke of Orleans, brother to Charles VI. of France. It remained under the dominion of the French till 1529, when it was ceded by the treaty of Cambray to the emperor Charles V. The latter made it over to one of his female relations, who married a prince of the house of Savoy, in whose possession it still continues. (*Conder's Italy*, i., p. 225.)

ATIER (ST.), a town of France, dep. Dordogne, on the Isle, 10 m. W.S.W. Périgueux. Pop. 2300.

ASTON, t., Delaware co., Pa., 20 m. W. Philadelphia. Bounded E. by Chester creek, watered by Painter's creek. It contains four stores, five cotton factories, with 7120 spindles, three grist-mills, four saw-mills, three schools, 70 scholars. Pop. 1469.

ASTORGA, a town of Spain, prov. Leon, 30 m. W. Leon, in an extensive and fertile plain near the banks of the Tuerto, lat. 42° 27' N., long. 6° 10' W. Pop. 4000. It is very ancient, and was formerly fortified by a wall and a castle: but both of these have been allowed to go to decay. Some new defences were, however, constructed in 1810, previously to its reduction by the French under Junot, but we are not informed as to their present state. The town is ill built, and the streets narrow and dirty. It is the seat of a bishop, has a Gothic cathedral, celebrated for its high altar, four parish churches, and some convents.

ASTORIA, p. v., Newtown t., Queen's co., N.Y., 132 m. S. Albany, 232 W. Situated on the East river, just below Hell Gate, 6 m. N.E. New-York city, and contains four churches, one Dutch Reformed, one Methodist, one Episcopal, one Roman Catholic, a female seminary, two stores, one turpentine factory, one carpet factory, 100 dwellings, and about 600 inhabitants. A steam ferry connects it with N. York city.

ASTORIA, a trading-post, situated on the S. side of Columbia river, 8 miles from its entrance into the Pacific. It was established in 1811 by John Jacob Astor, of New-York city, who was largely engaged in the fur trade. It was relinquished during the last war, but restored to its founder at its close. It is now occupied by the Hudson Bay company, and called fort George.

ASTRAKHAN, an extensive gov. of Russia, in Europe, lying along the N.W. shore of the Caspian sea, and divided into two nearly equal portions by the Wolga. Area supposed to be about 83,000 sq. m. Pop. estimated by various authorities at from 250,000 to 320,000. This is one of the least valuable provinces in the empire. With the exception of the Delta of the Wolga, and a narrow strip of land along the banks of that river, it consists almost entirely of two vast steppes, one on each side the river, in part occupied with sand hills, but mostly low and flat; the soil consisting of mud and sand, strongly impregnated with salt, interspersed with saline lakes, and altogether unsusceptible of cultivation. In consequence, agriculture is all but neglected; but in the Delta of the Wolga gardening is practised with some success, and superior fruits are raised. In summer the heats are frequently excessive, while in winter the frosts are equally severe. Horses are of the beautiful Calmuck breed; and some of the wandering tribes have great numbers of camels. That fertility which nature has denied to the land she has given to the water. The fishery forms the principal source of the wealth of this government, and is carried on upon a great scale on the Wolga, which teems with fish, and along the shores of the Caspian. Sturgeon, carp, and seal, but particularly the first, are the fish most commonly taken. The annual value of the sturgeon fishery is estimated at from 2,000,000 to 3,000,000 roubles; and above 30,000 barrels of caviar, prepared from the roes of the sturgeon, have been exported from Astrakhan in a single year. Though few in number, the inhabitants consist of a great variety of races. They are mostly nomades; and, according to the official statements, there are, in the entire government, only 20,098 individuals subject to the capitation tax. With the exception of some fabrics in Astrakhan, manufacturing industry is unknown.

ASTRAKHAN, a city of Russia, in the cap. of the above government, on a small island in the Wolga, on the left bank of the main stream, about 30 m. from its embouchure, lat. 46° 20' 53" N., long. 47° 55' E. Pop. 31,000. This "Alexandria of the Scythian Nile," as it has been sometimes called, stands on ground elevated sufficiently to be above the reach of the inundations. It consists of three parts: the *Kremlin*, or citadel; the *Bielogorod* (white town); and the *Slobodes*, or suburbs. In the first, or nucleus of the city, is the cathedral, a large square edifice surmounted by five domes, the convent of the Trinity, and the archi-episcopal palace; in the second are the buildings for the government functionaries, including an admiralty board, having charge of the flotilla kept on the Caspian, the gymnasium, and the bazars, or factories for the use of the merchants. The houses in the suburbs, where the bulk of the population resides, are of wood; whereas in the other two divisions they are of stone. Streets crooked, and mostly without pavement. It is the seat of an Armenian as well as of a Greek archbishop; and it has also Mohammedan, Hindoo, and Protestant places of worship. Exclusive of the gymnasium, there is an ecclesiastical academy, a district grammar school, and some inferior schools; but education is, notwithstanding, at a very low ebb here, and throughout the government. There are several manufacturing establishments for the production of cottons, woollens, and silks; with distilleries, tanneries, soap-works, &c. Astrakhan is the centre of the fisheries carried on in the Wolga and Caspian. Its burgesses had formerly a monopoly of the fishery in the Wolga; but since 1803 they have been free to every one. During the season, the fisheries employ immense numbers of people and boats. The population of the city is then much augmented, and it presents an animated, lively scene It is the grand fishing mart for all the interior of the empire; it is also the great entrepôt of the trade with Persia and the countries to the east of the Caspian, sending to them leather, furs, iron, copper, tallow, &c., and getting back silk and cotton goods, raw silk, cotton twist, drugs, carpets, &c. The exports to the countries in question in 1834 amounted to 1,447,189 roubles, and the imports to 912,416 roubles; but they have sometimes been more than double these amounts. This trade is principally carried on by Armenian merchants. (*Schnitzler, La Russie, &c.*, p. 699; *Official Tables, &c.*)

ASTURIAS, a principality in the N. of Spain, now the prov. of Oviedo, lying along the bay of Biscay, between 4° 30' and 7° 10' W. long., having E. the Castilian prov. of Santander, S. Leon, and W. Galicia. Its area has been variously estimated, but may be taken at about 3650 sq. m. Pop. (1834) 434,635. Surface much diversified. Its S. border consists of a chain of high mountains, which gradually diminish in height as they approach the coast, along which there are extensive tracts of pretty level land. It is extremely well watered, being intersected by the Nalon, Navia, and other rivers, and has several sea-ports, as Gijon, Rivadesella,

Cudillero, Aviles, &c. The climate along the coast is mild, but in the mountainous parts it is frequently severe, and it is distinguished by its humidity. But little wheat is raised, the inhabitants subsisting chiefly on maize, and a species of corn called *escanda*. Hazel-nuts are scarce; but chestnuts are very plentiful, and of excellent quality. The vine is cultivated in some parts; but the produce of wine is not sufficient for the consumption, the deficiency being supplied with cider, which is partly also exported. Oranges and lemons are produced in a few places, and great numbers of cucumbers. Besides the chestnut, the wood of which, as well as the fruit, is most valuable, the mountains are covered with forests of oak, beech, plane, &c. There is a considerable exportation of cattle and horses from this prov. to the interior. Iron, copper, lead, antimony, jet, amber, marble, mill-stones, &c., are found in different places. Coal is also found, and Miñano says that 90,000 quintals are shipped for other parts of the peninsula. With the exception of hardware, with many articles of which this prov. supplies the rest of Spain, its manufactures are in a very backward state. Mr. Townsend says of the inhabitants, "They eat little flesh; they drink little wine; their usual diet is Indian corn, with beans, pease, chestnuts, apples, pears, melons, and cucumbers; and even their bread, made of Indian corn, has neither barm nor leaven, but is unfermented, and in the state of dough: their drink is water" (ii., 14). The principal towns are Oviedo, Gijon, Aviles, Navia, &c.

Asturias may be said to be the cradle of Spanish independence. The Saracens, who had overrun the rest of the country, were unable to overcome the Christians, who had taken refuge in the fastnesses of its mountains. Pelayo was proclaimed king in 718; and his successors having gradually extended their conquests, took, about two centuries after, the title of kings of Leon. In 1388 the prov. was erected into a principality, and became the apanage of the heir presumptive to the throne, who has since been styled prince of Asturias. Several peculiar privileges have been conferred on this province on account of the services it has rendered to the monarchy. (*Antillon, Miñano.*)

ASYLUM, p. t., Bradford co., Pa., 145 m. N. Harrisburg, 255 W. Bounded E. and N.E. by Susquehanna river. Wyalussing rapids in the Susquehanna are opposite to to the t. It has six schools, 196 scholars. Pop. 947.

ASZOD, a market-town of Hungary, co. Pesth, on the Galga, 23 m. N.E. Pesth, in a fertile valley. Pop. 2220, mostly Protestants. Here is a large and handsome country-seat belonging to the barons Podmaniczky, with a fine collection of coins and natural curiosities. It has manufactures of blue and green dyed sheepskins, for which there is a considerable demand. (*Nat. Encyc.*, i., 134.)

ATACAMA, an extensive district of Bolivia, or Upper Peru, lying along the Pacific ocean, between the river Lao on the N., and the Salado on the S., or between 21½ and 25½ deg. S. lat. Towards its N. extremity there are some fertile valleys; but by far the greater part of its surface is an absolute desert, covered with dark brown or black movable sand. The arid soil of this portion is never refreshed with rain, and, except where a very few rivers descend from the Andes, it is both uninhabited and uninhabitable. Cobija, or Port La Mar, is built at the mouth of one of these rivers.

ATESSA, a town of Naples, prov. Abruzzo Citra, 14 m. W. Vasto d'Ammone. Pop. (canton, 1832) 7526. It is situated on a hill, has a fine collegiate church, with parish churches, convents, a hospital, and three *monts de piété*. The poet Cardone was a native of Atessa.

AT'FIEH, a town of Egypt, cap. prov. same name, near the right bank of the Nile, 42 m. S.S.E. Cairo. Pop. 4000. It is supposed to be on or near the site of the ancient *Aphroditopolis*.

ATH, a town of Belgium, prov. Hainault, on the Dender, and on the high road from Tournay to Brussels, 15 m. N. by W. Mons, lat. 50° 42′ 17″ N., long. 3° 46′ 32″ E. Pop. (in 1835) 8817. It was fortified by Vauban, and the works have been materially improved and strengthened since 1815. It is well built. Principal public buildings, the arsenal, town-house, and the church of St. Julian: the spire of the latter, 150 feet in height, was destroyed by lightning in 1817, and has not been rebuilt. Ath has a college, founded in 1416, a school of design, an orphan hospital, theatre, &c. It has manufactures of linen, woollen and cotton stuffs, hats and gloves; establishments for bleaching and dyeing; with oil-mills, soap-works, breweries, distilleries, &c. It is an entrepôt for the trade in coal, and for the produce of the surrounding country.

ATHAPESCOW, or ATHABASCO, an extensive lake of N. America, being about 200 m. in length, and from 14 to 15 in averge width. Fort Chipewyan, at its S.W. extremity, is in lat. 58° 42′ N., long. 111° 18′ W. It receives the Athapescow river; and the Slave river flows from it into Great Slave lake, lying about 170 m. N.E. Its N. shore is high and rocky, whence it is sometimes called the lake of the hills.

ATHBOY, an inland town of Ireland, co. Meath, prov. Leinster, on a small branch of the Boyne, from which it is supposed to have its name, signifying "the yellow ford," 31 m. N.W. by W. Dublin. It is a place of no historical notoriety. Pop. in 1821, 1569; in 1831, 1959, forming two thirds of that of the par., which in 1834 amounted to 5491, of whom 333 were of the E. church, and 5158 R. Cath. The town, situated in a level and fertile district, consists of one long street; has a modern church, with an ancient tower; a large and elegant R. Cath. chapel, in the ancient English style, with a steeple 90 ft. high; a dispensary; schools, partly endowed and partly private, in which about 400 pupils are educated; and almshouses, in which 12 poor widows are supported. Fuel is supplied in plenty from an extensive neighbouring bog. The hill of Ward, near the town, 400 ft. high, is a striking object in this flat country. The town, which is a bor. by prescription, received a charter from Hen. IV., confirming and extending its privileges, which were confirmed and farther extended by subsequent monarchs, particularly by Elizabeth, who confirmed on it the right of sending two m. to the Irish parl.; and by James I., by whom the municipal limits were fixed at a mile beyond the town in every direction, to which was added a right to hold a court of record. But these, and some manorial powers, have fallen into desuetude since the Union, when the borough lost its right to return ms. to parl. Petty sessions are held here on alternate Thursdays. There is a large flour-mill in the town. The market, held in the market-house on Thursdays, is well supplied with corn and provisions. The fairs are numerous; the principal being those held on the Thursday before Jan. 28, on May 4, Aug. 4, and Nov. 7; the others, held on Mar. 3 and 10, June 23 and 30, and on Sept. 29 and 29, are less important. The post-office revenue in 1830 was £201, and in 1836, £245. The town is a constabulary station. A *caravan*, conveying an average number of eight passengers each trip, plies between it and Dublin seven times a week. (*Municipal and Railroad Reports, &c.*)

ATHENRY, a decayed town of Ireland, co. Galway, 14 m. E. Galway. Pop. 1319. It was formerly of some importance, having been enclosed by walls, and possessed of a university. It returned a member to the Irish parliament.

ATHENS,* one of the most famous cities of antiquity, and the capital of the new kingdom of Greece, is situated on the W. side of Attica, about 5 m. from the gulf of Ægina lat. 37° 58′ 1″ N., long. 23° 46′ 14″ E. Its situation bears a considerable resemblance to that of Edinburgh, being built on the W. side of an abrupt and rocky eminence rising out of an extensive plain terminated N. by mounts Pentelicus and Parnes, N.E. by mount Anchesmus, E. by mount Hymettus, S.W. by the hill Museium, now called Philopappus, and W. by Lycabettus. During the prolonged conflicts of the revolutionary war (1820–27) the town, which previously consisted of 1200 houses, was laid in ruins; and when the seat of government was transferred to Athens in 1834, it was with the greatest difficulty that buildings could be fitted up for the members of the regency, the diplomatic body and their offices. It is, however, again rising rapidly into importance, but in general is meanly built, consisting, in great part, of mud houses. Several streets have been opened, levelled, and widened, the principal of which are Hermes, or Mercury-street, Æolus-street, Minerva-street, and the Bazar, or Market-street. The first of these traverses the town, which it divides into two equal parts, parallel with the Acropolis, and is crossed at right angles by that of Æolus, which terminates close under the Acropolis. Minerva-street, the broadest of all, runs in nearly the same direction as Æolus-street. Bazar or Market-street, so called from its containing the shops for the supply of the various articles required by the population, is about ½ m. in length. The principal commodities are "caviar, onions, tobacco, black olives, figs, rice, pipes with amber mouth-pieces, rich stuffs, silver-chased pistols, dirks, belts, and embroidered waistcoats." (*Wordsworth's Residence in Attica.*) The houses, built in the modern German style, are generally supplied with "jalousies" and balconies, and contain shops and coffee-houses on the lower story. The other streets of Athens are hardly deserving of the name, being mere narrow lanes, displaying marked contempt for regularity. The principal public buildings are, the royal palace, a large edifice recently constructed, with a portico facing the Acropolis, the mint, the royal stables, a military hospital, and a barrack. Many large private houses have been also lately erected, and building is proceeding "with such spirit that the sum of £300 is frequently given for half an acre of land." (*Words-*

* Athens, so called from Ἀθηνᾶ, Minerva, the patroness of the city There were several places of the same name in Greece. Steph. Byz. (v. a. v.) enumerates eight. The Romans used to designate the city of Minerva, *Athenæ Attica*.

worth.) The population of Athens amounts to about 17,000 (*Zeitung der Corresp.*), and is perhaps more heterogeneous in its composition than that of any city of its size. "Greeks, in their wild costume, are jostled in the streets by Englishmen, Frenchmen, Italians, Dutchmen, Spaniards, Bavarians, Russians, Danes, and Americans." (*Steven's Travels in Greece.*) European shops invite purchasers by the side of Eastern bazars; coffee-houses and billiard-rooms, and French and German *restaurants*, are opened all over the city. The mixture of its population bears a striking analogy to the extraordinary contrasts presented by the city itself. "The same half acre of ground," says a recent traveller, "often contains two or three remaining columns of an ancient portico, a small Christian chapel of the middle ages, a Venetian watch-tower, a Turkish mosque, with its accompanying cypresses and palm-trees, and a modern fashionable-looking residence;" thus, as it were, distinctly exhibiting the different phases of the varied existence of this celebrated city. Athens is the seat of a university, and has a gymnasium, in which the government has founded several exhibitions for the maintenance of students, three public seminaries, and two schools supported by private benevolence. Great efforts have been made to secure the health of the city, by cleansing and repairing the ancient sewers, and by draining the marshes formed by the overflowings of the Cephisus, the exhalations of which were extremely noxious. There are thirteen churches, twelve belonging to the Eastern and one to the Western Church. Though the manufactures of Athens are very backward, its revenues are considerably improved: according to the official statement of 1838, they amounted to 160,000 drachms. At the Piræus, too, the harbour of Athens, several large houses have been built, and "some good streets, flanked by low but respectable dwellings, have already been completed." A large custom-house, a quay, and a lazaretto, have been erected, and though trade cannot be said to flourish, the town presents rather a bustling appearance, and contains about 1500 inhabitants. The communications between Athens and the Piræus have been greatly facilitated of late by the construction of a good road; and it is rumoured that a railway will soon be formed between the two places. Athens stands on a spot rich in remains of antiquity; and it is reasonable to suppose that its present tranquillity will prove favourable to the better illustration of monuments and places already identified, and that the excavations everywhere forming for laying the foundations of new buildings will lead to many valuable discoveries.

The ancient city of Athens

> "— The eye of Greece, mother of arts
> And eloquence, native to famous wits,
> Or hospitable—"

considerably exceeded in extent the modern town; and, unlike the latter, which, as already observed, spreads into the plain chiefly on the W. and S.W., encircled the Acropolis. It was enclosed in a sort of peninsula formed by the confluence of the Cephisus and Ilyssus, the former of which flows due S. past the W. side of the city; the latter, which rises a few miles to the N.E. of the city, runs past it in a S.W. direction. At the time when Athens had attained its greatest magnitude, it was encompassed by a wall surmounted at intervals by strongly-fortified towers. The plan of this wall, many parts of which still remain, exhibits the form of an irregular oblong, having at its N. extremity the gate of Acharnæ, on the S. the Itonian gate and the fountain Callirhoe, on the W. the gate of Diochares, and on the E. the Peiraic gate. In attempting to describe the leading features in the topography of Athens, we cannot do better than transfer to our columns an extract from an article on Athens in the *Penny Cyclopædia*, which exhibits within small compass a more distinct outline of that city than is anywhere else to be met with. "Beginning with the gate of Acharnæ on the N., as above stated, the wall ran eastward near the base of Anchesmus, and past the Dorneian gate to the gate of Diochares, which led to the Lyceum; it then continued parallel to the Ilyssus on the western side of that stream to the fountain Callirhoe or Enneacrunos, and thence to the hill of the Museium, which it crossed, comprehending the still-existing monument of Philopappus within its circuit. Its course from the Museium was N., taking in the chief part of the Pnyx and mount Lycabettus, to the Dipylum, which led to the outer Ceramicus or great burying-ground, and to the Academia or school of Plato, in the depression between the Pnyx and Lycabettus. A line from Dipylum to the gate of Acharnæ completes the circuit." Athens had three great harbours, the Piræus, Munychia, and Phalerum. These ports formed a separate city larger than Athens itself, and were connected with it by means of the long walls (*μακρα τειχη*) the identification of which has involved the learned in interminable disputes. The harbour of the Piræus was a spacious basin embraced by two arms of rocky land which formed gigantic natural piers. Even now it is considered a safe port, and in former times it constituted at once the harbour, dockyard, and arsenal of Athens.

Athens, at its most flourishing period, contained about 10,000 houses (*Xen., Mem.*, iii., 6, 14), which were for the most part so small and mean in appearance that, according to Dicæarchus, it was to the public edifices alone that it owed its attractions. The inhabitants were comprised under three classes, citizens (*πολιται*), sojourners (*μετοικοι*), and slaves (*δουλοι*); of these, the slaves greatly preponderated, though it is difficult to make an accurate computation of their numbers. Indeed, the whole question as to the population of Athens is involved in great obscurity. Hume, Letronne, Boeckh, Leake, Clinton, and others, have, in our own times, directed their efforts towards its elucidation, and have supported their reasonings with great learning and ingenuity, though with little unanimity or success: and the difficulties that surround the subject, from the vagueness, inaccuracy, and discrepancy of the *data*, are so great as almost to preclude the possibility of arriving at anything like a satisfactory conclusion. Boeckh has estimated the population of the city and its ports at 180,000; Clinton at 160,000; and Leake at 116,000. The statement of Athenæus that the number of slaves in Athens (or Attica) was 400,000, is universally admitted to be grossly exaggerated. The commercial operations of Athens embraced every known country and commodity. "All the products of foreign countries," says Boeckh, "came to Athens, and articles which, in other places, could hardly be obtained singly, were collected together at the Piræus. Besides the corn, the costly wines, iron, brass, and other objects of commerce which came from all the regions of the Mediterranean, they imported, from the coasts of the Black sea, slaves, timber for ship-building, salt-fish, honey, wax, tar, wool, rigging, leather, goat-skins, &c.; from Byzantium, Thrace, and Macedonia, timber, slaves, and salt-fish; slaves from Thessaly; carpets and fine wool from Phrygia and Miletus." "All the finest products," says Xenophon (*De Rep. Ath.*, ii., 7), "of Sicily, of Italy, Cyprus, Lydia, Pontus, and the Peloponnesus, Athens, by her empire of the sea, is able to collect into one spot." Nor were manufactures neglected. It is true that commerce was regarded as the chief point of national policy, and that every encouragement was given to it which high protecting regulations and other privileges could bestow. But no restriction was imposed upon industry: the meanest manual occupation was attended by no disgrace; hence every branch of industry flourished, and the manufactures of Athens were everywhere esteemed. The native products of Athens, too, were of great importance: they consisted chiefly of olives, figs, and honey, and have been celebrated in all ages. The wealth of the city was also augmented by the silver mines of Laurion, and "those sumptuous edifices, which constituted the pride of the Athenians, and the admiration of the present day, owed their origin to the marble quarries of Pentelicus." (*Dodwell's Greece.*) The opulence, prosperity, and power of Athens are fully exhibited by Thucydides (lib. ii., 13). Previously to the Peloponnesian war, the treasury contained 9700 talents, besides a great quantity of gold and silver deposited in the temples of the gods and in other public edifices. The city was defended by 1200 cavalry, 1600 bowmen, and 13,000 heavy-armed troops; 16,000 men were stationed in the fortifications, and the coast was guarded by 300 well-manned ships. The same historian has distinctly indicated (lib. ii., 40) that the freedom of the Athenian institutions, so pre-eminently adapted to develop the energies of the human mind, was the chief source of their unparalleled greatness; but our limits preclude us from entering into details on the government and public economy of Athens, and we can only refer the reader to Boeckh's invaluable treatise on this difficult and interesting subject.

We now proceed to notice briefly the monuments of antiquity which still exist at Athens, as they have been described by Chandler, Clarke, Gell, Stuart, Dodwell, Leake, and other travellers. The most striking object is the Acropolis,* or old Cecropian fortress, founded by Cecrops, about anno 1556 A.C., rising abruptly out of the Attic plain, and covered with relics of Athenian grandeur. At its W. end, by which alone it was accessible, stood the Propylæa, the gate, as well as the defence of the Acropolis. Through this gate the periodical processions of the Panathenaic jubilee were wont to move; and the marks of chariot wheels are still visible on the stone floor of its entrance. It was of the Doric order, and its central pediment was supported by six fluted marble columns, each 5 ft. in diam., 29 in height, and 7 in their intercolumniation. On the right wing stood the temple of Victory, and on the left was a building deco-

* The Acropolis alone formed the ancient city, and from its elevated position was termed *ἡ ανω πολις*, in contradistinction to the lower part, *ἡ κατω πολις*, afterwards built. Athens, including the upper and lower parts, was styled, by way of eminence, *πολις*, or *αστυ*, *the city*.

rated with paintings by the pencil of Polygnotus, of which Pausanias has left us an account. In a part of the wall still remaining there are fragments of excellent designs in basso relievo, representing the combat of the Athenians with the Amazons; besides six columns white as snow, and of the finest architecture. Near the Propylæa stood the celebrated colossal statue of Minerva, executed by Phidias after the battle of Marathon, the height of which, including the pedestal, was 60 ft. But the chief glory of the Acropolis was the Parthenon, or temple of Minerva. It was a peripteral octostyle, of the Doric order, with seventeen columns on the sides, each 6 ft. 2 in. in diameter at the base, and 34 ft. in height, elevated on three steps. Its height, from the base of the pediments, was 65 ft., and the dimensions of the area 233 ft. by 102. The eastern pediment was adorned with two groups of statues, one of which represented the birth of Minerva, the other the contest of Minerva with Neptune for the government of Athens. On the metopes was sculptured the battle of the Centaurs with the Lapithæ; and the frieze contained a representation of the Panathenaic festivals. Ictinus, Callicrates, and Carpion, were the architects of this temple; Phidias was the artist; and its entire cost has been estimated at 1½ million sterling. Of this building, eight columns of the eastern front and several of the lateral colonnades are still standing. Of the frontispiece, which represented the contest of Neptune and Minerva, nothing remains but the head of a sea-horse and the figures of two women without heads. The combat of the Centaurs and Lapithæ is in better preservation; but, of the numerous statues with which this temple was enriched, that of Adrian alone remains. The Parthenon, however, dilapidated as it is, still retains an air of inexpressible grandeur and sublimity; and it forms at once the highest point in Athens, and the centre of the Acropolis. On the N.E. side of the Parthenon stood the Erechtheium, a temple dedicated to the joint worship of Neptune and Minerva. There are considerable remains of this building, particularly those beautiful female figures called Caryatides, which support, instead of columns, three of the porticoes; besides three of the columns in the north hexastyle with the roof over these last columns. The rest of the roof of this graceful portico fell during the siege of Athens, in 1827. Such is an outline of the chief buildings of the Acropolis, which, in its best days, had four distinct characters; being at once the fortress, the sacred enclosure, the treasury, and the museum of art of the Athenian nation. It was, so to speak, an entire offering to the deity, unrivalled in richness and splendour; it was the peerless gem of Greece, the glory and the pride of art, the wonder and envy of the world. In the city of Athens itself there are still some monuments of antiquity to be found. Of these, the principal are three exquisite Corinthian columns crowned by architraves; the temple of the Winds, built by Cyrrhestes, of an octagonal figure, with a representation of the different winds on each of its sides; and the monument of Lysicrates, called by the modern Greeks the Lantern of Demosthenes. This building consists of a pedestal surrounded by a colonnade, and is surmounted by a dome of Corinthian architecture; it was supposed to be the spot which Demosthenes used as his study: a supposition which has, however, long been overthrown. Beneath the southern wall of the Acropolis, near its extremity, was situated the Athenian or Dionysiac theatre. Its seats, rising one above another, were cut out of the sloping rock. Of these, only the two highest rows are now visible, the rest being concealed by an accumulation of soil, the removal of which would probably bring to light the whole shell of the theatre. Plato affirms it was capable of containing 30,000 persons. It contained statues of all the great tragic and comic poets, the most conspicuous of which were naturally those of Æschylus, Sophocles, and Euripides, among the former, and those of Aristophanes and Menander among the latter. On the south-west side of the Acropolis is the site of the Odeium, or musical theatre of Herodes Atticus, named by him the theatre of Regilla, in honour of his wife. On the north-east side of the Acropolis stood the Prytaneum, where citizens who had rendered services to the state were maintained at the public expense. Extending southwards from the site of the Prytaneum, ran the street to which Pausanias gave the name of Tripods, from its containing a number of small temples or edifices crowned with tripods, to commemorate the triumphs gained by the Choragi in the theatre of Bacchus. Opposite to the west end of the Acropolis is the Areopagus, or hill of Mars, on the eastern extremity of which was situated the celebrated court of the Areopagus. This point is reached by means of sixteen stone steps cut in the rock, immediately above which is a bench of stone, forming three sides of a quadrangle, like a triclinium, generally supposed to have been the tribunal. The ruins of a small chapel consecrated to St. Dionysius the Areopagite, and commemorating his conversion by St. Paul (Acts of the Apos., xvii., 34), are here visible. About a quarter of a mile south-west from the centre of the Areopagus stands Pnyx, the place provided for the public assemblies at Athens in its palmy days. The steps by which the speaker mounted the rostrum, and a tier of three seats hewn in the solid rock for the audience, are still visible. This is perhaps the most interesting spot in Athens to the lovers of Grecian genius, being associated with the renown of Demosthenes, and the other famed Athenian orators,

> "Whose resistless eloquence
> Wielded at will that fierce democratie,
> Shook the arsenal, and fulmined over Greece
> To Macedon, and Artaxerxes' throne."

On proceeding without the city, our attention is attracted by the ruins of the temple of Jupiter Olympius. This was one of the first conceived and the last executed of the sacred monuments of Athens. It was begun by Pisistratus, but not finished till the time of the Roman emperor Adrian, 700 years afterward; but of the 120 columns which supported it, only 16 remain. The last ruin to which we shall allude, is the temple of Theseus, built by Cimon, shortly after the battle of Salamis. This is one of the most noble remains of the ancient magnificence of Athens, and the most perfect, if not the most beautiful, existing specimen of Grecian architecture. It is built of Pentelic marble: the roof, friezes, and cornices still remain; and so gently has the hand of time pressed upon this venerable edifice, that the first impression of the mind in beholding it, is doubt of its antiquity. Such is an outline of the remains of the chief Athenian edifices, which link bygone times with the present, and which, as long as there is taste to appreciate, or genius to imitate, must arrest the attention and challenge the regard of every intelligent mind. We shall devote what remains of our limits to a short notice of the Athenian history, from the earliest ages down to the present time.

Concerning the early inhabitants of Athens, we are almost wholly destitute of information; and even after its history begins to emerge from obscurity, the events which distinguish it are for a long time scanty and doubtful. Though Ogyges is mentioned as the first king of Athens, it is not till three centuries later that Athenian history assumes a definite form, when Cecrops (A.C. 1556) a native of Egypt, by marrying the daughter of Actæon, obtained the sovereignty. He collected the hitherto scattered inhabitants of Attica, divided them into tribes, and founded the Acropolis. Nothing of importance occurs in the history of Athens among the successors of Cecrops, till the time of Theseus (A.C. 1300), who united in himself the attributes of legislator and warrior. The reins of government descended in his family, without any occurrence of historical importance, till Codrus (A.C. 1068) heroically sacrificed his life for his country. At this time an aristocratical was substituted for the monarchical form of government, and the title of "king" was exchanged for that of "archon." On its first institution, the office of archon was hereditary, and for life; but after the lapse of two centuries, it was limited to ten years, and after passing through six hands on this footing, was finally changed to an annual office. When the last change took place, a farther alteration was made by dividing the duties of archon among ten persons, selected by the people from the class of the nobles, in whom were vested all legislative and judicial powers. Such a form of government was peculiarly exposed to party spirit and contentions for power, and pressed heavily on the people; and a strong desire for a definite code of laws arising, Draco was chosen as the lawgiver (A.C. 624). The atrocity of his code, however, which awarded the punishment of death at once to the most venial offences and the most flagrant crimes, soon rendered it incapable of execution; and Draco lost the public favour and died in exile. To quell the disturbances which continued to distract the city, the people (A.C. 594) had recourse to Solon, who had already distinguished himself as a general, and invested him with the office of archon. The code of laws which he framed, was admirably suited to the exigency of the times: for though its tendency was decidedly democratic, a counterbalancing check was given to popular encroachment by the establishment of the assembly of 400, and by the prerogatives vested in the court of Areopagus. Indeed, the freedom of spirit which Solon introduced and rendered durable, and the liberal education which the whole system of his laws made indispensably necessary to the noble and wealthy citizens, soon rendered Athens the central point of illumination to all the republics of Greece. Nor were the consequences of Solon's measures at all retarded by the subsequent domination of Pisistratus (A.C. 561). For notwithstanding his assumption of the regal power, his administration was characterized by an assiduous cultivation of the arts and sciences; and it is to him that posterity is indebted for the collection of the Homeric poems in their present definite form. That the spirit of the Athenian freedom was not extinct, was proved by the expulsion (A.C. 510) of Hippias and Hipparchus (the sons of Pisistratus), whose tyranny became oppressive; and from this

time the constitution of Solon was gradually melted down into a pure democracy, until Cleosthenes gave the last blow to the aristocracy by the institution of ostracism.

The petty internal contests which had agitated Athens, were now however to be swallowed up in others of far greater magnitude. With rapid strides the Persian monarchy had been encroaching upon Greece, and most of the Grecian states had already sworn fealty to Darius, when Athens and Lacedæmon raised the banner of defiance, and the battle of Marathon (A.C. 490), under the conduct of Miltiades, at once achieved the liberty of Greece, and enshrined Athens in the centre of a glory. We can do no more than allude to the subsequent invasion of Greece by Xerxes, his alternate successes and defeats, the seizure and conflagration of Athens and its citadel, the stratagems of Themistocles, the memorable battles of Salamis, Platæa, and Mycale, and, lastly, the defeat of the Persians. Among other consequences that resulted to Athens from the Persian invasion, was the impetus given to its naval affairs. Themistocles, who was eminently imbued with a naval spirit, caused (A.C. 479) a new and more commodious harbour to be built at the Piræus, which in process of time was joined to the city by the celebrated Long Walls. This precaution invested Athens with the command of the sea, and raised her commercial and military marine to an unexampled pitch of prosperity; a prosperity which was maintained in full vigour by the moderation of Aristides, so deservedly named the just, and by the generous and martial spirit of Cimon, son of Miltiades (A.C. 466). Before the Persian invasion, Athens had contributed less than many other cities, her inferiors in magnitude and in political importance, to the intellectual progress of Greece. She had produced no artists to be compared with those of Argos, Corinth, Sicyon, Ægina, Laconia, and of many cities, both in the eastern and western colonies. She could boast of no poets so celebrated as those of the Ionian and Æolian schools. Her spirit hitherto had been decidedly martial; but her peaceful glories quickly followed, and outshone those of her victories and political ascendency. After the termination of the Persian war, literature and the fine arts began to tend towards Athens as their most favoured seat, for here, during the age of Pericles, above all other parts of Greece, genius and talents were fostered by an ample field of exertion, by public sympathy and applause. It was during this age that painting, architecture, and sculpture, reached the highest degree of perfection; and that Greek poetry was enriched with a new kind of composition, the drama, which exhibited all the grace and vigour of the Athenian imagination, together with the full compass and the highest refinements of the language peculiar to Attica. The drama was indeed the branch of literature which peculiarly signalized the age of Pericles; and the intellectual character of the Athenians is vividly portrayed by the sublime and impassioned strokes of Æschylus, the graceful and elegant touches of Sophocles, the elaborate philosophy of Euripides, and the caustic raillery and moral power of Aristophanes. And though time has effaced all traces of the pencil of Parrhasius, Zeuxis, and Apelles, posterity has assigned them a place in the temple of fame beside Phidias and Praxiteles, whose works are, even at the present day, unrivalled for classical purity of design and perfection of execution. But it was not alone to works of art and the embellishment of the city by splendid architectural decorations, that the efforts of Pericles were directed. For at the period in question, the whole of Athens with its three celebrated harbours, Piræus, Munychia, and Phalerum, connected by means of the Long Walls begun by Themistocles, was made to form one great city, enclosed within a vast parabolus of massive fortifications, extending to no less than 174 stadia, of which the circuit of the city amounted to 43, the Long Walls taken together to 75, and the circumference of the harbours to 76. But the advantages that flowed to Athens from the administration of Pericles were not without alloy. The splendor which he introduced exhausted the public revenues; and to supply deficiencies, recourse was had to the infliction of religious imposts upon the allied states. Hence a spirit of disaffection was engendered; and Sparta, who had long viewed with jealousy the magnificence of her rival, seized the opportunity of fanning the discord into a flame. This issued in the Peloponnesian war, the various fortunes of which have been so ably recorded by the pen of Thucydides. After the lapse of 27 years, during which period the movements of the conflicting parties were characterized by various success, victory at length declared for the Spartans, and the Athenians were forced to submit to the dominion of the Thirty Tyrants; a humiliating period in the history of Athens, over which we would willingly throw a veil. It was reserved, however, for the skill of Thrasybulus (A.C. 403) to restore to Athens its former constitution; a revolution which he was able to effect without much severity, or effusion of blood. Perhaps in the whole history of the Athenians, there is no feature more remarkable than the vigorous elasticity of spirit which they displayed in recovering from disasters; and never was the truth of this remark so strikingly illustrated as at the present period. One generation had scarcely passed away, since she was groaning beneath the Thirty Tyrants and the reign of terror—her native energies prostrate, her external resources swept away—and now we find her on a lofty eminence. Seventy-five cities hail her as the head of their confederacy; the Ægean isles are numbered among her foreign settlements; Lacedæmon recognises her dominion of the sea; she is confessedly, and without a rival, once more the first of the Grecian communities. Nor is this all; hitherto we have seen her producing and fostering legislators, warriors, statesmen, painters, sculptors, poets, historians, and orators; we are now to behold her in another aspect, as the mother of that philosophy at once subtle and sublime, which even at the present hour exerts a powerful influence over the human mind. This important æra in the history of Athens has been beautifully alluded to by Milton:

> "See there the olive grove of Academe,
> Plato's retirement, where the Attic bird
> Trills her thick-warbled notes the summer long;
> There flowery hill Hymettus with the sound
> Of bees' industrious murmur oft invites
> To studious musing; there Ilissus rolls
> His whispering stream; within the walls then view
> The schools of ancient sages; his who bred
> Great Alexander to subdue the world,
> Lyceum there and painted Stoa next;
> * * * * * *
> To age philosophy next lend thine ear,
> From Heaven descended to the low roof'd house
> Of Socrates; see there his tenement,
> Whom, well inspired, the oracle pronounced
> Wisest of men; from whose mouth issued forth
> Mellifluous streams that water'd all the schools
> Of Academics old and new, with those
> Surnamed Peripatetics, and the sect
> Epicurean, and the Stoic severe."

From this time a new æra begins in the history of Athens. Philip, king of Macedonia, by dint of dissimulation and bribery, contrived first to embroil the different states of Greece, and then to trample on their independence. The Athenians, roused by the thunders of Demosthenes, made a vigorous defence (A.C. 338); but the battle of Cheronea proved adverse to their hopes, and on this field sunk the supremacy of Athens. And if the last sparks of her heroism do not expire with Demosthenes, the fitful gleams they throw out from time to time, serve but to "mark the ruins they adorn." It is true that under the sway of Alexander the Great, and the different generals who succeeded him in the government of Athens, she made various efforts to throw off the yoke; but these efforts resemble more the spiteful ebullitions of a pusillanimous slave, than the glorious aspirations of a noble spirit struggling to be free. In this state she continued, the sport of every tyrant who chanced to draw a prize in the lottery of war, till the Roman eagles soared over the Acropolis, and the victorious Sylla proclaimed Athens a tributary of Rome (A.C. 86). But while Athens thus saw every trace of her political existence vanish, she rose to an empire scarcely less flattering, to which Rome itself was obliged to bow. Her conquerors looked to her as the teacher and arbiter of taste, philosophy, and science; and all the Romans who were ambitious of literary attainments, flocked to Athens in order to acquire them. This tribute of respect to Athenian taste and genius was paid by various Roman emperors in succession. Under Adrian (A.D. 117) she even regained much of her former internal splendor; and his example was followed by several of his successors, though on a less magnificent scale. The description of Athens by Pausanias belongs to this period. In the third century, according to Zosimus, Athens was taken by Gothic invaders, who, however, did not long retain their acquisition, having been expelled by the inhabitants under the command of Cleodemus. In the year 396, it was again taken by Alaric, king of the Goths, who is said to have laid in ruins its stately structures, and to have stripped it of its ancient splendour. After this dreadful visitation, Athens sunk into insignificance, and became as obscure as she had once been illustrious. We are told, indeed, that the walls of Athens were put in a state of defence by Justinian: but from the time of this emperor, a chasm of nearly seven centuries ensued in its history, except that, in the year 1130, it furnished Roger, king of Sicily, with a number of artificers, who there introduced the culture of silk. Doomed, apparently, to become the prey of every spoiler, Athens again emerges from oblivion in the thirteenth century, under Baldwin and his crusaders, at a time when it was besieged by a general of Theodorus Lascaris, the Greek emperor. In 1427, it was taken by Sultan Murad; but some time afterward was recovered from the infidels by another body of crusaders, under the Marquis of Montferrat, a powerful baron of the West, who bestowed it on Otto de la Roche, one of his followers. For a considerable time it was governed by Otto and his descendants, with the title of duke; but this family

was afterward displaced by Walter of Brienne. The next rulers of Athens were the Acciaioli, an opulent family of Florence, in whose possession it remained till 1455, when it was taken by Omar, a general of Mohammed II., who settled a colony in it, and incorporated it completely with the Turkish empire. In the year 1687, it was captured by the Venetians under Morosini, after a short siege, during which the Parthenon, then in an almost perfect state, and the other buildings of the Acropolis, sustained great damage. After a short interval, it again fell into the hands of the Turks, under whose jurisdiction it remained, until the treaty of Adrianople in 1829, following up the provisions and the stipulations of the treaty of London in 1827, established the new kingdom of Greece, of which Athens is now the capital.

Such is a brief and necessarily imperfect sketch of Athens and its inhabitants. To have investigated the causes that led to its rise, progress, and decline; to have analyzed the character of its people, and to have traced it through its varied phases in their love of glory, in their refined taste, in their fickleness and injustice on the one hand, and, on the other, in their generosity and gratitude, in their courage and cowardice, haughtiness and humility (*Plin., de Parrhas.*), would have involved us in discussions to which volumes alone would have been adequate, even if the vastness of the subject had not precluded the attempt. Plunged for centuries in barbarism, and subjected to the galling yoke of a foreign despotism, it is not surprising that the modern Athenians should have inherited little but the vices of their forefathers. But now that their nationality is restored, and the light of civilization has again dawned upon their country, it may, we trust, be inferred that the few seeds of the ancestral character which still linger in their constitution, exhibiting themselves in pride, stubbornness, and susceptibility, will ripen into such qualities as may render them worthy denizens of the soil, *unde humanitas, doctrina, religio, fruges, jura, leges orta atque in omnes terras distributa putantur.*

ATHENS, p. t., Somerset co., Me., 49 m. N. Augusta, 644 W. Watered by a branch of Kennebec river, and contains four stores, seven grist-mills, three saw-mills, one fulling-mill, ten schools, 603 scholars. Pop. 1427.

ATHENS, p. t., Windham co., Vt., 109 m. S. Montpelier, 447 W. It has three schools, 119 scholars. Pop. 378.

ATHENS, p. t., Greene co., N.Y., 5 m. N. Catskill, 29 S. Albany, 341 W. Bounded E. by Hudson river, and contains eighteen stores, one flouring-mill, one distillery, three schools, 80 scholars. Pop. 2387. The village is on the W. side of Hudson river, opposite the city of Hudson, and contains five churches, one Episcopal, one Dutch Reformed, one Lutheran, one Baptist, and one Friends', 200 dwellings, and about 1300 inhabitants. Incorporated in 1805. Over twenty sloops are owned at this place, and ply between it and New-York city. A steam ferry-boat connects it with Hudson.

ATHENS, p. b., Bradford co., Pa., 152 m. N. by E. Harrisburg, 262 W. Situated at the junction of Chemung river with the Susquehanna. It was formerly called Tioga Point. It contains a Presbyterian church, an academy, eleven stores, sixty dwellings, and 435 inhabitants. The North Branch canal of Pennsylvania terminates here. The t. contains two fulling-mills, one woollen factory, two grist-mills, 14 saw-mills. Pop. 1532.

ATHENS, t., Crawford co., Pa. It contains one grist-mill, five saw-mills, three schools, 60 scholars. Pop. 498.

ATHENS county, O. Situated in the S.E. part of the state, and contains 740 sq. m. Watered by Hockhocking r. and its branches, which afford good water-power. Bituminous coal is abundant, iron ore is found, and several wells have been sunk, from which excellent salt is manufactured. Two townships in this county, containing 46,080 acres, were granted by the Congress of the United States to the Ohio Company, for the use of a university. The surface is broken and hilly; soil productive. It had in 1840, 15,871 neat cattle, 29,590 sheep, 24,459 swine, and produced 175,894 bushels of wheat, 387,077 of Indian corn, 152,346 of oats, 63,740 of potatoes, 108,878 pounds of tobacco, 69,202 of sugar, 92,800 bushels of salt, and 84,200 of bituminous coal. It had fifty-four stores, eighteen grist-mills, fifty-two saw-mills, three oil-mills, six tanneries, one printing-office, one weekly newspaper, one university and one academy, eighty-eight schools, 2083 scholars. Pop. 19,109. Cap. Athens.

ATHENS, p. v., capital of Athens co., O., 72 m. S.E. Columbus, 339 W. Situated on the N.E. side of Hockhocking river, on a beautiful peninsula, formed by a bend in the river. Athens t., in which it is situated, is the northernmost of two townships granted to the Ohio University. The village is pleasantly situated and handsomely built, mostly of brick, and contains a court-house, county offices, a jail, a Presbyterian and a Methodist church, thirteen stores, three grist-mills, three saw-mills, three schools, 120 scholars, over 100 dwellings, and 710 inhabitants. Exclusive of the v., the t. contains two saw-mills, six grist-mills, nine schools, 208 scholars. Pop. 1593. The Ohio University, located in the village, was founded in 1821, has a president and five professors or other instructers, 145 alumni, of whom 34 have been clergymen, 165 students, and 2500 volumes in its libraries. The commencement is on the first Wednesday in August. The funds yield about $5000 annually. The college edifice is four stories high, of brick, and pleasantly situated. An academy is connected with the institution, with a handsome brick edifice, two stories high, containing 40 students.

ATHENS, t., Harrison co., O. It has seven schools, 263 scholars. Pop. 1439.

ATHENS, p. v., capital of Clarke co., Ga., 75 m. N. by W. Milledgeville, 610 W. Situated on the W. side of Oconee river. It contains a court-house, jail, three churches, one Methodist, one Presbyterian, and one Baptist, and about 1200 inhabitants. It is the seat of the Georgia University, which was founded in 1785, and has a president and eight professors or other instructers, 433 alumni, 116 students, and 11,000 volumes in its libraries. The commencement is on the first Wednesday of August. It has a fund of $100,000 in bank stock, and 50,000 acres of land. The philosophical apparatus, with a portion of the library, cost $12,000. It has two college edifices, 120 by 45 feet, besides a chapel, &c.

ATHENS, p. v., capital of Limestone co., Ala., 25 m. N.W. Huntsville, 154 N. by E. Tuscaloosa, 733 W. Situated one mile W. of Swan creek, which flows into Tennessee river, and contains a court-house, jail, and several stores and dwellings.

ATHENS, p. v., capital of M'Minn co., Tenn., 154 m. S.E. Nashville, 555 W. Situated on Eastanalla creek, 15 miles from its entrance into Tennessee river. It has a court-house, jail, three churches, one Methodist and two Presbyterian, two academies, one female seminary, two banks, thirteen stores, one flouring-mill, one saw-mill, two printing-offices, and about 1000 inhab.

ATHERSTONE, a m. town of England, co. Warwick, hund. Hemlingford, contiguous to the Coventry canal, 12½ m. N. Coventry. Pop. 3870. It has a free school, founded in 1573, and manufactures of hats, ribands, and shalloons. There are here four annual fairs; that which is held on the 19th of September being one of the most considerable in England for the sale of cheese.

ATHERTON. See CHOWBENT.

ATHIS, a town of France, dep. Orne, cap. cant., arrond. Domfront. Pop. 4537.

ATHLONE, an inland town of Ireland, cos. Westmeath and Roscommon, on the Shannon, 65 m. W. Dublin, lat. 53° 32′ N., long. 7° 54′ W. Its name is derived from *Ath Luan*, "the ford of the rapids." To command this ford a castle was built here by the English shortly after their arrival in the country, that became a post of great consequence. In 1641 Athlone was besieged by the Irish army; but, after a resistance of upward of five months, was relieved by the Duke of Ormond. In the subsequent war of 1688, it was gallantly defended by Colonel Grace against the English, but was taken by storm the next year by Ginkell, afterward earl of Athlone. The fortifications, which had suffered much during this siege, were renovated; but in 1697, the castle and the greater part of the town were destroyed by the explosion of a gunpowder magazine, occasioned by lightning. During the late war with France, it was made the military depôt for the W. of Ireland, and secured by strong works on the Connaught side, covering an extent of fifteen acres, and containing two magazines, an ordnance store, an armory for 15,000 stand of small arms, and barracks for 900 men. The pop. in 1821 amounted to 7543, and in 1831 to 11,406, showing an increase of 3863 in the intervening period, being at the high rate of 51·213 per cent. In 1834 the pop. of the parishes of St. Peter and St. Mary, mostly in the town of Athlone, amounted to 15,040, of whom 1708 were Protestants of the Established Church, 9 Protestant diss., and 13,323 Roman Catholics.

The town is divided into two nearly equal portions by the Shannon, over which is a long and inconveniently narrow bridge, built in the time of Elizabeth. Its public buildings are the two parish churches, four Roman Catholic parochial chapels, a Franciscan chapel, a Presbyterian and two Methodist meeting-houses. A public school, endowed by one of the Ranelagh family with 470 acres of land, educates, maintains, and apprentices fifteen boys; there are also parish schools for boys and girls, and an abbey school for Catholic children. The number of pupils in the different public schools is about 350, and the private seminaries in the town educate about 500.

By its ruling charter, received from James I. in 1606, its limits are fixed at 1½ mile in every direction from the centre of the bridge; but for electoral purposes they are confined nearly to the space covered with dwelling-houses, which extends over about 485 acres. The governing body consists of a sovereign; 12 burgesses, one of whom is the constable of the castle; a common council of about 28

members, chosen for life; and an unlimited number of freemen nominated by the common council. The borough was represented by two members in the Irish, and is now represented by *one* in the Imperial Parliament. The right of election exists in the members of the corporation resident within 7 miles, and in the £10 householders, the number of electors in 1837 being 235. The sovereign holds a court three times a week, for petty criminal cases. The general sessions for Roscommon are held here twice a year, and those for Westmeath four times. There are petty sessions on alternate Saturdays. On the Roscommon side there is a small prison or bridewell for the temporary detention of culprits.

There are in the town, or in the immediate neighbourhood, two distilleries, and the same number of breweries, tanneries, and soap and candle manufactories, besides several flour-mills. Coarse hats were formerly made here in large numbers, but the demand for them is now trifling. A small trade is carried on with Shannon harbour and Limerick by the steamers on the Shannon, the intercourse being aided by a canal about 1 m. in length, near Athlone, by which the rapids in the river are obviated. Markets on Tuesdays and Saturdays. Fairs on the Monday after Epiphany, 10th March, Holy Thursday, and 24th August. each fair continues for three days.

Athlone is principally supported by the expenditure of the garrison; and in proportion as this has been diminished by the continuance of peace, so has its wealth and prosperity declined. There are but few resident families of wealth or independence; and the working classes, being chiefly agricultural labourers, live according to the habits, and are affected by the fluctuations incident to this portion of the pop. of the island.

ATHOL, p. t., Worcester co., Mass., 20 m. N.W. Worcester, 69 W.N.W. Boston, 416 W. Incorporated in 1762. Watered by Miller's river, which affords extensive water-power. It has three churches, one Congregational, one Unitarian, and one Baptist, five stores, three grist-mills, nine saw-mills, thirteen schools, 412 scholars. Population 1591.

ATHOL, p. t., Warren co., N.Y., 12 m. W. Caldwell, 74 N. by W. Albany, 443 W. Bounded E. by Hudson river, by a branch of which it is watered. It contains two stores, two grist-mills, thirteen saw-mills, eleven schools, 405 scholars. Pop. 1210.

ATHOS, AGIOS-OROS, or MONTE SANTO, a famous mountain of Turkey in Europe, near the S. extremity of the most easterly of those peninsulas that project in a S.E. direction from the district of Salonîki (part of Macedonia) into the Ægean sea, being that between the gulfs of Contessa (*Sinus Strymonicus*), and Monte-Santo (*Sinus Singiticus*). This peninsula is joined to the mainland by a low isthmus, not more than 1½ m. across, and not more, where highest, than 15 feet above the level of the sea. But the peninsula itself, which is about 25 m. in length, by about 4 m. in breadth, is mountainous and rugged. Mount Athos has, by a recent survey, been found to be in lat. 40° 10′ N., long. 24° 20′ 30″ E., and to reach the height of 6349 feet above the level of the sea. It rises abruptly from the water, its lower parts being covered with forests of pine, oak, chestnut, &c., above which towers the bare conical peak of the mountain.

Mount Athos has been famous both in ancient and modern times. Herodotus relates that the fleet of Mardonius, the Persian general, in attempting to double mount Athos, was reported to have lost above 300 ships, and 20,000 men. (Lib. vi., s. 44.) When Xerxes invaded Greece, he determined to guard against the occurrence of a similar disaster, by cutting a canal across the isthmus, of such dimensions as to admit of two triremes passing abreast (*Herod.*, lib. vii., s. 24); of which great work the traces still remain. In modern times the peninsula of mount Athos has been occupied from a remote epoch by a number of monks of the Greek Church, who live in a sort of fortified monasteries, of which there are about twenty, of different degrees of magnitude and importance. These, with the farms or *metochis* attached to them, occupy the whole peninsula, which has thence derived its modern name of Monte Santo. The situation of the different monasteries is very various; but generally the most romantic and strikingly beautiful that can be imagined. Some of them belong to Russians, others to Bulgarians, and others to Servians. Except the produce of their own farms and vineyards, and the sale of crosses, beads, &c., they depend chiefly on the oblations offered by the numerous pilgrims by which they are occasionally visited, and on the sums collected by their mendicant brethren in other parts. They pay an annual contribution to the Porte. No females are admitted within this peninsula; and a market held weekly within its limits, and resorted to by the country people, presents the singular spectacle of a market without noise, and a crowd without a woman!

Most of the monasteries possess considerable collections of manuscripts, and it was long a prevalent opinion that some of the lost treasures of ancient genius might be recovered, were a diligent search made in the monasteries of mount Athos. In 1801, however, they were thoroughly explored by Dr. Carlyle, and, with the exception of a copy of the Illiad and Odyssey, a few of the edited plays of the different tragedians, a copy of Pindar and Hesiod, the Orations of Demosthenes and Æschines, parts of Aristotle, and copies of Philo and Josephus, he did not meet with anything that could be called classical! There were some valuable MSS. of the New Testament, but none so old by centuries as the Codex Alexandrinus or MS. of Beza. Polemical divinity, and lives of the saints, formed the great bulk of the libraries.

The monasteries suffered severely from the exactions of the Turks during the Greek revolution. The entire population of the peninsula was estimated at about 6000 in 1801; but at present it is probably rather under 3000.—(*Walpole's Memoirs relating to Turkey*, i., p. 194–230; *Journal of the Geog. Society*, vii., p. 61–74.)

ATHY, an inland town of Ireland, co. Kildare, prov. Leinster, on the Barrow, 38 m. S.W. Dublin. Its ancient name was Athlegar, "the western ford." From its position on the border of the English pale, and on a ford of the river, it has been a frequent scene of conflict. In 1308 it was plundered by the Irish, and burned by Edward Bruce in 1315. A fort, built about 1506, to guard the pass of the river, was occupied in 1648 by Owen Roe O'Neal, on the part of the Irish, but in 1650 it surrendered to the parliamentary forces. Pop. in 1821, 3693; in 1831, 4494; in 1834, 4615; of whom 780 were of the E. church, 90 Prot. dis., and 3815 R. Cath. The two portions into which the town is divided by the Barrow, are connected by a bridge of five arches, thus forming one continuous main street, whence several lesser avenues diverge. There is a par. church, a plain building; a spacious R. Cath. chapel, with a Presbyterian and a Methodist meeting-house. Adjoining the town is a small chapel, an ancient cemetery, and a small Dominican monastery. Besides the parochial school, which instructs about 100 children, there are two others supported by voluntary subscriptions, in which 400 boys and 100 girls are instructed. There is also a dispensary and a poor fund. It is a chief constabulary station, and has a small cavalry barrack. By a charter of 11 James I., the corporation consists of a sovereign, two bailiffs, and twelve burgesses. Previously to the Union the borough sent two ms. to the Irish parliament. The summer assizes for the county are held here, as are general sessions of the peace in January and June, and petty sessions every Tuesday. The borough courts are now disused, except one called the curl court, in which the sovereign decides pleas of debt under £2 Irish currency, on the first Monday in every month. The county jail is near the town: it is built on the radiating principle, and is provided with thirty-two sleeping, and three solitary cells. The committals to it in 1837 were ninety. The sentences were—death, none; transportation for life, six; for seven years, twelve; imprisonment for one year, two; for six months or under, twenty-nine: fine or whipping, seven; liberated by acquittal, or want of prosecution, thirty-four. The total expenditure for the year was £840, being an average of £9 7*s.* for each prisoner. The markets are held on Tuesdays and Saturdays; the fairs on 17th March, 25th April, 9th June, 25th July, 10th October, and 11th December. The modern consequence of the town is mainly derived from its being at the junction of a branch of the Grand canal with the Barrow, and from the latter being made navigable to its embouchure. It has, in consequence, become a place of considerable commercial importance. The principal trade is in corn, of which large quantities are purchased, partly for mills on the Barrow, but chiefly for the Dublin market, to which city it is conveyed principally by the Grand canal. Corn, butter, provisions, &c., are also sent down the Barrow to New Ross and Waterford; and timber and other articles, for the use of the adjoining districts, are imported by the same channel. The malting trade is in a flourishing state: duty was paid in 1835 on 11,016 bushels. The post-office revenue in 1830 was £420; in 1836, £520. Passengers are conveyed to Dublin by the Grand canal by means of fly-boats. One of the mail-coach roads from Dublin to Cork passes through the town; and a *caravan*, carrying eight passengers each trip, daily plies to Carlow. (*Municipal and Railroad Reports, &c.*)

ATINA, a town of Naples, prov. Terra di Lavoro, 12 m. S.E. Sora, near the Melfa, among some of the loftiest summits of the Apennines. Pop. 4000. It has a cathedral, a convent, and a hospital; and was formerly the seat of a bishopric, suppressed by Pope Eugene III. It is principally remarkable for its Cyclopean remains.

This is one of the most ancient of the Italian cities; being, according to Virgil (*Æn.*, lib. vii., 629), a considerable town as early as the Trojan war. It was taken from the Samnites by the Romans, A.U.C. 440. Cicero says it was

a prefecture, and one of the most populous and distinguished in Italy. (*Cic. pro Planco.*) It received a colony from Rome during the reign of Nero. (*Cramer's Ancient Italy*, ii., p. 116.)

ATKINSON, p. t., Piscatiquis co., Me., 35 m. N.N.E. Bangor, 90 N.E. Augusta, 687 W. Incorporated in 1819. It has two stores, two grist-mills, two saw-mills, six schools, 280 scholars. Pop. 704.

ATKINSON, p. t., Rockingham co., N. H., 33 m. S.E. Concord, 466 W. Incorporated in 1767. It contains one of the most respectable academies in the state, founded in 1789, and endowed with 1000 acres of land. In a large meadow is an island of six or seven acres, formerly covered with pine and other timber. When the meadow is overflowed by means of an artificial dam, the island rises with the water, sometimes to the height of six feet, and settles as the water subsides. This remarkable fact is stated on the authority of Dr. Belknap. It contains a Congregational church, one store, two grist-mills, three saw-mills, one academy, 120 students, six schools, 181 scholars. Pop. 557.

ATLANTIC, county, N. J., situated in the S. part of the state, and contains 550 sq. m. Watered by Great Egg Harbour river, and branches of Little Egg Harbour river, which bounds it on the N.E. The Atlantic bounds it on the S.E., along which are many bays, islands, and marshes. It has a light and sandy soil, and contained, in 1840, 4668 neat cattle, 2413 sheep, 2959 swine, and produced 2099 bushels of wheat, 1661 of rye, 60,370 of Indian corn, 15,932 of potatoes. It had forty-three stores, with a capital of $68,800, two glass-houses, twelve grist-mills, thirty-three saw-mills, thirty-five schools, 2590 scholars. Pop. 8726. Capital, May's Landing.

ATLANTIC OCEAN. This is one of the great divisions of that watery expanse which covers more than three fourths of the surface of the globe. It lies between the Old and the New World, washing the E. shores of the Americas, and the W. shores of Europe and Africa, extending lengthwise from the Arctic to the Antartic seas. Where narrowest, between Greenland and Norway, it is about 930 m. across; but between N. Africa and Florida, where it attains to its maximum breadth, the distance from shore to shore exceeds 4150 m. Though it comprises little more than a fifth part of the whole ocean, its shores form a more extended line of coast than those of all the other seas taken together. This arises from several extensive mediterranean seas, which enter deeply into the contiguous continents, being connected by straits with the N. Atlantic ocean, and forming portions of it. Such are the Baltic and Mediterranean seas in the Old Continent; and Hudson's and Baffin's bays, and the Columbian sea (gulf of Mexico and Caribbean sea), in the New World. And it is probably in some degree owing to the facilities afforded for commercial intercourse by these arms of the Atlantic, that the countries in their vicinity have made a greater and more early progress in civilization than those of most other parts of the world.

To the same cause has also been ascribed the circumstance of the nations inhabiting the shores of the Atlantic having applied themselves peculiarly to navigation: they have not limited their activity in this branch of industry to the Atlantic, but navigate every other sea; and there is now no harbour, how remote soever, which is not regularly visited by their ships, with the exception of those to which a free access is denied, or which do not furnish any article of trade. The Atlantic ocean has thus, as it were, become the most frequented highway of commercial nations, and has been more completely explored and examined than the other seas; and frequently repeated experiments have enabled rules to be laid down for the guidance of vessels traversing its different parts, in different seasons of the year, which give the greatest facility and security to its navigation.

Those groups of islands which impede navigation, and render it comparatively difficult and dangerous, are much less numerous in the Atlantic than in most other seas. If, indeed, we except the chain of islands which separates the Columbian sea from the Atlantic, and which, therefore, may be considered as forming part of the shores of the ocean, it can hardly be said that there exists any such group of islands between 50° N. lat. and 50° S. lat. The Azores, Canaries, and Cape de Verd islands, as well as those of Guinea and the Bermudas, occupy a comparatively small space, and are easily avoided; and the two last-mentioned groups lie far from the common track of vessels. The Canaries, including Maderia, are frequently visited; being situated where it is usual for vessels to change the direction of their course.

The direction of the winds and currents is of special importance as affecting the performance of voyages; and to the more exact knowledge of their course and influence, as well as to other improvements in the art of navigation, is to be ascribed the fact that voyages are at present performed in nearly half the time they occupied only two centuries ago.

Winds.—As the Atlantic ocean, including the two lay seas at its extremities, extends from the Arctic to the Antarctic pole, it is in parts subject to the *perpetual* or *trade* winds, in others to the *variable* winds; and along some of its coasts, between the tropics, the winds are subject to a regular change according to the seasons—or, in other words, *monsoons* are there prevalent.

The trade-winds do not extend beyond the 32d parallel from the equator; sometimes they are not met with at a greater distance than 27° lat. The whole surface of the sea extending from these latitudes to the poles is the province of the *variable* winds. The latter blow in every season from all points of the compass; but, by long experience, it has been found that the W. winds prevail in both hemispheres. If a line be drawn in the direction of a meridian, it is estimated that the proportion between the winds blowing from the W. to those that come from the E. is as 9 to 5½. This, at least, is the proportion in the N. hemisphere, where the estimate has been made with the greatest exactness. It is, besides, to be observed, that while the winds between the tropics and near them blow nearly always with the same degree of force, the variable winds vary extremely in this respect—blowing sometimes almost with the strength of hurricanes, and at other times sinking into dead calms.

The two trade-winds do not blow over the whole surface of the sea lying between the tropics. They are separated from each other by the *region of calms*. This region varies, according to the seasons, in extent; and does not always occupy the same part of the ocean. It is found to extend from a short distance off the shores of the Old Continent to a short distance off those of the New, but its breadth is very various. Sometimes it occupies not more than 3° of lat., and at other seasons up to 10°. The most remarkable fact respecting this region is, that it does not extend equally on both sides the equator, but lies nearly the whole year round in the N. hemisphere. Only when the sun is near the tropic of Capricorn it passes the line, but never extends farther to the S. than 2½°. On the N. of the equator it advances, at certain seasons, even to the 14th or 15th deg. of lat. These changes in the extent and in the range in which the region of calms is met with, and in which the trade-winds blow, depend evidently on the position of the sun. When the sun is near the N. tropic, or retiring from it, especially in July, August, and September, the calms advance towards the N. even to the 14th and 15th deg. of lat.; and at the same time the S. trade-winds encroach considerably on the N. hemisphere, being met with as far as the 4th or 5th deg. of N. lat. Then the breadth of the region of calms is 10°; but when the sun is near the S. tropic, or begins to retire from it, the S. trade-winds also recede farther S.; and in January, February, and March, the calms extend to the S. of the line, but only to a distance of from 1° to 2½°. In this season the N. trade-wind advances to 2° N. lat., and the width of the region of calms is then narrowed to from 3° to 4° lat. The central line of the region of calms may be placed at about 5° or 5½° lat.; and its mean breadth may extend over 5° or 5½°, or from 300 to 350 sea m. Continued calms reign in this region; and they would form an insuperable obstacle to the progress of vessels, were not the air daily agitated by a squall which occurs about 2 o'clock in the afternoon. At noon, a black and well-defined cloud appears near the horizon, which increases, and announces a violent thunder-storm; suddenly a wind arises, blows for a short time with great violence, sends down a few drops of rain; and after this tumult of the elements has lasted from ½ to 1 hour, the calm returns. These short violent squalls are called *tornadoes*, and it is only by their means that the region of calms can be passed by vessels using sails; but it always proves a very tedious navigation.

The *northern trade-wind* is subject to change, not only respecting the extent of sea over which, but also respecting the direction in which, it blows. When the sun advances in the N. hemisphere, it withdraws, as already seen, farther from the equator. It also blows over a wider range of sea, near the coasts of America, than at a short distance from the Old Continent. In the seas enclosing the Canary islands, it is rarely met with at 30° lat., and often not before the 27th parallel is reached; here, therefore, its N. boundary may be fixed at 28½° N. lat. as a mean. On the W. borders of the ocean, however, near the coast of America, it extends farther N., even to 33° lat.; here its mean boundary may be fixed at 30° lat. In the neighbourhood of the Old Continent, this trade-wind blows from the N.E., but it declines more to the E. as it proceeds farther W. In the middle of the ocean it is E. ¼ N., and where it approaches the New Continent it blows from due E. This wind is somewhat changeable towards its N. boundary; sometimes violent N.E. winds are found to prevail be-

tween the 22d and 30th deg. of lat., and in the same parallels it is frequently very weak. But no navigation can be more pleasant than that with this trade-wind. It is rather to be called a breeze than a wind; and is uniform, and never interrupted by squalls. The waves which are raised by it are low, and their swell gentle. Where this wind blows, the passage from the Old Continent to America may safely be effected in an open boat. Hence the Spaniards have called this part of the Atlantic ocean the "Sea of the Ladies"—*Golfo de las Damas.*

The *southern trade-wind* differs from the northern in the greater extent of sea over which it blows, extending, as we previously observed, in summer, to 5° or even 6° to the N., and never receding farther to the S. of the equator than 2½°. It is, farther, much more regular, not being interrupted towards its S. boundary by other winds. Its direction near the Old Continent is, also, somewhat different; for here it blows parallel to the coast extending from the cape of Good Hope to the Bight of Benin—that is, from the S. At a distance from the continent it becomes by degrees more easterly, and where it approaches America its direction is nearly due E. The meridian of 20° W. of Greenwich may be considered as the line of separation between the winds which blow more southerly or more easterly. To the E. of this line, the wind varies between S.S.W. and S.S.E.; but to the W. of it, between S.S.E. and S.S.W.

In some parts the trade-winds extend to the very shores of the continents; in others, a tract of sea lies between the trade-winds and the land in which a different wind is prevalent. Thus it is found, that the sea between the N. trade-wind and the African coast, from the Canaries to the Cape de Verd islands, the wind blows constantly from the W. This phenomenon is sufficiently explained by the peculiar nature of the great African desert, the Sahara. Its surface, destitute of vegetation, and covered with loose sand, is heated by the sun to an excessive degree, and in consequence the superincumbent air is rarefied, and rises. Where this rarefied air comes into contact with the more dense air covering the surface of the sea, the latter expands over the desert; and this gives rise to a continual flow of air from W. to E.

Farther S., between the Cape de Verd islands and cape Mesurado (7° N. lat.), a kind of monsoon prevails, which, in certain places, blows to the distance of 200 m., and opposite Sierra Leone about 150 m., off shore. From September to June it proceeds from the N. or N.E., and in the rest of the year from S.W. Along the coast of Guinea, and in the Bight of Benin, the S. trade-wind prevails nearly the whole year round; but its direction is a little changed, the wind blowing from the S.W. Between the Bight of Benin and 30° S. lat., the trade-wind blows to the very shores of the continent.

On the other side of the Atlantic ocean, along the coast of Brazil, a regular monsoon prevails. It proceeds, between September and March, from between N. ½ E. and N.E. ½ E.; and from March to September, from between E. ½ N. to E.S.E. These winds blow with considerable force, and extend sometimes to a great distance from the shore, especially in the months of June and July. There are instances on record of its having been met with nearly as far as the middle of the Atlantic.

N. of cape S. Roque, the trade-winds reach the very shores of the American continent and the West Indies. In these parts they seem even to extend over a considerable part of the continent itself; for the continual E. wind which blows over the plain of the river Amazon, to the very foot of the Andes, is with reason considered as a continuation of the trade-winds. The same may be said of the E. winds which blow over the plains watered by the Orinoco, where this wind is felt as far as Angostura, and at certain seasons still farther W.

Currents.—We are less acquainted with the currents than with the winds. This arises partly from the difficulties in which the subject is naturally involved, and partly from the comparatively short time which has elapsed since they have attracted the attention of navigators and naturalists.

Currents are to be distinguished from *drift-water*. By the latter expression, that motion of the water is understood, which is produced on the surface of the sea by perpetual or prevailing winds. By pushing continually the upper strata of the water towards that point to which they blow, they cause a slow motion of the water in that direction. Accordingly, we find that that part of the Atlantic ocean, which is subject to the trade-wind, is in a continual motion towards the W.; which is most sensible in those regions which are always exposed to the trade-winds, and less so where they blow only in certain seasons. This kind of current is in most parts constant, but its flow very gentle. Its mean velocity is from 9 to 10 m. a day, and it is very favourable to navigation.

Other drift-currents are met with in those parts of the Atlantic, in which the wind changes with the seasons; as along the coast of Sierra Leone, and that of Brazil, S. of cape S. Augustine. In the former the current runs, from September to June, S., and in the remainder of the year in a N. direction. Along the coasts of Brazil, the current, from September to March, runs in a S. direction, and from March to September, N.

Even in those parts of the Atlantic which are subject to a continual change of the wind, a drift-current is observable. We observed, that N. of 30° N. lat., and S. of 30° S. lat., in the region of the variable winds, the W. winds prevail, and in these parts of the ocean a W. current is perceived; but it is feeble, and manifests itself in the N. Atlantic only on the whole course of a voyage from Europe to America and backward, retarding the former and forwarding the latter. This drift-current seems to attain its greatest velocity S. of 36° S. lat.

Besides the drift-currents, the velocity of which is moderate, there are others of much greater force, called properly *currents*. Their origin is still involved in obscurity; but, from some facts, we may suppose that they are not formed on the surface of the water, but are of great depth, and in many parts, if not in all, extend to the very bottom of the sea. These currents cannot be compared with rivers; for they extend over such a portion of the surface of the sea, that if they were transferred to the continent they would cover countries of great extent.

In the Atlantic, these currents run across the ocean in three places. The current crossing the Atlantic near the line, is called the *Equatorial current;* it runs from E. to W. The current, which, in a direction from W. to E., traverses the N. Atlantic between 36° and 44°, bears the name of the *Gulf stream;* and that which runs in the same direction, through the S. Atlantic, between 30° and 40° S. lat., is named the *S. Atlantic current.* Other currents run along the shores of both continents between 40° N. lat. and 30° S. lat. Along the Old Continent they run towards the equator; but, on the shores of America, they flow from the line towards the poles. These latter kind of currents are intimately connected with the equatorial current; but very slightly, if at all, with the gulf stream or S. current.

The *Equatorial current* may be supposed to have its origin in the Bight of Benin, on the W. shores of Africa, between the islands of Anno Bom and St. Thomas; whence it proceeds, in a W. direction, towards capes S. Roque and Augustine, on the coast of Brazil. Its breadth is different in different parts. Near its origin, it is not quite 3° of lat. across, about 160 m.; but, in its progress to the W., it increases considerably in width. Opposite cape Palmas, its N. border is found at about 1° 45' N. lat., but the S. reaches nearly to 5° S. lat.: thus its breadth extends here over more than 6° of lat., or upward of 360 nautical m. It attains its greatest breadth between 20° and 22° W. long., where it extends over 7° or 8° of lat., from 4½° to 5° S. of the equator to 2½° or 3° N. of it; here, consequently, it is 450 nautical m. across. A little farther W., between 23° and 23° W. long., it sends off a branch to the N.W.; and here it narrows to about 300 m., which breadth it probably preserves up to its division into two currents, opposite capes S. Roque and S. Augustine; but that part of its course, which lies W. of 23° and 24° W. long., is somewhat declined towards the S. Its velocity varies likewise, not only in the different parts of its course, but also in different seasons; being much greater in summer than in winter. From Anno Bom to 10° W. long. it may run from 25 to 30 m. a day; but between 10° and 16° its velocity increases to from 44 to 80 m. at the end of June and the beginning of July; in the other summer month it is somewhat less; and, from October to March, very moderate, and sometimes very weak. Between 16° and 23° W. long., where it is commonly crossed by vessels, the rapidity of the current rises often to 45, 50, and even 60 m. per day; but its mean velocity may be fixed at about 30 m. That part of the current, between 23° and the coast of Brazil, is avoided by vessels, and its rapidity not exactly known; it seems rather to increase, and not to be affected by the seasons. The temperature of the water within the current is everywhere some degrees lower than that of the seas without the current. The whole length of this current, from S. Thomas to cape S. Roque, amounts to upward of 2500 sea miles.

The portion of the equatorial current which branches off from the main stream between 22° and 23° W. long., and about 2½° N. lat., is called the *N.W. current.* At the point of separation it may be from 180 to 200 m. in width; farther N. it widens even to 300 m., but narrows again to 240 and less. Its velocity is not so great as that of the main equatorial current. In its S. part, as far as 10° N. lat., it may run 30 m. a day; but it afterward slackens considerably; yet at all times it may be traced up to 18° N. lat., and commonly even to 25°. In the N. part of its

course it declines more to the N., till it is lost in the drift-current. It is not improbable that this current increases the velocity of the drift-current, which navigators have observed between 35° N. lat. and the island of Trinidad; and that the change in the direction of the drift-current, which here declines to the N.W., is also to be ascribed to the same cause.

At a distance of about 300 m. from the coast of Brazil, extending between capes S. Roque and S. Augustine, the equatorial current divides into two branches. That which continues to run along the N. coast of Brazil, turns at the mouth of the Amazon to the N., and proceeds along the shores of Guiana to the island of Trinidad, where it enters the Caribbean sea. It is called the *Guiana current*, and the length of its course does not fall short of 1500 m. Its velocity is greatest in summer and winter; and may, in the former, be about 30 m. a day at a mean. It enters the Caribbean sea by the different straits which, S. of the island of Martinique, divide the smaller Antilles from one another and from the continent of S. America. In these straits, the currents setting into the Caribbean sea are strong: that between Trinidad and Grenada runs from 1 to 1½ m. per hour; less rapid is the current in the strait between S. Vincent and S. Lucia; and between the latter island and Martinique it runs not more than 21 m. per day. At the Virgin islands the flow of the water is only 8 or 10 m. a day; and that is not more than the common rate at which the drift-current runs. In the Caribbean sea the Guiana current terminates; for, in that sea, no perpetual current has been traced. It rather seems that the currents which exist there depend on the winds, and change the direction of their course according to the seasons.

The other current, which branches off from the equatorial current, opposite cape S. Augustine in Brazil, is called the *Brazil current*, and runs to the S.W. along the shores of S. America, but does not in any part of its course approach near to them. From 8° S. lat., where it separates from the Guiana current, to 16° or 17° S. lat., the current has a considerable width, and runs about 20 m. or somewhat more a day. Its distance from the continent is nowhere less than 230 m. Farther S. it increases in breadth and velocity, and approaches at the same time nearer the continent. Opposite cape Frio, it runs about 30 m. a day, and is not more than 200 m. distant from the coast. As, however, from the last-mentioned cape the land falls back to the W., the current is soon found at 300 m. and more from the continent. By declining, by degrees, its course farther to the W., it approaches nearer; but never is found at a distance less than 250 m. Thus it continues to the mouth of the La Plata river, running all this way from 15 to 20 m. per day. It becomes weaker as it advances farther S., but may be traced to the straits of Magellan and Le Maire. In the space of sea which intervenes between this current and the coast, the changeable currents occur, noticed above among the currents depending on monsoons.

The Guiana and Brazil currents are those with which the equatorial current is connected on the shores of America. The currents with which this great sea-stream is united near the coast of the Old Continent are the S. and the N. African currents. The *S. African current* seems to have its origin some degrees N. of the cape of Good Hope. It appears, however, not to be connected with the Agulhas current, which is found at a short distance S. from the cape, and which runs W. from the Indian into the Atlantic ocean. Between 18° and 11° S. lat. exists a current running from S. to N. at a short distance from the coasts of Africa, but we are not acquainted either with its breadth or velocity; neither, however, appears to be considerable. Between 11° and the island of Anna Bom, the current runs in a N.W. by W. direction, at the rate of from 15 to 25 or even 30 m. a day, but seems to be of inconsiderable width. It increases in velocity at the mouth of the river Zaire, and in width at cape Lopez, but soon afterward merges into the Equatorial current.

The *N. African current*, which is also called the *Guinea current*, from its terminating opposite the coast of Guinea, has its origin opposite the coast of France, between the southern shores of Ireland and cape Finisterre in Spain. It is impossible to determine more precisely the place where it originates, but it is a fact well established by experience, that the whole body of water between the Peninsula and the Azores is in motion towards the S., the western part setting more southerly, and the eastern more to the S.E. Between cape S. Vincent in Portugal, and cape Cantin in Morocco, the motion is directed towards the straits of Gibraltar; and this motion extends as far westward as 20° W. long. Between cape Cantin and cape Blanco the general direction of the current is along the coast, but it sets in nearly perpendicularly towards the shores. This portion of the current is about 300 m. across between cape Cantin and cape Bojador, but only from 150 to 180 between the last-mentioned cape and cape Blanco. Between cape Blanco and cape De Verd the current runs a little to the W. of S., approaching the general direction of the drift-current of the trade winds. Near the cape De Verd islands the temperature of the water of the current is 8° lower than in those parts of the sea which lie beyond it. After passing cape De Verd, the current turns S., and by degrees S.E. and S.S.E. Here it does not approach the shores of Africa; at least between cape De Verd and cape Mesurado it is met with only at a distance of about 200 m. from the coast. The intermediate space is occupied by periodical currents, which run, from September to June, S. or S.W.; but in the remainder of the year, N.E. S. of cape Mesurado it approaches the coast, and increases in velocity, running sometimes at the rate of 2 m. per hour: here its temperature is considerably increased, but still lower than that of the ocean at large. At cape Palmas it turns entirely to the E., and skirts the coast of Guinea until it disappears in the sea opposite the mouth of the Quorra, and in the bay of Biafra, where it partly seems to mingle with the Equatorial current.

With the N. African current another current is connected, which runs across the British channel at its western extremity. It runs E. from cape Finisterre along the S. shores of the bay of Biscay; turns then to the N. and N.W., along the W. coast of France; and passing Ushant, it traverses the British and Irish channels. At the Scilly islands, which it touches with its eastern border, it is 60 m. across. It then continues to the southern shores of Ireland, W. of Carnsore point; and hence turns to cape Clear, where, after entering the ocean, it turns to the S. and S.E., and rejoins the N. African current. By this current vessels are frequently placed in danger near the Scilly islands. With certain winds this current runs from 24 to 28 m. a day. We owe the exact knowledge of this current to the careful investigations of the late Major Rennel, and hence it has been called *Rennel's current*.

The *Gulf stream*, which crosses the Atlantic between 36° and 44° N. lat., originates in the gulf of Mexico. The water in this sea is set by two currents into a nearly circular motion; which seems to be the principal reason why it acquires such a high degree of temperature—being 86° Fahr., while that of the ocean at large in the same lat. (25° N.) does not exceed 78° Fahr. The two currents, which put in motion perhaps three fourths of the water of the gulf, unite about 70 m. W. of the Havana; and by this junction the Gulf stream is formed. It runs along the N. coast of the island of Cuba, eastward; but it is neither broad nor rapid at the entrance of the straits of Florida at the Salt Keys, where it begins to run about 1½ m. an hour. After entering the straits, its velocity increases to 2½, 3, and occasionally 4 m. an hour. In the Narrows, however, between cape Florida and the Bimini islands (which belong to the Bahamas), where the strait is only 44 m. across, and the water-way is straitened by reefs and shoals to 35 m., it runs, in the month of August, 5 m. an hour; and at that rate commonly through the remainder of the strait up to cape Cañaveral. Though the current has traversed, in this space, about 4° of lat., the temperature of its water is not sensibly diminished. From cape Cañaveral (about 28° N. lat.) the Gulf stream runs first due N., and then nearly N.E., along the shores of the United States, up to cape Hatteras (33° N. lat.). It increases gradually in width, and decreases in velocity. At cape Hatteras it is from 73 to 75 m. across, and it runs only 3½ m. per hour. The temperature of its water has sunk from 86° to 83°. In this part, the current runs not so close to the shores as in the strait of Florida. Its N.W. edge is about 24 m. S.E. from cape Hatteras. After passing this cape, the current increases still more rapidly in width, and diminishes gradually in velocity. Between cape Hatteras and the banks of Nantucket and St. George (40° N. lat.), the general direction of the current continues to be from S.W. to N.E., though the W. edge runs nearly due N. At the Nantucket and St. George banks it suddenly declines its course to the E., and, brushing the S. extremity of the great bank of Newfoundland, it continues in that direction as far as 43° or 44° W. long., between 37° and 43° N. lat. Farther E. it bends to the S.E. and S.; and, having enclosed the islands of Flores and Corvo, belonging to the group of the Azores, it is lost in the ocean. There are some instances on record of the warm water of the Gulf stream having advanced to the very shores of Spain and Portugal. It is difficult to determine the width of the current where it runs across the Atlantic, because its warm water expands on both sides to a considerable distance, where no current has been traced. The strongest current is between 36° and 39° N. lat.; and it is probable that the breadth of the whole current does not exceed 120 naut. m., though the warm water is found to be 200, 250, and even 330 m. across. Between 65° and 66° W. long. the strongest current runs from 55 to 56 m. a day; but 900 m. farther E. only from 30 to 33 m. In the neighbourhood of the Azores its mean

nts does not exceed 10 m. a day. The temperature of its water decreases less rapidly. At the meridian of 63½° W. long., or 600 naut. m. from cape Hatteras, the thermometer shows in summer 81°, or from 10° to 11° above the water of the sea under the same lat. At 73° long. its temperature is 75°; and even at Corvo, not lower than 72½°, or from 8° to 10° above the ocean. The length of the Gulf stream from the Salt keys to the S. of the Azores is upwards of 3000 naut. m. It traverses from 19° to 20° of lat. (from 23° to 42° or 43°), and its temperature decreases only 13½° (from 86° to 72½°). The sea which is traversed by it is subject to nearly continual gales, especially towards the outer edges of the current.

Nearly in the middle of the Atlantic, the gulf stream is joined by the *Arctic current*, which originates beneath the immense masses of ice that surround the pole, and thence runs in a S.W. direction along the E. shores of Greenland, carrying with it a great number of icebergs, ice-fields, and ice-floes. Pressing these icy masses against the coast of Greenland, the current renders that coast inaccessible; but it prevents the ice from spreading over the North sea, and from encumbering the shores of the British islands. At cape Farewell the width of the current seems to be from 120 to 160 m., the ice-masses extending to such a distance from it. After passing cape Farewell, the current bends to the N. and enters Davis's strait, running along the western coast of Greenland up to the polar circle, where it crosses the strait to cape Walsingham (about 66° N. lat.); hence it flows southward along Cumberland's island to Frobisher's and Hudson's straits. Opposite these straits it runs from 15 to 16 m. a day. Approaching Newfoundland, the current divides: one branch, running through the strait of Belleisle, mixes with the waters brought down by the St. Lawrence; while the other skirts the E. shores of Newfoundland, where it passes between the great and the outer bank of Newfoundland (between 45° and 46° lat., and 46° and 47° long.), and at last joins the Gulf stream, between 44° and 47° W. long. The width of this current, probably, nowhere exceeds 200 m.; the temperature of its water is always considerably lower than that of the ocean, sometimes as much as 16° or 17°.

The last current we have to notice is the *S. Atlantic current*, which traverses the ocean from E. to W. between 30° and 40° S. lat. It is not known whether this current be connected with the Brazil current, and we are only generally acquainted with the existence of a motion in the sea between the S. coasts of Brazil and the cape of Good Hope. In the W. part of the Atlantic its velocity seems to be moderate; but it increases as the current advances farther E., and opposite the cape it is very strong. It is met with at a distance of from 150 to 180 m. from the cape; hence it flows in a straight line into the Indian ocean, and traces of it are found 2000 m. beyond the cape. That space of sea which intervenes between this current and the cape, is occupied by another current, which runs in an opposite direction; being formed in the Indian ocean by two currents which descend on both sides the island of Madagascar, and unite between the first point of Natal and cape Recife, about 33° S. lat. Passing the cape of Good Hope, it enters the Atlantic as a current, running at the rate of from 1 to 1½ m. an hour in a N.W. direction, and may be traced as far as 25° S. lat. This current is called the *Agulhas current*, from passing over the bank of that name at the S. extremity of Africa.

Tracks of Vessels.—In proportion as our knowledge of the prevailing winds and of the strength and direction of the currents has increased, the tracks have been fixed with more precision, which vessels should follow in sailing from or to a country lying on the shores of the Atlantic. In a few cases they follow the same route, whether outward or homeward bound; but in most cases they follow different routes. We shall notice a few of those which are most frequented.

1. Between *Europe* and the *E. coast of N. America* vessels keep clear of the Gulf stream, sailing along its N. border, between 44° and 50° N. lat. If, in sailing from E. to W., they were to enter the Gulf stream, and to stem its current, they would be delayed in their course, perhaps, not less than a fortnight. If, in sailing from W. to E., they were to enter it, they, doubtless, would arrive four or five days sooner in Europe; but the vessels would suffer, from the continual gales which prevail within the borders of the stream, so much damage in wear and tear, that it hardly could be compensated by the gain of a few days. In sailing to the United States N. of the Gulf stream, vessels have the advantage of a counter current, which runs from the Nantucket and St. George's banks to Chesapeake bay, and perhaps to cape Hatteras.

2. In sailing from *Europe* to the *West Indies*, and the countries S., W., and N. of the Columbian sea, different tracks are followed outward and homeward. In sailing from Europe, the trade-winds are taken advantage of. The vessels pass Madeira and the Canary islands, and sail S. as far as 21° N. lat., where they are certain to find a constant trade-wind. In this course they must avoid approaching too near the coast of Africa between cape Nun and cape Blanco, because the N. African current sets in towards the shores of the Sahara, and the winds blow continually from the sea towards the land. Many navigators who hoped to make the island of Teneriffe, according to their dead reckoning, have been carried so far to the E. that they have been cast on these inhospitable shores, where most of them have perished. Between 1790 and 1805, not less than thirty vessels are known to have been thus lost; and it is supposed that many others shared the same fate, without its being known. Having got a constant trade-wind at 21° N. lat., the vessels sail W., and enter the Columbian sea commonly by one of the straits lying between the islands of Martinique and Trinidad.

In sailing homeward, ships sometimes go through the Mona (between Puerto Rico and Haiti) and windward (between Haiti and Cuba) passages; but more commonly they pass round the island of Cuba on the W., and sail through the straits of Florida. As soon as they have got clear of the strait, they sail E. to get clear of the Gulf stream. They then direct their course across the Atlantic, S. of the Bermudas, till they come into the long. of the island of Flores. They then sail N., either passing between Flores and the other Azores, or to the E. of the group.

3. In sailing from *Europe* to the coast of *Guiana* (Demarara, Surinam, and Cayenne), and to those provinces of Brazil which are situated W. of cape S. Roque, ships go S. till they meet the trade-wind, and then shape their course to the place of destination, but keeping a few degrees farther to the E.; for, on approaching the New Continent, they meet the Guiana current, which carries them W. If, therefore, they make land somewhat too far to the W., they find it very difficult to attain their place of destination, having to bear up against the current.

In returning to Europe, the vessels sail along the shores of America, where they are favoured by the Guiana current as far as the island of Trinidad. Then they keep to the windward of the Antilles, till they get into the variable winds, where they follow the track of the vessels returning from the W. Indies.

4. Sailing from *Europe to S. America, S. of cape St. Roque*, ships have to pass through the region of calms, and to traverse the equatorial current. The first retards their progress, and the second carries them forcibly to the W. If they cut the equatorial line W. of 25° W. long., they cannot make cape St. Roque, and fall in with the Guiana current, which carries them still farther W., and along the N. coast of Brazil. Then they can only get back to cape St. Roque by a toilsome voyage of many days, and even weeks. To avoid this, vessels traverse the line between 18° and 23° W. long. Having done this, they are assisted by the Brazil current in making, with ease, any part of the coast they please.

Vessels homeward bound from this coast take different tracks, according to the seasons. From March to September, when the monsoons blow, and the currents run, from S. to N., between the Brazil current and the continent of S. America, they sail along the shores, till, at cape St. Roque, they meet the Guiana current; and then they follow the track of the vessels returning from Guiana to Europe. But, from September to March, the periodical winds and currents blow and run from E. to S.W., in the direction of the Brazil current. Ships then sail across the currents, and try to get into the middle of the Atlantic, where they follow the track of the vessels returning from the East Indies.

5. In sailing to the *East Indies*, it is now the general practice to avoid the numerous difficulties met with in navigating along the coasts of Africa, S. of the equator, and to follow the tracks of the vessels bound to Brazil. Afterward, the vessels proceed along the coast of S. America to 32° or 33° S. lat., where they get out of the range of the S.E. trade-winds, and are certain to meet with the S. Atlantic current, which carries them eastward. They do not touch at the cape of Good Hope, but follow the current until they enter the Indian ocean.

In returning from the East Indies to Europe, vessels enter the Agulhas current near Madagascar, and are carried by it to the cape of Good Hope, where they commonly stop for some time. From the cape, the same current takes them by its N.W. course to the middle of the Atlantic. They then shape their course N., so as to traverse the line between 22° and 24° W. long., where they meet the N.W. current, which takes them to 20° or 25° N. lat., whence they proceed to the Azores.

Ice.—Both extremities of the Atlantic ocean are invaded by great masses of ice. They either have been detached from the enormous masses which enclose the poles to a great distance, or from those countries which are situated

so near the poles, that their coasts are covered with ice for the greater part of the year. In the N. seas, the ice consists of icebergs, ice-fields, and ice-floes. The icebergs are enormous masses of ice, sometimes several hundred and even thousand yards long and broad; their summits being, in some cases, 100 ft. and more above the level of the sea, though only a seventh part of the whole mass rises above it. They are, properly, glaciers, formed along the high and snow-covered coast of Greenland, and which have afterward been precipitated into the sea. The ice-fields and ice-floes are considered as having been detached from the ice surrounding the pole. This ice is commonly of the thickness of from 20 to 30 ft., and rises from 3 to 4 ft. above the sea. These masses are called fields whenever they are so extensive that their limits cannot be discovered from the mast-head; and floes when their extent may be overlooked from it. In the S. Atlantic only, fields and floes are found, icebergs never having been met with. It is farther worth remarking, that the ice advances much nearer to the N. than to the S. tropic. The ice-floes at cape Horn are far from being numerous; and Captain Weddell says, that at 55° 20′ S. lat., there is no fear of falling in with ice. In the N. hemisphere we always find great ice-masses at some distance from the E. shores of Newfoundland from January to May and June; and icebergs are annually seen grounded on the Great Bank. It even sometimes happens that icebergs are met with in the Gulf stream, 40½° N. lat., and 39° W. long., as was the case in 1817.

Miscellaneous Remarks.—Fish seem to be much more plentiful in the seas near the arctic, than in those surrounding the antartic pole. This is probably to be accounted for by the greater number and greater extent of banks found in the N. seas, and these, besides, wash a far greater extent of shores, which many species of fish resort to in quest of food. Another remarkable fact is, that the seas near the equator, and, in general, those lying in lower latitudes, are much richer in species than the N. parts of the ocean; but that, in the latter, the number of individuals belonging to each species is far greater. Hence we find that the most extensive fisheries are those which are carried on to the N. of 45° N. lat.; as the cod fisheries on the Great bank of Newfoundland, and at the Lafoden islands, the whale fishery at Spitzbergen and on both sides of Greenland, the herring fishery along the coasts of Great Britain, and the pilchard fishery in the British channel. The most important fisheries S. of 45°, if we except the whale fishery near the S. pole, seem to be that in the Caribbean sea along the coasts of Venezuela, and that which the inhabitants of the Canary islands carry on in the sea surrounding cape Blanco in Africa.

The *temperature of the water* is greater in the N. than in the S. hemisphere. In the seas N. of the equatorial current, the thermometer indicates 80° or 81°, and S. of it 77° and 78°, at the time when the sun approaches the line. This difference may, perhaps, be satisfactorily accounted for by the sun's remaining annually seven days longer to the N. than to the S. of the equator.

The *specific gravity and saltness* of the sea-water is, doubtless, greater near the equator than in the vicinity of the poles; but the experiments which have been made to determine the exact difference, have given such different results, that we must still consider this question as undecided. According to Capt. Scoresby, the specific gravity of the sea-water near the coasts of Greenland varies between 1·0259 and 1·0270. Between the tropics, some have found it 1·0300, or nearly this much; and near the equator, even 1·0578, but the last statement is, with reason, regarded as doubtful.

In a part of the Atlantic, the *gulf-weed*, or *fucus natans*, occurs in great quantities. This region extends nearly across the whole ocean beginning on the E. at the 30th meridian, and terminating on the W. in the sea washing the E. side of the Bahama bank. In width, it occupies the whole space between 20° and 36° N. lat.; but the whole extent of the surface between these lines is not equally crowded with weed. The most crowded part extends between 30° and 32° W. long.; where, in the neighbourhood of the island of Flores—one of the Azores—it forms first only a small stripe; but farther to the S. expands to a great width. In this part of the Atlantic, which is called by the Portuguese *Mar de Sargasso* (Weedy sea), the fucus covers, like a mantle, far and wide, the surface of the sea, extending from N. to S. more than 1200 m. Another part of the sea, covered with fucus in a very crowded state, occurs between the meridians of 70° and 72°, and the parallels of 22° and 26°, towards the W. end of the region. The sea lying between these two crowded districts is, in some parts, only lightly strewed with sea-weeds; but, in others, it occurs in dense masses.

Many conjectures have been formed as to the origin of the name given to this great sea. Of these, the most probable seems to be that which derives it from mount Atlas. Being first navigated by Phœnician and Carthaginian adventurers, they would naturally designate it by the most conspicuous feature in the limited space with which they were acquainted; and would, therefore, call it *Mare Atlanticum*, or sea of Atlas.

ATLAS (MOUNT), according to Herodotus, was a single isolated mountain of great elevation, on the W. coast of N. Africa. This information was probably obtained from the first navigators of these seas, who observed the elevated mountain which forms at cape Geer (30° 40′ N. lat.) the western extremity, and, as it were, the gable-end of that extensive range, now comprised under the name of mount Atlas.

The principal and, according to our present knowledge, the highest range of mount Atlas, is that which begins at cape Geer (near 10° W. long.), and extends E., with a slight declination to the N., as far as 5° W. long., where it approaches 32° N. lat. As to cross it requires two days' journey, its width may be estimated at from 20 to 40 m. Its height nowhere seems to exceed the snow-line; for its highest summit, the Miltsin, 27 m. S.E. from the town of Morocco, has been measured by Lieut. Washington, and found to have an elevation of 11,400 feet above the sea. It is only once in about twenty years free from snow; during the winter months the N. declivity of this range is frequently covered with snow for several weeks; we do not know whether this be also the case with the S. declivity, but as it is turned towards the great African desert (the Sahara), and towards the hot winds blowing from that quarter, it is likely that snow falls rarely there, even on the highest summits. This range is called by the natives Djebbel Telge.

From the E. extremity of the Djebbel Telge a chain branches off on the S. side, which runs in a W.S.W. direction, and terminates with low hills on the Atlantic sea at cape Nun. According to Jackson, it contains a snow-capped summit, E. of Elala, but its mean elevation does not appear very great. Between this range and the Djebbel Telge lies the province of Suse. Along the S. base of this range, according to the newest information, runs the river Drâh, which does not lose itself in the sand of the Sahara, as has been usually believed, but reaches the sea about 32 m. S. of cape Nun.

At about 5° W. long. and 32° N. lat., the chain forms a mountain knot, from which issue two ranges, one running a little to the E. of N., and the other first N.E. and then E. Near the mountain knot, between the sources of the rivers Oom-er-begh (Morbeya) and Mulwia or Mahala, it was, till lately, supposed that the Atlas attained an elevation of 15,000 or even 19,000 feet; but the route of Caillié lay precisely over this part of the range, and from his account we only can infer that the ridges rise from 1000 to 2000 ft. above the country at their base; and this country is probably not more than from 3000 to 4000 ft. above the level of the sea; he does not mention any summit rising to the line of congelation.

The range which runs a little to the E. of N. continues in that direction from 32° to 34½°, where, at a distance of about 30 m. from the Mediterranean, it divides into two ridges, which hence run along the Mediterranean sea, in opposite directions, the W. terminating on the peninsula forming the straits of Gibraltar, at cape Spartel and the E. continuing through the whole of Algiers, and terminating at capes Blanco and Zibeeb, on the strait separating Sicily from Africa. The undivided range (bet. 32° and 34½°) is called by Europeans the Greater Atlas, and by the natives Djebbel Tedla or Adtla. The chain which extends W. to cape Spartel is commonly named the Lesser Atlas; by the natives, Errif. Its highest part is hardly anywhere more than 15 or 20 m. distant from the sea; but in numerous places its branches occupy the whole space lying between it and the elevated shores; it forms the capes of Tres Forcas, Quilates, Negro, and Ceuta. Its mean elevation seems hardly to exceed 2000 ft.

The chain which skirts the Mediterranean from 3° W. long. to 10° E. long., or to cape Blanco, has no general name. The distance of the highest part of the range from the sea varies between 10 and 30 m., but at numerous points the coast itself is formed by mountains of considerable elevation, which are parts of the great masses lying behind them. No level country of any extent occurs along the shores, except the plain of Metidjah, E. of the town of Algiers. This range is of greater elevation than the W. Shaw states that the higher portions of it are covered with snow a considerable part of the year; and the French naturalist Desfontaines estimated their height at 7200 ft. But the highest points have lately been measured, and one has been found to rise 5124 ft., and another 6729 ft. only above the sea. E. of 5° E. long. the mountains in the interior seem to be much lower than farther W., but some high summits occur on the coast very near the sea. This chain is at several places broken down, and it is by these wide

chasms, that the most considerable rivers of northern Africa find their way to the Mediterranean sea, as the Mulwia, Shellif, Isser, Sumeim, Wad-el-Kebir, Selbous, and Mejerdah.

The mountains in which these rivers have their origin are very imperfectly known, even as respects their geographical position. It is supposed that they form the continuation of the ridge which branches off from the mountain knot at 5° W. long. and 32° N. lat. towards the N.E., but afterward by degrees declines to the E. East of the meridian of Greenwich, its principal masses seem to lie near the parallel of 35° N. lat., and to extend eastward to the meridian of 10°. Between this range and the more southerly one, lie wide valleys and plains of moderate extent, but of great fertility; they have a temperate climate, and constitute the best portion of the countries embosomed within the range of mount Atlas. Edrisi thinks that no country can match these elevated valleys for fruitfulness of soil and amount of population! (ed. Hartmann, p. 140). The height of the range to the S. seems not to be equal to that lying N. of the valleys, though it probably occupies a greater width: perhaps on this last account it is considered as the principal chain of the Atlas. Among the natives a great portion of it is known under the name of Djebbel Amer, or Lowart.

The country extending south of this range is called, according to Shaw, Sahara by the natives; but though it doubtless partakes, in some respects, of the character of the Great desert, it differs widely from it in others, and must be considered as belonging to the system of mount Atlas. This country, as far as we are informed, presents a succession of flat-backed ridges of moderate elevation, but considerable breadth, running commonly E. and W. The lower grounds by which they are separated from each other are completely closed valleys or plains of moderate extent, each of which has a temporary or permanent lake in its lowest part, the receptacle of the waters that flow down from the adjacent high grounds during the rains. The surface of this extensive country is composed of a sandy soil, entirely destitute of trees, and, in most parts, even of every kind of vegetation, at least during the dry season. But along the water-courses extensive plantations of date trees exist; hence the country has received the name of Bled-el-jereed (the country of dates). In most districts the water is salt or brackish; but in parts potable water may be obtained in abundance by digging wells to the depth of 100 and sometimes 200 fathoms. This country extends S. to the very borders of the Great African desert, and extends eastward far beyond 10° E. long.; but the country east of that meridian is not considered as forming a portion of the Atlas which terminates between 9° and 10° with the Nefusa hills, W. of the bay of Cabes, or the lesser Syrtis.

Our knowledge of the roads traversing this mountain system is, of course, very scanty. Jackson states that only two passes, Bebawan and Belavin exist between the province of Suse and the country N. of the Atlas. Farther E., between 5° and 4° W. long., lies the great caravan road, on which the commerce between Fez in Morocco, and Timbuctoo in Soudan, is carried on. It traverses the districts of Tafilett and Drâh, and does not appear to present great difficulties, according to the statement of Caillié, who returned by it to Europe: this road is connected with the great caravan road leading to Mecca. We are not well acquainted with the precise place where this latter branches off from the former, but it seems to be between 32° and 33° N. lat., not far from the sources of the river Mulwia. The principal stations of the caravans within the Atlas mountains are named Kassabi or Akabi Shurefa, Tiz Fighig, Gardeia, and Wurgiah, all of which are situated near the S. borders of the mountain system. From Wurglah the road passes to Gadames, and hence to Murzook in Fezzan.

We are very imperfectly acquainted with the mineral riches of the Atlas; the precious metals seem only to occur in the province of Suse, and not in abundance, at least no mines are worked. But copper is very plentiful in the principal range S. of the town of Morocco, where it is worked by the natives who inhabit the mountains, and are, in a great measure, independent of the sultan of Morocco. Iron of good quality occurs in many places, and is worked in few, as is likewise lead: antimony in abundance is found and collected in the range of Tedla. Rock-salt is also plentiful, but not worked, because salt may be obtained with less labour by evaporating sea-water. Saltpetre of a superior quality abounds in some districts of Suse, and in the neighbourhood of the town of Morocco; fuller's earth is abundant, and of good quality.

Mount Atlas is inhabited by a nation which must be considered as aboriginal, having probably been in possession of N. Africa long before the beginning of our historical records. It is known under the name of Berebbers or Berbers; though it seems that this denomination is entirely unknown to themselves. This nation, which still forms the bulk of the pop. of N. Africa, including nearly the whole of the Sahara, is divided within the limits of mount Atlas into two great tribes, the Amazirghes, or Mazirghes, and the Shelluhs. The latter occupy the two high western ranges, including the province of Suse; and the Amazirghes the remainder. It has long been a question, whether these two nations speak only different dialects of one language, or two essentially different languages; but Graberg de Hemso, who lately published a work on the empire of Morocco, and understands the languages, states that they are substantially the same, the difference between them being not greater than that between the Portuguese and Spanish, or the English and Dutch languages. Both nations, however, differ in their manner of life and occupations, the Shelluhs living in houses, cultivating the fertile valleys of the mountain ranges, and applying themselves with assiduity and success to several mechanical arts; while the Amazirghes dwell in tents or caverns, attending only to their numerous herds of cattle and sheep. Only a few individuals of these nations are subject to the emperor of Morocco and the sovereigns of Algiers. Those inhabiting the mountains have preserved their independence, and are governed by independent chiefs. They are frequently at war with the sovereigns in whose territories their possessions are included. Among both nations a considerable number of Jews are settled.

The most exaggerated notions were early entertained of the height of mount Atlas. Mela says of it, *In arenis mons est Atlas, dense consurgens, verum inciseis undique rupibus, præceps, invius, et, quo magis surgit, exilior, qui, quod altius quam conspici potest, usque in nubila erigitur, cœlum et sidera non tangere modo vertice, sed sustinere quoque dictus est* (lib. iii., s. 10). This supposed extraordinary height of the mountain, and the ignorance that prevailed in the earlier ages of the contiguous countries, afforded full scope for the exercise of the imagination. The poetical history of Atlas may be seen in Ovid (*Metamorph.*, lib. iv., line 656), and is referred to by Virgil in one of the finest passages of the *Æneid*, lib. iv., line 246.

ATLAS, t., Lapeer co., Mich. It contains two stores, one grist-mill, two saw-mills, four schools, 98 scholars. Pop. 660.

ATRI, or ATRIA, a town of Naples, prov. Abruzzo Ultra I., 5 m. from the Adriatic, and 11 m. N. by E. Civita Penne, on a steep mountain. Pop. of canton (1830), 7249; town, about 4000. It is the seat of a bishopric, has a cathedral, parish church, several convents, a grammar school, two hospitals, and a mont-de-piété.

This is a very ancient city, and, instead of the Venetian Adria, it has been supposed to have given its name to the Adriatic; but the weight of authority and probability is against this supposition: its origin is, however, undetermined, or lost in obscurity. Some extraordinary excavations exist in a hill near the town, forming a series of chambers, distributed with such regularity as to authorize the notion that they were designed for some particular object, such as prisons or magazines. These peculiarities have suggested the idea that they are of a more remote construction than the *Lathomiæ* at Syracuse, which they much resemble, or than the celebrated prisons of Servius Tullius at Rome. Some antiquaries have supposed, not without considerable plausibility, that the word *Atrium* must have been derived from these excavations. The town received a Roman colony about the year 465 U.C. It seems to be generally allowed that the Emperor Adrian was descended of a family originally of this city. (*Del Ré Descrizione delle Due Sicilie*, ii., p. 52; *Cramer's Ancient Italy*, i., p. 291; *Craven's Abruzzo*, i., p. 300.)

ATRIPALDA, a town of Naples, prov. Principato Ultra, on the Sabato, 2 m. E. Avellino. Pop. 2400. It has a collegiate and a parochial church, with fabrics of cloth, paper, and nails.

ATSION, p. v., Galloway t., Burlington co., N.J., 43 m. S. Trenton, 167 W. Situated on Atsion river. It has a furnace, employing 100 men, one forge, one grist-mill, and three saw-mills.

ATTALA, county, Miss. Situated a little N. of the centre of the state, and contains 720 sq. m. Big Black river bounds it on the W. Drained by branches of Pearl river. It contained in 1840, 915 neat cattle, 687 sheep, and 13,640 swine; and produced 2909 bushels of wheat, 170,892 of Indian corn, 28,322 of potatoes, 4174 pounds of tobacco, 3230 of rice, 151,489 of cotton. It had two stores, six grist-mills, six saw-mills, one printing-office, one weekly newspaper, six schools, 85 scholars. Pop.: whites 2955, slaves 1082, free coloured 266; total, 4303.

ATTERCLIFFE, a township in the parish of Sheffield, which see.

ATTICA, in antiquity, the most celebrated region of Greece, and the seat of its most renowned people, now part of the monarchy of Attica and Bœotia, and forming the eparchy of Athens. It lies between lat. 37° 39′ (cape Co-

lonna) and 38° 22' N., and long. 23° 20' and 24° 5' (C. Marathon) E., having N. Bœotia, E. the Ægean sea, S. and S.W. the gulf of Egina (Saronic G.), and W. the eparchy of Megara: shape triangular, the base to the N.W.: length 44 m.: breadth about 34 m. It owed all its ancient glory to the industry and genius of its inhabitants. Soil mostly rugged, the surface consisting of barren hills, or plains of little extent. The chief mountains are Nosea (Parnes), the loftiest; Elatea (Cithæron), and Manglia, which form its N. boundary; Mendeli (Pentelicus), famous for its marble; Vreio-vuni (Hymettus), and Laurini (*Laurion*), famous for its silver mines. The most remarkable plains are those of Athens and Marathon: rivers, the Sarandaporo, Cephissus, and Ilyssus. The produce of Attica differs remarkably from that of Bœotia; it is deficient of water, and yields little grain, except barley; its pastures are but few, and its spontaneous vegetation consists mostly of evergreens, as the pine, prinari, olive, myrtle, &c. Parnes is covered by a forest, and supplies Athens and the surrounding country with fuel; Hymettus abounds with lentisks, wild thyme, and other odoriferous plants; its honey still enjoys some portion of its ancient fame, and its mutton has a delicious flavour. The oil is equal to that of France: what corn is produced is very good, and the harvest takes place earlier than in any other part of Greece. Game is very abundant, and wolves, wild boars, and a few bears are met with in the N. Owls, especially the small gray owl (*Strix passerina*), still inhabit the vicinity of Athens in great numbers; but luckily there are remarkably few venomous reptiles or insects. The chief mineral treasures are marble, white at M. Pentelicus, and gray at M. Hymettus; the ancient silver mines of Laurium are no longer productive. Air pure and healthy; and, though the country is in many parts dreary and uncultivated, the summits of the mountains afford sublime views, embellished by numerous classical remains, associated with imperishable and ennobling recollections. Every hillock of Attica appears to have been dedicated to gods or heroes, and decorated with their altars and statues, the ruins of which are often clearly traceable. It originally contained 174 demi or boroughs; it now possesses no town of any importance, except Athens: its villages are mostly inhabited by Albanians. (For farther particulars, *see* GREECE.)

ATTICA, p. t., Wyoming co., N.Y., 257 m. W. Albany, 375 W. Watered by Towanda creek and its tributaries. It has twelve stores, one woollen factory, one flouring-mill, two grist-mills, four saw-mills, one oil-mill, two academies, 140 students, thirteen schools, 725 scholars. Pop. 2710. The village contains one Presbyterian and one Methodist church, a bank, a female seminary, one printing-office, one weekly newspaper, 100 dwellings, and about 800 inhab.

ATTLEBOROUGH, a m. town and par. of England, co. Norfolk, hund. Shropham, 15½ m. S.W. Norwich. The par. contains 5800 acres, and 1939 inhab. The town, formerly a place of some importance, is now decayed and inconsiderable.

ATTLEBOROUGH, p. t., Bristol co., Mass., 12 m. N. Providence, 30 S. Boston, 412 W. A branch of Pawtucket river affords excellent water-power. Incorporated in 1694. It has a bank, four churches, two Congregational, one Baptist, and one Universalist; eight stores, six cotton factories with 9846 spindles, two grist-mills, three saw-mills, one academy, 50 students, twenty-four schools, 833 scholars. Pop. 3585.

ATTOCK (*Atac*, a limit), an. *Varanas*, a fort and decayed, though formerly a considerable, town of the Punjab, Hindostan, on the E. bank of the Indus, in lat. 33° 56' N., long. 71° 57' E., 42 m. E.S.E. Peshawer, and 236 m. N.W. Lahore. The modern fort stands on a low hillock beside the river; it is of an oblong form; its shortest faces parallel to the river, being about 400 yards in length, and the others twice as long. The walls are of polished stone, and the whole structure is handsome; but in a military point of view it is of little importance, being commanded by a hill, from which it is divided only by a ravine. On the opposite side of the river is a small village, having a fort erected by Nadir Shah, and a fine aqueduct built by some former Khuttuk chief. The Indus is here 200 yds. broad, the channel deep, and the current rapid, but so tranquil that a bridge might be thrown over it; and it is easily passed both in boats and on the inflated hides of oxen, a contrivance common here, and as old as the days of Alexander the Great, who is believed to have crossed the Indus at or near this point. For a long period Attock belonged to Caubul; but in 1818 it was taken by the Maharajah Runjeet Sing, who now possesses it. (*Elphinstone's Caubul*, i., 96, 97.)

ATTWATER, p. t., Portage co., O., 21 m. E. Akron, 144 N.E. Columbus, 310 W. It has one Congregational and one Methodist church, three schools, 128 scholars. Pop. 755.

AUBAGNE, a town of France, dep. Bouches du Rhone, cap. cant., on the Veaume, 10 m. E. Marseilles. Pop. 6481. It consists of an old and a new town; the former built on the declivity of a hill, and the latter at its foot. In the first, the houses are small, and the streets narrow and dirty; but in the new part the houses are good, and the streets broad and well kept. It has fabrics of earthenware and paper, and tanneries; and several fairs are held in it, for the sale of horses, mules, and jewellery.

AUBE, an inland dep. of France, S.E. Paris, between 47° 55' and 48° 42' N. lat., and 3° 24' and 4° 48' E. long., having N. dep. of Marne, E. Haute Marne, S. the Côte d'Or and Yonne, and W. Seine et Marne. Area 609,000 hectares. Pop. 253,870. It is traversed by the Seine, which is navigable from Troyes, and also by its important affluent the Aube, whence the dep. has its name: the latter is navigable from Arcis-sur-Aube. Surface generally flat; but in the N.W. quarter there are some low hills. The soil of the region to the N. and W. of Troyes consists of chalk thinly covered with mould, and is exceedingly barren and unproductive, great part of it not being worth cultivation. The subsoil of the other portion, or that to the E. and S. of Troyes, also consists of chalk; but, being for the most part thickly covered with alluvial deposit, produces luxuriant crops of corn, hemp, turnips, &c. Agriculture has made considerable progress since the revolution, particularly as respects the culture of turnips, and the formation of artificial meadows. Oxen as well as horses are employed in field labour. The annual produce of wool is estimated at 220,000 kilogs. A great number of hogs are fattened. The meadows in the valleys of the Seine, Aube, and Armance annually supply about 2,000,000 quintals hay, about one third part of which is sent to Paris. The forests in some parts are pretty extensive; but in the barren chalk region there is a great want of trees. The best wines are those of Ricey, Bac, Bouilly, Javernant, and Laines-aux-Bois. According to the official tables, the principal divisions of the soil are—cultivable land 394,000, meadows 37,500, vineyards 23,000, woods 80,000, heaths, moors, &c., 22,000 hectares. Excepting chalk and marble, the minerals are unimportant. The manufacture of cotton stuffs and yarn, hosiery, and woollen stuffs, is extensively carried on. There were, in 1834, 2500 looms and 3500 work-people employed in the weaving of cotton; 5000 looms, employing 3600 work-people, produced anpually 80,000 doz. caps, and 270,000 doz. pairs of stockings; the establishments for spinning wool, produced annually about 400,000 kilogs. of yarn; and those for the spinning of cotton put in motion 68,000 spindles, employing from 2700 to 3000 work-people, and furnish annually 500,000 kilogs. of yarn. There are also tanneries, works for the preparation of beet-root sugar, glass-works, tile-works, &c. The dep. returns four members to the Chamber of Deputies; number of electors, 1208. Amount of public revenue in 1831, 8,176,586 fr. With the exception of Troyes, none of the other towns are of much importance. The condition of the inhabitants of Aube has been materially improved during the last 30 years. "Les progrès de la civilisation y sont remarquables. Les paysans et les artisans sont vêtus avec propreté, on pourrait presque dire avec recherche. Les ouvriers mangent de la viande, et leurs salaires, qui se sont beaucoup accrus depuis la révolution, ont aussi accru leur bien-être. Ce bien-être leur a inspiré des idées d'ordre et d'avenir. Le département est un de ceux où un caisse d'épargne et de prevoyance a eu la plus prompt succès; l'établissement de celle de Troyes date de 1822." (*Hugo, France Pittoresque*, art. *Aube*; and *French Official Tables*.)

AUBEL, a town of Belgium, prov. Liege, 5 m. N. Verviers. Pop. 3000. It has a good weekly market, and a considerable trade in butter and cheese.

AUBENAS, a town of France, dep. Ardèche, cap. cant., near the Ardèche, at the foot of the Cevennes, 13 m. S.W. Privas. Pop. 4865. It is beautifully situated on the slope of a well-wooded hill, and is surrounded by the ruins of an old wall flanked with towers. The interior of the town by no means corresponds with the beauty of its situation, its streets being generally crooked, narrow, and filthy, and the houses *sombres et mal-propres*. It is the seat of a tribunal of commerce, and has manufactures of cloth, filatures and fabrics of silk, establishments for the dressing of leather, &c. It is the great mart for the sale of the wines and chestnuts of the dep., and has also a considerable trade in raw and wrought silk, wool, and cotton.

AUBERVILLIERS, a village of France, dep. Seine, a little to the north of Paris. Its inhabitants are principally employed in the raising of garden stuffs for the supply of Paris.

AUBIGNY, a town of France, dep. Cher, cap. cant., on the Nère, 28 m. N. Bourges. Pop. 2206. It is old, dirty, and ill-built. It has manufactures of coarse cloth, linsey-woolsey, serges, &c.; but they have greatly declined from their ancient prosperity. It is still, however, the centre of a considerable trade in wool. Aubigny is the name of

numerous small towns and villages in different parts of France. This town, with its lordship, was erected into a duchy in 1684, in favour of the Duchess of Portsmouth and her son, the Duke of Richmond, in whose family it continues to the present day.

AUBIN-DE-CORMIER (ST.), a town of France, dep. Ille et Vilaine, on a steep hill, 16 m. N.E. Rennes. Pop. 1769.

AUBIN (ST.), a town of France, dep. Aveyron, cap. cant., 18 m. N.E. Villefranche. Pop. 3017. In the environs of this town are the burning mountains, or, rather, hills of Fontagnes and Buegne, in which subterranean fires have been in action for ages. The smoke and other vapours produced by the fire's deposit, on the sides of the crevices of the rocks and earth, by which they make their escape, large quantities of imperfect alum and sublimated sulphur. The alum crystals, being collected and refined, furnish excellent alum, sufficient for the supply of France.

AUBIN (ST.), a finely situated sea-port town of the island of Jersey, opposite to St. Hiliers, on the W. side of the bay on which the latter is built. Pop., inclusive of that of the parish, which is but small, 2069. It consists principally of a single street, of well-built houses. There is a harbour formed by a pier, but it is deficient in water; but the largest ships may anchor inside the pier at St. Aubin's castle, in the vicinity.

AUBONNE, a town of Switzerland, cant. Vaud, on the Aubonne, 14 m. W. by S. Lausanne. Pop. 1650. Its castle, which commands a very fine view, was built by the counts of Gruyère, and repaired by Tavernier, the celebrated traveller, to whom it belonged, in the seventeenth century. The heart of Duquesne, one of the most celebrated naval officers that France ever produced, is interred in the parish church, where a monument has been erected to his memory. (*Biographie Universelle*, art. *Duquesne.*)

AUBURN, p. t., Worcester co., Mass., 5 m. S. by W. Worcester, 47 W.S.W. Boston, 395 W. Incorporated by the name of Ward in 1788, and received its present name in 1837. Watered by French river. It contains two stores, one woollen factory, two grist-mills, four saw-mills, six schools, 181 scholars. Pop. 649.

AUBURN, p. t., capital of Cayuga co., N.Y., 154 m. W. Albany, 333 W. It was taken from Aurelius t. in 1823. Owasco lake touches its S.E. corner, by the outlet of which it is watered, and which affords good water-power. This is a small town, including only the chartered limits of the village. Auburn is one of the most flourishing villages in the state, and is situated on the outlet of Owasco lake. It is not very regularly laid out, but the streets are spacious, and many of the buildings are large and elegant. It contains a court-house, jail, county-clerk's office, two banks, the Auburn academy, the Auburn female seminary, seven churches, two Presbyterian, one Methodist, one Baptist, one Episcopal, one Universalist, and one Roman Catholic; fifty-nine stores, one woollen factory, one cotton factory, four flouring-mills, two saw-mills, three furnaces, one brewery, one distillery, four printing-offices, one college, 48 students, two academies, 250 students, nine schools, 740 scholars. Pop. 5626. The great western line of rail-roads passes through the place.

A state prison is located here, which is regarded as a model for such institutions. The enclosure forms a square, 500 feet on a side, surrounded by a stone wall 2000 feet long, and from 16 to 40 feet high. The Owasco outlet passes directly along the outside of the wall, and moves a water-wheel on a shaft, which passes through the wall, and moves machinery within the prison. The buildings form three sides of a square, the front of which is 276 feet long, and the wings 242 feet long and 45 feet wide. The main building faces to the east. The north wing is divided into solitary cells and a hospital, and the south wing into cells. Between the wings is an area of grass and gravelled walks. To the west of this is the interior yard, surrounded with work-shops, which are built against the outer wall. In the front part of the main building is the residence of the keeper and offices for the clerk and agent. The prisoners labour together in silence when employed, and, when not employed, are confined in solitary cells.

The Auburn Theological Seminary, under the direction of the Presbyterians, is a flourishing institution. It was founded in 1821; has four professors and 71 students; 344 have completed their education; and it has 5000 volumes in its libraries. It has a fine stone edifice, 160 feet long and four stories high, which, when completed, will be 200 feet long.

AUBURN, p. t., Geauga co., O., 146 m. N.E. Columbus, 330 W. It contains three stores, four saw-mills, ten schools, 520 scholars. Pop. 1198.

AUBUSSON, a town of France, dep. Creuse, cap. arrond., on the river of that name, 20 m. S.E. Gueret. Pop. 5631. It is picturesquely situated in a sterile country, in a narrow gorge, surrounded by rocks and mountains. It consists of one long street of good houses; has a theatre, an agricultural society, and publishes a journal entitled the *Album de la Creuse*. The carpet manufacture of Aubusson is the most celebrated in France, after that of the Gobelins and Beauvais. It was formerly, however, much more extensive than at present. In the early part of the seventeenth century the town is said to have contained 12,000 inhabitants, of whom upward of 2000 were directly employed in the carpet trade. But, being mostly Protestants, the revocation of the edict of Nantes, by making the greater number emigrate to foreign countries, gave a blow to the manufacture, from which it never recovered. In 1780, it employed about 700 work-people. It languished for a long time after the revolution; but within the last dozen years it has materially improved, and at present it employs a greater number of hands than in 1780. (*Hugo, France Pittoresque*, art. *Creuse.*)

AUCH, a city of France, dep. Gers, of which it is the cap., on the left bank of the Gers, lat. 43° 38′ 39″ N., long. 1° 35′ 11″ E. Pop. 8470. It stands on the plateau and declivity of a hill, which gives it at a distance a fine appearance. A considerable suburb is built on the opposite side of the river, the communication with it being kept up by a bridge. It is the seat of a court of assize, of tribunals of commerce and original jurisdiction, and of an archbishopric; and has a royal college, a primary normal school, a theological seminary, a school of design, an agricultural society, a museum, a public library with about 5000 vols., a theatre, &c. Notwithstanding modern improvements, Auch is still generally ill-built, and the streets, though clean, are narrow and crooked. The best part of the town is on the summit of the plateau. There is here a magnificent promenade upon an elevated terrace of great extent, finely shaded, and commanding an extensive view over the neighbouring country as far as the Pyrenees. Principal public buildings—the cathedral and the hotel of the prefecture. The former is one of the most magnificent in France; but, though taken as a whole, it is admirable; its parts are not a little incongruous, the principal part of the building being Gothic, while the front and some other portions are Greek! The different parts of the interior are exceedingly well proportioned; the woodwork of the choir and the painted glass windows are each admirable. The hotel of the prefecture, formally the archiepiscopal palace, is a vast and a noble building. There is also (in the suburb) an immense hospital, with a town-house, barracks, &c. Auch has manufactures of thread and cotton stuffs, called *rases pleniares*, coarse cloths, with tanneries, and establishments for the spinning of wool. A considerable trade is carried on, particularly in the brandies of Armagnac.

Auch is a very ancient town. Before the Roman conquest it was called Climberris, and was the capital of the Auscii. Augustus having planted in it a Roman colony, it took the name of *Augusta-Auscocurum*, whence its modern name has been derived. The old city stood on the right bank of the Gers, on the site of the present suburb. The modern city is, however, very ancient, having been founded previously to the reign of Clovis. (*Hugo, France Pittoresque*, art. *Gers; Ing'is's Switzerland*, p. 227.)

AUCHTERARDER, a village and parish of Scotland, co. Perth, on the S. bank of the Earn. The village, which is nearly 1 m. in length, consists of a single street on both sides the high road from Glasgow to Perth, being about 14 m. W. by S. from the latter. It is principally occupied by cotton weavers in the employment of the Glasgow manufacturers, there being above 500 looms in the parish, and mostly in the town. At one time it returned members to the Scotch parliament, and it is uncertain how or when it lost the privilege. At present it is the seat of a Presbytery. It was burned down by the Earl of Mar, in 1718, and has no building worth notice. Population of parish in 1836, 3315, of whom there were in the town 1981. The agriculture of the parish has been greatly improved within the present century. (*New Statistical Ac. of Scotland*, art. *Auchterarder.*)

AUCHTERMUCHTY, a town and par. of Scotland, co. Fife, the town being situated on the high road from Kinross to Cupar, 9 m. W. the latter. Population of par., 3225. The town is intersected by a rapid streamlet, employed to turn flax and other mills, and to supply a bleach-field. It is very irregularly built, but it contains a fair proportion of good substantial houses. The inhabitants are principally employed in the weaving and spinning of linen and cotton, especially the former. It was created a royal burgh by James IV., but has never enjoyed the privilege of voting in the return of a member either to the Scotch or British parliaments.

AUDE, a maritime dep. in the S. of France, on the Mediterranean, separated from Spain by the dep. of the Pyrenees Orientales. Area 606,397 hectares. Pop. 281,068. The Aude, whence it derives its name, is the only consid-

erable river in the dep.; but it is traversed from E. to W. by the canal of Languedoc. The coast along the Mediterranean is mostly low, and is bordered by several lagoons, or, as they are called in the language of the country, *etangs*. At the mouth of one of them is La Nouvelle, the only port in the dep. Surface generally hilly and mountainous, being encumbered on the N. with the Montagne Noire, a prolongation of the Cevennes, and on the S. with ramifications of the Pyrenees. The highest summit of the latter, the Pic Messet, rises about 8000 feet above the level of the sea; the highest point of the Montagne Noire is about 3900 feet above the sea. Soil of the plains and valleys generally calcareous and very productive. Climate variable, and principally distinguished by the prevalence of hot winds; that from the S.E. called the *Autan*, and that from the N.W. called the *Cers*. Both of these blow with great force; and at Carcassone and Castelnaudary the autan is occasionally so violent as to unroof houses and tear up trees. In summer it sometimes strikingly resembles the sirocco. All sorts of corn are raised on the plains, and millet and buckwheat on the mountains. The produce exceeds the consumption of the inhabitants so much, that the export is estimated at about 500,000 hectolitres a year. It is singular, that notwithstanding improved processes and implements have been pretty generally introduced, the primitive mode of threshing corn, by treading it with horses, is still almost universally adopted. Next to corn, wine is the most important agricultural product, the vineyards being supposed to furnish about 890,000 hectolitres a year. The red wines are inferior, but the white wines, particularly the blanquette de Limoux, are much esteemed. A good deal of brandy is manufactured. Sheep numerous: annual product of wool estimated at 1,800,000 kilogs. Irrigation well understood; and there are some fine artificial meadows. The severe winter of 1829 was fatal to most of the olive-trees, and the culture of silk-worms is not attended-to. The honey of Narbonne is the finest in France. According to the official tables, the soil is principally appropriated as follows, viz.: cultivable lands 273,000, meadows 11,000, vineyards 50,000, forests 44,000, and waste lands, heaths, &c., 183,000 hectares. The dep. is rich in mineral products. Mines of iron are wrought in different places; and the total produce of the foundries is estimated at about 17,000 metrical quintals a year. Above 30,000 pieces of cloth are annually manufactured at Carcassonne, of which 6000 are exported to the Levant. There is also a large manufactory of combs and articles of jet, with fabrics of paper, tanneries, distilleries, salt-works, &c. The trade and industry of the dep. have been greatly promoted by the facilities of communication afforded by the canal of Languedoc. The dep. returns five members to the Chamber of Deputies. Number of electors 1959. Total public revenue in 1831, 9,162,801 francs. Principal towns—Carcassonne, Narbonne, and Castelnaudry. (*Hugo, France Pittoresque*, art. *Aude; Dict. Géographique; French Official Tables.*)

AUDINCOURT, a village of France, dép. Doubs, cap. cant., on the Doubs, 3 m. S.E Montbeliard. Pop. 1432. This village is distinguished by its iron-works, which furnish annually above 5,000,000 kilogs. of bar and wrought iron, exclusive of considerable quantities of iron and tin plates. (*Hugo*, art. *Doubs.*)

AUDRIAN, county, Mo., situated N.E. of the centre of the state, and contains 435 sq. m. Drained by the S. fork of Salt river. It contained, in 1840, 2016 neat cattle, 1655 sheep, 5975 swine, and produced 2927 bushels of wheat, 77,320 of Indian corn, 12,700 oats, 3715 of potatoes, and 24,080 pounds of tobacco. It had four stores, with a capital of $7600, five grist-mills, two saw-mills, two schools, 45 scholars. Pop.: whites 1752, slaves 195, free coloured 2; total, 1949. Capital, Mexico.

AUDRUICQ, a town of France, dép. Pas de Calais, cap. cant., 2373 m., N.N.W. St. Omer. Pop. 2373.

AUBERBACH, a town of Saxony, on the Golzsch, 12 m. E. Plauen. Pop. 2000. It is the property of baron Planitz; and has manufactures of muslin and black lace, with breweries, paper-works, &c., and an active trade.

AUERBACH, a handsome village of g. d. Hesse Darmstadt, 15 m. S. Darmstadt. It has a castle, the summer residence of the grand duke; and several wells and baths, much resorted to by the inhabitants of Darmstadt.

AUERSTADT, a small village of Prussian Saxony, reg. Merseburg, 6 m. W. Naumburg. Here, on the 14th of October, 1806, the main body of the grand Prussian army, under the Duke of Brunswick and the king in person, was defeated by the division of the grand French army commanded by Marshal Davoust. The same day Napoleon defeated, at Jena, the right wing of the Prussian army, under General Mollendorff. The combined action has been called the battle of Jena. (See JENA.) Davoust, in reward of his skill and gallantry, received from Napoleon the title of Duke of Auerstadt.

AUGGUR, a town of Hindostan, prov. Malwa; in the dom. of Sindia; on a rocky eminence 1508 feet above the level of the sea, between two lakes, 40 m. N.E. Oojein; lat. 23° 43′ N., long. 76° 1′ E. It is surrounded by a stone wall, and has a well-built native fortress: it is of considerable extent, and in 1820 contained 5000 houses; but these, excepting one street, were merely mud buildings.

AUGLAIZE, t., Allen co., O. Pop. 732.

AUGLAIZE, t., Paulding co., O. Pop. 298.

AUGLAIZE, r., O., rises in Allen co., and receiving several tributaries, it forms a large southern branch of Maumee river, which it enters in Depance, in the S.E. part of William's co. The Maumee canal passes along the valley of this river.

AUGSBURG (an. *Augusta Vindelicorum*), a city of Bavaria, cap. circ. upper Danube, finely situated in an extensive and fertile plain, between and near the confluence of the Wertach and Lech, 35 m. N.W. Munich; lat. 48° 21′ 46″ N., long. 10° 54′ 42″ E. Pop. 35,000 of whom about 12,000 are Protestants. This was long one of the richest, most commercial, and powerful of the free cities of the empire. Its fortifications were dismantled in 1703; and though it be still surrounded by walls and ditches, they are no longer useful as means of defence. The streets are mostly narrow and inconvenient; but "the Maximilian Strasse is a noble street, more than ¾ of a mile in length, wide and airy, with lofty well-built houses, and ornamented with several fine fountains." (*Spencer.*) There are also some other good streets and squares. The houses, which are mostly old, are many of them large, and sculptured and painted fronts are common. The town-hall, near one of the extremities of the Maximilian Strasse, the finest building in the town, was finished in 1620. It has a hall on its second story, denominated the golden hall, from the profusion of gilding, reckoned one of the finest apartments in Germany. The other public buildings are the palace, formerly the residence of the bishop, but now used for government offices; the cathedral, an extensive Gothic fabric, "devoid of symmetry and grandeur" (*Murray*); the arsenal; the *ci-devant* abbey of St. Ulric, with the church of St. Afra, &c. The town is extremely well supplied with water, and is intersected by no fewer than four canals. Exclusive of the walks on the glacis and in the neighbourhood, it has a fine promenade in front of St. Ulric's church. Among the educational establishments are two gymnasiums, one for Protestants and one for Catholics; an academy of arts, founded in 1820; a polytechnic school; a polytechnic society; two endowed schools for females; a Lancastrian school, Sunday schools, &c. The public library is said to contain a valuable collection of printed and manuscript Greek works. The collection of paintings, chiefly of the German school, formerly in the town-hall, has been mostly removed to the *ci-devant* convent of St. Catherine; but the best pictures have been carried to Munich. Among the charitable establishments is the *Fuggerei*. This consists of 106 (Reichard says 51) small houses, built in 1519 by the Fugger family, and let to indigent citizens at a mere nominal rent. In our own times, Schaezler, a banker of the city, has followed up this example, by endowing a school of industry for 100 orphans and poor children, and founding an asylum for decayed towns-people.

The manufactures of Augsburg are various and important. That of woollen stuffs is the most extensive and thriving; those of cotton and linen, though still considerable, are said to have materially declined: it has also a cannon foundry, and produces large quantities of paper, with gold and silver lace and jewellery, printing-types, soap, glass, &c. The *Algemeine Zeitung* is published here, and it is the centre of an extensive trade in printing, engraving, and bookbinding; but its principal importance at present, and for a long time past, has been derived from its being, next to Frankfort, the grand seat of banking and exchange operations in central Europe. The greater part of the extensive transactions between Vienna and W. Germany, as well as most of those between Germany and Italy, are finally balanced and adjusted in this city.

This was formerly a place of much greater population and importance than at present. It is very ancient. Augustus having settled a colony in it about 12 years B.C. In the middle ages it was early distinguished by its trade; and having purchased its freedom from the dukes of Suabia, it rapidly rose in importance. At the end of the 14th century Augsburg, Nuremberg, and some other cities in southern Germany, had establishments in Venice, and carried on a very extensive trade with Italy, the Levant, and the rest of Germany. The family of the Fuggers, probably the richest and most extensive merchants of the 15th and 16th centuries, and who afterward became princes of the empire, were originally simple burghers of this city; and though the most celebrated, they were not its only citizens who attained to almost regal opulence and power. Augsburg declined, partly in consequence of the prolonged wars

of the 16th and 17th centuries, but more, perhaps, from the change in the channels of commerce, occasioned by the discovery of the route to India by the cape of Good Hope, and the rise of other emporiums. Latterly it has improved considerably.

Augsburg has been the theatre of many important events. At a diet held within its walls, on the 25th of June, 1530, the famous Confession of Faith, drawn up by Melancthon and subscribed by the Protestant princes, was publicly read before, and presented to, the Emperor Charles V. This celebrated document has thence been called the Augsburg Confession. Here, also, the *interim*, or provisional edict, was published by Charles V. in 1548; and here, in 1555, the peace which assured the full enjoyment of their rights and liberties to the Protestants. Augsburg continued to be a free city till 1806, when it was ceded by Napoleon to Bavaria. (*Murray's Handbook for Southern Germany; Reichard, Guide des Voyageurs* (Berlin, 1835); *Penny Cyclopædia; Schmidt, Histoire d'Allemagne*, v., 513, and vi., 414.)

AUGUSTA, p. t., capital of Kennebec co., and of the state of Maine, is situated on both sides of Kennebec river, 2 m. above Hallowell, at the head of sloop navigation, 43 m. from its entrance into the Atlantic. Sloops of 100 tons come to its wharves. It is in 44° 18′ 43″ N. lat., and 69° 50′ W. long., 146 m. N.E. Concord, N. H., 163 N.N.E. Boston, Mass., 595 W. Pop. in 1820, 2475; in 1830, 3980; in 1840, 5314.

A handsome bridge of two arches, each 180 feet span, and which cost $98,000, connects the two parts of the village. It is regularly laid out, and has many handsome dwellings. It contains a state-house, a court-house, jail, a United States arsenal, an insane hospital, a high school, and seven churches, one Congregational, one Episcopal, one Methodist, one Baptist, one Unitarian, one Universalist, and one Roman Catholic. The state-house is situated on an eminence a little S. of the village, on the W. side of the river, built on the plan of the Boston state-house, though smaller. The central part is 84 feet long and 56 feet deep, with two wings, each 34 feet long and 54 feet deep. It has a Doric portico of eight granite columns, one story, of 21 feet high, each of which weighs 10 tons. It has a handsome dome and cupola, and before it is a spacious park, ornamented with walks and trees. The United States arsenal is on the E. side of the river, opposite to the state-house, and has a large stone edifice. The lunatic asylum is a fine granite building with wings, is surrounded with 70 acres of ground, and cost $100,000. It is on the E. side of the river. The high school has a brick edifice, 65 by 50 feet, two stories high.

Half a mile above the village is a splendid dam across the Kennebec, with locks to facilitate the navigation of the river, which was expected to produce an immense water-power. But after its completion, the river wore a passage around the end of the dam, doing much damage, and it will require a large additional expenditure to complete the original magnificent design. The first cost of this great work was $300,000. There were in the town, in 1840, sixty-four stores, four grist-mills, four saw-mills, two oil-mills, one distillery, two academies, 150 students, twenty-six schools, 1129 scholars. The growth of the place has been rapid since it became the seat of government.

Augusta, p. t., Oneida co., N. Y., 100 m. W.N.W. Albany, 370 W. It contains four stores, five grist-mills, six saw-mills, two fulling-mills, one academy, 92 students, fourteen schools, 626 scholars. Pop. 2175. The village contains three churches, one Methodist, one Presbyterian, and one Baptist, an academy and forty dwellings.

Augusta, p. t., Northumberland co., Pa., 65 m. N. Harrisburg, 165 W. Drained by great and little Shamokin creeks, which unite and flow into the Susquehanna. It contains one store, five grist-mills, seven saw-mills, one pottery, nine schools, 452 scholars. Pop. 2409.

Augusta, p. t., Carroll co., O., 135 m. E. Columbus, 304 W. Pop. 1234.

Augusta, p. v., Des Moines co., Iowa, situated on the N. side of Skunk river. It contains one carding-machine and the largest flouring-mill in the S. part of the territory.

Augusta, p. v., capital of Bracken co., Ky., 73 m. N.E. Frankfort, 487 W. Pleasantly situated on the S. side of Ohio river. It contains a court-house, jail, and Augusta college, under the direction of the Methodists, founded in 1825, with a president and five professors or other instructors, 75 students and 2500 volumes in its libraries. The commencement is on the Thursday after the first Wednesday in August. It has one school, 28 scholars. Pop. 786.

Augusta, county, Va., situated near the centre of the state, and contains 900 sq. m. Drained by tributaries of James and Shenandoah rivers. It contained in 1840, 21,479 neat cattle, 19,668 sheep, 32,445 swine; and produced 394,332 bushels of wheat, 92,227 of rye, 384,408 of Indian corn, 244,869 of oats, 48,357 of potatoes. It had thirty-four stores, with a capital of $117,300, twenty-nine flouring-mills, thirteen grist-mills, thirty-one saw-mills, three oil-mills, two fulling-mills, three furnaces, fifty-eight distilleries, eighteen tanneries, one printing-office, one weekly newspaper, two academies, 60 students, twenty-nine schools, 633 scholars. Pop.: whites, 15,072, slaves, 4145, free coloured, 421; total, 19,628. Capital, Staunton.

Augusta, city, capital of Richmond co., Ga., 96 m. E.N.E. Milledgeville, 130 N.W. Savannah, 575 W. Pop., 1830, 4000; 1840, 6403. Situated on the S.W. side of Savannah river, and is regularly laid out and handsomely built, chiefly with brick. The streets are ornamented with trees, and many of the houses are spacious and elegant. It contains a city hall, court-house, jail, theatre, hospital, a female asylum, an arsenal, and seven churches, one Episcopal, one Methodist, one Baptist, one Presbyterian, one Unitarian, one Roman Catholic, and one African; twelve commercial houses engaged in foreign trade, capital $245,000; 265 stores, capital $1,281,870; two furnaces, two printing-offices, two daily, four weekly, and two semi-weekly newspapers, and two periodicals, three academies, 105 students, three schools, 148 scholars. It is connected with Charleston, S. C., and Milledgeville by railroads, and has an extensive trade, particularly in cotton and tobacco. A bridge crosses the river to Hamburg.

Augusta, p. v., capital of Perry co., Miss., 173 m. S.E. Jackson, 1051 W. Situated on Leaf river, a branch of Pascagoula river.

Augusta, t., Washtenaw co., Mich. Pop. 646.

AUGUSTINE (ST.), a town and sea-port of the United States, E. coast of Florida, lat. 29° 52′ N., long. 81° 25′ W. Previously to the acquisition of Florida by the U. States, this was a place of some importance, contained from 4000 to 5000 inhabitants, and was defended by a fort. But it has since declined, principally in consequence of the badness of its port. The bar at the mouth of the latter has not more than 8 or 9 feet water at high spring tides, and at low water not more than 5 feet, which at times makes it impossible even for boats to pass in or out. A light-house, on the N. end of Anastasia island, with a fixed light, marks the entrance to the port. (*Blunt's American Coast Pilot*, p. 243.)

AULENDORFF, a market-town of Wirtemberg, circ. Danube, 12 m. S.S.W. Bibberach. It is beautifully situated, and has a castle that belongs to the counts Konegsegg-Aulendorf.

AULETTA, a town of Naples, prov. Principato Citra, on a hill, near the Negro, 36 m. E.S.E. Salerno. Pop. 1800. This town is very ancient, having been founded by a Greek colony.

AULONA or VALONA (an. *Aulon*), a sea-port town of Turkey in Europe, prov. Albania, cap. sanjiack, near the mouth of the Adriatic, on the E. side of a gulf of the same name, 54 m. E.N.E. Otranto, in Italy, lat. 40° 27′ 15″ N., long. 19° 26′ 20″ E. Pop. 5000 or 6000, consisting of Turks, Christians, and Jews banished from Ancona, by Pope Paul IV. Though very ancient, it has few or no remains of antiquity. It was taken by the Turks from the Venetians in 1691; and the only good houses of which it has to boast, were built by the latter. It is defended by a castle. The gulf of Aulona has at its mouth the small island of Sassino, which serves as a natural breakwater, protecting it from the heavy seas that would otherwise be thrown in from the W. and N.W. There is deep water on each side the island, and within, the gulf expands into a fine basin with excellent anchoring ground. The country round Aulona is exceedingly fertile; but it is very unhealthy in summer, when the town is nearly deserted by the inhabitants. This is a consequence of the contiguous marshes not being drained, and might, it is believed, be easily obviated. But no amelioration need be looked for at the hands of its present masters. "*Campés sur une terre qui les dévore, étrangers à toute idée d'amélioration, ils ne s'occupent que du moment, sans apercevoir aucun avantage dans l'avenir.*" (*Pouqueville, Voyage dans la Grèce*, i., 286.)

AUMALE, a town of France, dép. Seine Inférieure, cap. canton, on the Bresle, 14 m. E.N.E. Neuchatel. Pop. 2063. It has manufactures of coarse cloth, &c. Henry IV. was wounded in an action with the Spaniards under the prince of Parma, on the bridge of this town, in 1592.

AURAVIA, p. v., Lumpkin co., Ga., 135 m. N.N.W. Milledgeville, 625 W. Situated on the height of land between Etowa and Chestatee rivers, in the richest part of the gold region, whence its name. It is rapidly increasing in population.

AURAY, a sea-port town of France, dép. Morbihan, cap. cant. on the Auray, 11 m. W. Vannes. Pop. 3895. It is built on the declivity of a hill; the town-house and the parish church are worth notice. Vessels of small burden come up to the town; but its port lower down is accessible to vessels of considerable burden, and it has a good deal of coasting trade. Charles of Blois was killed and Duguesclin made prisoner in a battle fought here in 1364.

AURELIUS, p. t., Cayuga co., N. Y., 5 m. W. Auburn, 158 W. by N. Albany, 337 W. Watered by Owasco outlet and its branches, and by small streams flowing W. into Cayuga lake. It contains three stores, three woollen factories, one flouring-mill, six grist-mills, one saw-mill, fourteen schools 786 scholars. Pop. 2643. The village at the centre contains twenty dwellings. In the W. part, on Cayuga lake near its outlet, is the village of Cayuga, which contains a Presbyterian church, several stores and forty dwellings. A wooden bridge, one mile and eight rods long, crosses the lake, belonging to an incorporated company, the stock of which has been at 200 per cent. A steam-boat plies from this place to Ithaca, at the head of the lake, daily.

AURELIUS, t., Washington co., O., 20 m. N. Marietta, 40 S.E. Columbus, 408 W. Situated on the W. branch of Duck creek. The surface is uneven; soil, fertile.

AURELIUS, t., Ingham co., Mich. It has one school, 20 scholars. Pop. 148.

AURICH, a town of Hanover, cap. West Friesland, 15 m. N.E. Emden. Pop. 2600. It is the seat of the provincial government, a chancellery, a Protestant consistory, &c.; has three churches, a college, and a gymnasium, with fabrics of tobacco, paper, and pipes.

AURILLAC, a town of France, cap. dep. Cantal, on the Jordane, 147 m. E. Bordeaux, lat. 44° 55′ 41″ N., long. 2° 26′ 40″ E. Pop. 9697. The town is built on the declivity of a hill, and between it and the river is the agreeable promenade, called *le Gravier*. Though generally well built, it is gloomy and disagreeable: the streets are narrow, crooked, and ill paved, but well watered and clean. It was formerly surrounded by walls, and defended by a castle; but excepting a part of the latter, the rest of its fortifications have been demolished. The college is the largest of the public buildings: the hotel of the prefect, the town-house, and the church of St. Giraud, belonging to the ancient monastery to which the town owes its foundation, deserve notice. There is a handsome bridge over the river. Aurillac has tribunals of original jurisdiction and of commerce; a theatre, a public library containing 6000 volumes, a society of agriculture, arts, &c., a cabinet of natural history, and a *dépôt des chevaux*, or *haras*, for the supply of the royal stud. It is an industrious town, and has manufactures of paper, lace, tapestry, with coppersmiths and cutlers, curriers, tanners, shoemakers, &c.

Piganiol de la Force, the author of a *Description Géographique et Historique de la France* (best ed. Paris, 1752–53, 15 vols. 12mo), was born here in 1673. Carrier, infamous for his atrocities during the revolution, was also a native of this place. (*Hugo, France Pitt.*, art. *Cantal.*)

AURIOL, a town of France, dép. Bouches du Rhone, on the Veaume, 15 m. E.N.E. Marseilles. Pop. 5319. It is said to be rich, with fine streets and good houses; but to be infected by the dunghills, which, according to a custom tolerated in most small towns of Provence, are deposited on the high road! (*Hugo*, i., p. 218.) It has manufactures of wool, brick and tile works, with well-frequented fairs held on the 18th September, 3d October, and the 6th December, for hogs, mules, grain, and cloth.

AURORA, t., Erie co., N. Y., 276 m. W. Albany, 15 S.E. Buffalo. Drained by Seneca and Cazenove creeks. It contains ten stores, three fulling-mills, five grist-mills, nineteen saw-mills, one academy, 62 students, twenty schools, 1034 scholars. Pop. 2908.

AURORA, p. t., Hancock co., Me., 116 m. E. Augusta, 698 W. It has two schools, 50 scholars. Pop. 149.

AURORA, p. v., Ledyard to., Cayuga co., N. Y., 170 m. W. Albany, 393 W. Pleasantly situated on the E. side of Cayuga lake. It is situated on an inclined plane terminated by the lake, and contains three churches, one Methodist, one Episcopal, and one Presbyterian, the Cayuga academy, 100 dwellings, and about 600 inhabitants. It is one of the most pleasant villages on the lake. A steam-boat from Ithaca to Cayuga bridge, stops here daily.

AURORA, p. t., Portage co., O., 26 m. S.E. Cleveland, 144 N.E. Columbus, 335 W. It is celebrated for the quantity and excellent quality of its cheese and butter. More than 200 cows are kept, producing 300 tons of cheese, and 30 tons of butter annually. It contains two churches, four stores, seven schools, 199 scholars. Pop. 906.

AURUNGABAD (*the place of the throne*), a large marit. prov. of the Deccan, Hindostan, comprised partly in the British diminions (presid. Bombay), and partly in those of the Nizam; principally between 18° and 21° N. lat., and 73° and 77° E. long.; having N. the provs. Gujrat, Candeish, and Berar, E. Beeder, S. Bejapoor, and W. the Indian ocean. Surface very irregular, and in general mountainous, especially towards the W., where the Ghauts attain a considerable height. That part of the prov. E. of the western Ghauts is a table-land rarely less than 1800 feet above the sea, and often much more: it abounds with natural fortresses and strongholds. There are no rivers of any size; the Neera, Beema, and Godavery rise within this prov., but acquire no magnitude until after they have left it: the two former streams unite in marking the S.W. boundary. The climate is particularly favourable for the production of European fruits, which arrive at greater perfection than in any other part of India, especially the peach, grape, and strawberry; nectarines, figs, and melons are excellent; but the oranges are inferior to those of Sylhet and Tipperah. The gardens and fields around the villages are very generally enclosed by hedges of prickly pear and milk-plant; rice is the grain most cultivated. Great numbers of horses for the Mahratta cavalry were formerly reared on the banks of the Neera and Beema; they are a hardy breed, but neither strong nor handsome. The inhabitants are chiefly Mahrattas; but the prov. is comparatively thinly peopled, especially towards the N.E.: the Mohammedans are to the Hindoos only as 1 to 20. Aurungabad has 13 subdivisions, and contains the cities of Bombay, Poonah, Aurungabad, and Soolapoor. The bazars of its larger towns are cheerful and enlivening enough, but the streets of its smaller ones extremely dull and gloomy, from the absence of windows facing towards them. The religious edifices are distinguished by many peculiarities from those of the prov. both of N. and S. India; the portico is often nearly as large as all the rest of the building, and in some towns the pagodas are either 12-sided pyramids or square buildings surmounted by a large cupola. Many remarkable antiquities exist in this prov.; as the temples and caves at Salsette, Elephanta Cariee, Ellora, &c. Until the destruction of Mahratta power, in 1818, plundering by land and piracy by sea prevailed much in and round this prov., the greater part of which, for some time previously to that year, was subject to the Peishwa. Aurungabad was also the great source of the predatory bands that devastated Hindostan for more than a century; though, after the overthrow of the Mahrattas, it unexpectedly became one of the quietest and most orderly portions of the peninsula; and in 1830 no part of S. India was so undisturbed, crimes of violence being rare, and property safe. This prov. was formerly called Ahmednuggur, and afterward Dowletabad, from the cities so named being in turn its capitals, under two dynasties previously to A.D. 1635; at which period Shah Jehan finally conquered and annexed it to the Mogul empire. The seat of government was then transferred from Dowletabad to Gurka, which town becoming the favourite residence of Aurungzebe, acquired, as well as the prov., its modern appellation.

AURUNGABAD, a city of the Deccan, Hindostan, cap. prov. of same name, within the dom. of the Nizam, and the head quarters of a battalion of his army under British officers. It is built in a hollow on the banks of the Kowlah, a tributary of the Godavery, in 19° 54′ N. lat., and 75° 33′ E. long., 275 m. N.W. Hyderabad, 180 m. E.N.E. Bombay, and 140 m. N.E. Poonah. Pop. (1825) estimated at 60,000, but scattered over a space of 7 miles in cir. Aurungabad was once highly flourishing, and the favourite residence of Aurungzebe, but now, in great part, presents an appearance of decay and ruin; though, at a distance, its lofty minarets, large white domes, and terraced houses, give it an imposing character. The wall which surrounds it, though capable of affording protection from predatory bodies, is lower than such walls usually are. The streets are broad, especially the principal bazar, which is 2 m. in length, and has at one extremity a spacious quadrangle, with a handsome modern market: some few streets are paved. There are many large and good houses; and the public buildings, mosques, and caravanserais, are superior to those usually met with in native cities, and interspersed with numerous gardens, groves, and fountains. The shops are supplied with the goods of both India and Europe; but there is neither activity, bustle, nor any other symptom of industry, occupation, or prosperity. The only structures worthy of notice are the royal palace of Aurungzebe, which covers a large space of ground, but is now fast mouldering away; and a mausoleum erected by that monarch to a favourite wife, an octagonal building with a cupola and four minarets, constructed on the model of the *Traja Mahal* at Agra, but Lord Munster says it is in every respect inferior: the enclosure surrounding it contains perhaps thirty acres of land laid out in gardens. The principal suburb is on the opposite side of the river, and connected with the city by two substantial stone bridges. Towards the N. there is a large marshy tract of ground cultivated with rice, and near the Delhi gate is a considerable tank, now overgrown with weeds; from which circumstances, combined with its low situation and ruinous state, this city is decidedly unhealthy. It is, however, by reason of its position, well supplied with good water, conveyed thither in stone conduits from the neighbouring hills, and distributed by earthen pipes into stone reservoirs in every quarter. The climate is subject to great and sudden alterations: for ½d part of the year E. winds prevail, and the thermometer ranges from 50° to 86° Fahr.; for the rest of the year W.S.W. winds are the most common, the thermometer often rising to 100°. Tropical fruits of all

kinds are produced in abundance, and the grapes and oranges are scarcely inferior to those of Europe. The military cantonments are in a salubrious spot about a mile S.W. the city. Aurungabad was originally named Gurka, and became the seat of the provincial government after the Mogul conquest in A.D. 1634. (*Hamilton's E. I. Gaz.*, i., 62, 83; *Conder., Mod. Trav.*, x., 279–292.)

AUSABLE, t., Clinton co., N.Y., 15 m. S. Plattsburg, 140 N. Albany. Drained by great and Little Ausable rivers, the former of which bounds it on the S. It contains seventeen stores, one grist-mill, fifteen saw-mills, two furnaces, one brewery, one academy, 40 students, ten schools, 344 scholars. Pop. 3322.

AUSABLE, river, rises in Essex co., N.Y., and passing by the villages of Clintonville, Keeseville, and Birmingham, to which it affords extensive water-power, it falls into lake Champlain, in the S. part of Clinton co. Below the lower falls, at Birmingham, the river passes through a chasm with perpendicular banks of rocks, from 75 to 150 ft. high, and only 50 ft. across at the top, which is a great curiosity.

AUSTERLITZ, a small seignorial town of Moravia, circ. Brunn, on the Littawa, 13 m. S.E. Brunn. It has a magnificent castle and gardens. In the vicinity of this town, on the 2d of December, 1805, took place the famous battle that bears its name, between the grand French army under Napoleon, and the combined Russian and Austrian armies under their respective emperors. The genius of Napoleon never shone more conspicuously than on this occasion. His superior talent more than compensated for the numerical inferiority of his forces, and secured for the French a complete and decisive victory with comparatively little loss on their part. The battle of Austerlitz was followed by the treaty of Presburg, signed on the 26th of December.

AUSTERLITZ, p. t., Columbia co., N.Y., 31 m. S.S.W. Albany, 363 W. Watered by Green river, a branch of Housatonic river. It has four stores, two fulling-mills, two grist-mills, four saw-mills, one academy, 35 students, eighteen schools, 824 scholars. Pop. 2091.

AUSPITZ, a town of the Austrian empire, Moravia, ara. Pop. 1245.

AUSTINBURG, p. t., Ashtabula co., O., 201 m. N.E. Columbus, 334 W. It contains a Presbyterian church, an academy, one store, two flouring-mills, three saw-mills, two fulling-mills, one woollen factory, one oil-mill, two carding-machines, one academy, 71 students. Pop. 1047.

AUSTINTOWN, t., Trumbull co., O., 12 m. S.E. Warren, 160 N.E. Columbus. It has twelve schools, 425 schol- circ. Braunn, belonging to Prince Lichtenstein.

AUSTLE (ST.), a m. town and parish of England, co. Cornwall, hund. Powder, on the declivity of a hill, at the bottom of which is a small rivulet, 243 m. W.S.W. London, 14 m. N.N.E. Truro. The par. contains 11,540 acres, and 8738 inhab., of whom the town may have about two thirds. It is situated about 2 m. from St. Austle's bay, and is connected by a railway with the port of Pentewan, and also with the port of Charleston. It has a good church, but the streets are narrow and inconvenient, many of them being unpaved. It is the seat of the most considerable of the stannary courts, but it owes its entire consequence to the Polgooth and Crennis tin and copper mines, &c., and the soap-stone quarries and china clay-works in its immediate vicinity. The pilchard fishery is also prosecuted to a considerable extent in St. Austle's bay. The extension of the mines and clay-works has been such that the population has more than doubled since 1801, it having then amounted to only 3788. About 5000 tons of soap-stone and 7800 tons of china-clay are annually shipped from Charleston and Pentewan, principally for the potteries. (*Private information.*)

AUSTRALIA, a great division of the globe, lying S. and S.E. of Asia.

It was for a lengthened period supposed that the different points of land that were discovered in the Southern ocean, to the S. of the islands of Java and Celebes, and of the cape of Good Hope and cape Horn, belonged to, or formed parts of, a vast southern continent, to which the name of *Terra Australis* was given. The existence of this great continent was inferred, not merely from the discovery of lengthened portions of coast, but also on theoretical grounds, it being supposed to be necessary as a counterpoise to the vast extent of land round the arctic pole. (*Histoire des Navigations aux Terres Australes*, i., 13.) But as this Terra Australis was supposed to extend quite round the globe, the expediency of subdividing it into smaller portions became evident; and the learned President de Brosses, in his excellent work referred to above, suggested that that portion of it to the S. of Asia should be called *Australasia*, that to the S. of America *Magellanica*, and that to the S. of the Pacific ocean *Polynesia*, from the number of its islands. (*Navigations aux Terres Australes*, i., 80.) The discoveries of Cook and other modern navigators have shown that there is but little ground for thinking that there is any continent S. of America. But the appropriateness of the names given by De Brosses to the other portions of the Terra Australis have been very generally acknowledged. And with the exception of the conversion of Australasia into Australia, and the extension of the latter a little farther to the E. than De Brosses had probably in view, his definitions are now universally adopted. It is not, however, very easy to assign the precise limits of Australia, mingling as it does with the Polynesian islands towards the N.E. and with those of the Indian archipelago towards the N.W.: physical, rather than purely geographical considerations must dictate the demarcation; and, guided by these, the following is probably as little objectionable as any:

S. of the tropic of Capricorn, Australia extends from the 113th to the 180th meridian.

Between the tropic and 11° S. lat., from the 113th to the 170th meridian.

Between 11° and 5° S. lat., from the 135th to the 165th meridian.

Between 5° and 1½° S. lat., from the 131st to the 160th meridian.

Between 1½° S. lat. and the equator, from the 130th to the 150th meridian.

Within these limits are included the mass of Australian land, generally called New Holland (a term now rapidly and justly falling into disuse), and the islands of New Zealand, New Caledonia, New Hebrides, Queen Charlotte's islands, Solomon's archipelago, New Britain, New Ireland, New Hanover, Admiralty isles, and Papua or New Guinea.

The continent* of Australia lies between 16° 30′ and 39° 11′ S. lat., and extends from 113° 5′ to 153° 16′ E. long. In form it is very compact; its greatest length, from W. to E., between Dirk Hartoy's point and Sandy cape, being 2400 m., its greatest width from N. to S. between cape York and cape Wilson 1971 m. Its average length and width may perhaps be estimated at 1800 and 1700 m. respectively; its coast-line at 7750 m.; and its area is estimated at about 3,000,000 sq. m. (*Flinder's Charts, Voyage*, i., 224; ii., 8, *passim*; *King*, ii., 178, *et pass.*; *Picture of Australia*, 11.)

1. SKETCH OF AUSTRALIA, *Coast.*—In comparison with the outlines of Europe and Asia, and the E. sea-board of America, Australia may be regarded as almost iron bound. It possesses only two *large* indentations, the gulf of Carpentaria on the N. and Spencer's gulf on the S. Shark's bay on the W. and Hervey's bay on the E. are the next largest, but they are very inconsiderable, not more than 40 or 50 m. in width and depth; and for the rest, though some of them, as port Philip on the S. and Van Dieman's gulf on the W., are large, when regarded as harbours, they are insignificant if considered as breaking the continuity of the coast. The same remark applies still more forcibly to such inlets as King George's sound, Western port, Corner inlet, &c., on the S., or to the Twofold bay, Jervis bay, Botany bay, port Jackson, &c. on the E. It may be observed, too, that these ports and harbours are numerous only on the E. and N. shores; a very considerable portion of those on the S. and W. being quite unbroken. (*Flinder*, i., 49–223; *King*, ii., 159–178; *Australian Directory*, 30, 31, &c.)

But the most remarkable feature in the Australian coast, is the total absence of outlets for any large rivers. So complete is this, that after Flinder's survey (in 1801–3) had established the fact, a belief became pretty general that the whole land was fenced, at no great distance from the coast, by a continuous mountain ridge; on the inner sides of which the principal rivers had their sources, flowing inwardly to a great internal lake or mediterranean sea. Wild as this hypothesis may now appear, it received some countenance from the earlier results of interior discovery, though it was unwarranted by the accounts on which it was founded, and has been completely disproved by more recent and more accurate investigation. The S. coast, through a length of more than 20°, from cape Leuwin to Spencer's gulf, is generally low and sandy, with only here and there some eminences, and scarcely anywhere exhibiting a high inland country. (*Flinder's Charts*, 2–4, *Voy.*, i., 49–255.) On the E., indeed, a range of mountains rises at no great distance from the coast, extending from the S. extremity of the continent as far, at least, as the 26th parallel, and, most probably, as far as cape York, on Torres straits, the most remote point of the mainland towards the N. (*Flinder's Adm. Ch.*, ii., 1–76; *King*, i., 165–240;

* Continents differ from islands in nothing except size, and (as a consequence of that difference) variety in surface, climate, &c.; since every mass of land, however large, is finally surrounded by the ocean. Now the area of America is not more than six times that of Australia; while the latter is more than ten times that of either Borneo or Papua, the next largest portions of continuous land. Hence, from its being more proportionate with continents than with islands, it seems reasonable to class Australia with the former rather than with the latter.

Bligh's Nar., 46–49.) But on the N. shore, a mountain, not higher than the mast of a sloop, is noticed by Flinder as the highest point of ground seen by him in a run of 175 leagues along the coast. (*Voyage*, ii., 134.) Low levels, with only here and there some elevations of no great character, mark, also, the shore W. of Carpentaria, as far as cape Loadonderry, where the land begins to trend toward the S.W. (*King's Survey*, i., 247–209.) The W. coast, as low as 22°, and, again, between 13½° and 16° S., appears to resemble that on the E. (*King*, ii., 150–192), but between the parallels of 22° and 14°, about 500 m. of coast are wholly unknown, and it is uncertain whether many portions of that recently surveyed on the N.W. may not consist of detached islands, separated by greater or lesser intervals from the main shore. (*A. Cunningham's Geog. Journ.*, ii., 132.)

Interior.—From what has been said, it is evident that the readiest road for the investigation of a strange country, that is, extensive creeks, inland seas, and navigable rivers, are wanting in this "land of anomalies." Its interior recesses had to be explored, if at all, by land travelling; and to this there appeared, at first, to exist an unconquerable barrier. The first settlers on the E. coast found their horizon bounded towards the W. by a dark and rugged chain of mountains which rose at no very great distance from the sea, and to cross which the earlier attempts, though made by parties of no common skill and energy, completely and signally failed. (*A. Cunningham's Geog. Journ.*, ii., 99.) A rugged and abrupt ascent, called "Caley's repulse," marks the limit of the first adventurer's tour (*Oxley*, 363), and the efforts of Daws, Tench, Patterson, Hacking, Bass, and Bareilier, though some of them proceeded a few miles farther than Caley, led to no useful result. The aborigines, when questioned, were totally ignorant of any opening in the mountains (*A. Cun.*, *Geog. Journ.*, ii., 99); but they had a tradition that malignant spirits resided there, and that the country beyond was inhabited by *white men*. In 1813, however, after an interval of twenty-five years, an extremely dry season having destroyed the minor vegetation, and produced a great mortality in the flocks and herds, Lieut. Lawson, Mr. Baxland, and Mr. Wentworth attempted to penetrate the hitherto impenetrable mountain barrier, in the hope of finding pasture and water for the exhausted cattle of the colony. They were so far successful that they gained a view of an extensive country W. of the mountains; but want of provisions compelling them to return, the honour of completing the discovery was reserved for Mr. Evans, the deputy surveyor-general. (*Oxley, Introd.*, 7–9; *Sturt, Introd.*, 73–75.) The barrier once penetrated, the lands beyond were not left long unexplored. In the twenty-five years that have since passed, Messrs. Hume, Hovel, Currie, Cunningham, Oxley, Sturt, Mitchell, &c., have pushed their inquiries as far as the 139th deg. of long. and the 26th deg. of lat.; while, on the opposite coast, the short period of eight years from the establishment of the Swan river settlement has enabled Messrs. Dale, Preston, Erskine, Bannister, &c., to survey a tract reaching as far N. as 31° S., and including in some cases nearly 3° of long. Thus, between 1-7th and 1 6th of the continent has been explored within the period of a quarter of a century: a fact honourable alike to the zeal and the industry of the observers.

Mountains and Plains.—In the Old World, the mountain ranges, however tortuous, agree in general direction with the greatest length of the continents in which they lie. Thus the axis of America runs N. and S.; of the E. continent (Europe, Asia, and Africa) from N.E. to S.W.; but in Australia the principal chains, so far as observation has yet been carried, appear to run transversely to the direction of the land; that is, from N. to S. The recent discoveries of Major Mitchell have made known a mass of mountain land, called by him the Australian Grampians, which commences near the S. coast at Portland bay, in lat. 36° 52′ S., long. 142° 25′ E. The direction of these mountains is at first due N., but in lat. 37° 30′, long. 142° 47′, a range of grassy hills diverges to the E.N.E. to connect them with the highest masses yet seen in Australia, called by the natives Warragong, and by the settlers, the Australian Alps. The connecting range received from Mitchell the title of Australian Pyrenees. The Warragongs may be described as running N.N.E. from near the S. termination of the continent at cape Wilson as far as 35° 20′ S.; but as high as 36° S. a chain of less elevation, called the Blue mountains, branches off from them, and, following generally the direction of the E. coast divides the E. and the W. waters. In lat. 32°, long. 150°, the range, after tending, for some distance, a little to the W. of N., suddenly turns due E., and, under the name of the Liverpool range, runs in that direction for about 1° of long., when it resumes its northerly course; but, though it has been traced as low as 26° S. lat., no name has been bestowed upon any part of it beyond the parallel of 32°. The highest peak in the Grampians is mount William, 4500 ft. above the level of the sea (*Mitchell*, ii., 265), of the Pyrenees, mount Cole, or mount Byng, probably 3000 ft.* No measurements have been taken of the Warragongs, but as they are covered with eternal snow (*Mitchell*, ii., 297, *&c.*; *Currie's Geog. Mem.*, 373), their height, in this lat., cannot be estimated at less than 15,000 ft. The Blue mountains, so long impassable, do not attain a great elevation: mount York, the highest peak, being no more than 3292 ft., but the valleys and plains in this extraordinary range occur extremely near the summits. King's table-land is 2727 ft., the vale of Clwdd 2496 ft., and Bathurst plains 1970 ft. above the level of the sea. (*Oxley's Ber. Mea. P. Cur.*, 8vo, i., 152; *Wentworth*, 82.)

The Liverpool range is almost as difficult of passage as the Blue mountains (*A. Cunningham's Geog. Mem.*, 159–177); its highest peaks being between 6000 and 7000 ft., and the continuation of the dividing chain apparently still more rugged and abrupt. A gap of the kind, called by the Spaniards *quebradas*, in S. America, stopped Oxley in his journey from the interior to the coast, in 1818. This "*tremendous ravine*" he describes as being from 2 to 3 m. wide at top, and 3000 ft. in perpendicular depth: its width at bottom does not exceed 100 or 200 ft., and is the bed of a river. (*Journal*, 295.) Sea View hill, in this part of the range, is between 6000 and 7000 ft. high; but Oxley did not think it the most elevated ground in the neighbourhood. (*Journ.*, 310.) Practicable passes are, however, being continually discovered: one over the Blue mountains, near the 35th parallel, was effected by Mr. Thorsby in 1819, and two others by Mitchell since 1830. (*Mitchell*, i., 153; *Wentworth*, 81.) That over the Liverpool range, traversed by Mitchell in 1831, which is nearly on the meridian of Sydney, seems to be easier than Pandora's pass, 1° to the E., crossed by A. Cunningham in 1823 (*Mitch.*, i., 25; *A. Cun.*, *Geog. Journ.*, 179), and breaks are said to have been observed in the more N. mountains, which promise to be free from those difficulties which were wellnigh the destruction of Oxley and his party.

The W. mountains, viewed from the S., appear to consist of three parallel ranges, extending about 20′ E. of the 118th meridian, and running, like the E. chains, almost due N. through the continent. The most E., and the highest of these mountains, appears to rise a few miles behind King George's sound; the second, called the Darling range, commences at cape Chatham, in 35° S., 116° 35′ E., and the third and lowest is found running close to the shore from cape Leuwin. (*Journals of Exped. in W. Australia; Surveyor-Gen. Rep.*, *May* 11, 1830.) Subsequent observation has, however, discovered that the first is not a continuous range running N. and S., but two detached and parallel chains extending longitudinally, and separated from each other by a plain of considerable magnitude. (*Journ. Dale*, p. 163–167.) The W. chain, called Koikyennuruff, is considerably the higher, one of its peaks, Toolbrunup, attaining the elevation of 3000 ft., an altitude much exceeding that of any other mountain yet examined in W. Australia. The S. chain, called Porrungorrup, is not only lower, but of much less extent, having a base of only 13 m., while that of the Koikyennuruff is full 30. (*Journ. Dale and Collie*, 161–167, 139, 173, *&c.*) The Darling range is continuous as far as 31° S., to which distance it has been explored, and there is every reason to conclude that it runs in the same direction to the N. coast, in the neighbourhood of Dampier's archipelago. Capt. King (i., 36–53; *Adm. Ch. N.W. and W. Aust.*, vii.) lays down this coast as high and rocky, though bounded to the W. and E. by a low sandy shore, that is, as having all the appearance of the termination of a mountain chain. Should this eventually prove to be the fact, this range will be the most direct in the world; the high N. coast, just described, commencing at cape Preston in 116° 5′ E., and point D'Entrecasteaux, to which these mountains extend on the S. shore, lying in 116° 1′ E. (*Flinder's and King's Adm. Ch.*) The Darling mountains average from 30 to 40 m. in width, and their greatest observed elevation is 1800 ft.; but as still higher ground was observed at this altitude, they may probably, in some places, attain 2000 ft. It is not likely that, S. of the 31st parallel, they anywhere exceed this height. (*Journ. Preston*, 9, 11; *Dale*, 31, 33; *Surv.-Gen. Rep.*, *Mar.* 22, 1830.) The third range, mentioned in the Surveyor-General's Report, is unimportant; it is probably continued in Moresby's flat-topped range, the altitude of which is about 1000 ft. (*King*, i., 22; ii., 174. *Adm. Ch.*) In about 33° S. lat., a rugged and irregular succession of mountains branches off W. from the Blue mountain range, and appears like the dividing line of two great river basins. It quickly divides, however, into groups, almost detached from each other, to which various names, as Canobolas, Croker, Peel, Macquarrie, *&c.*, have been given;

* Mitchell, in his description of these mountains (ii., 272–279) speaks of the view from their summits as bounded only by the higher ranges W. and S., and the road over them as the very lowest neck in the whole range. This road (*Expedition Pass*) he afterward (p. 400) fixes at from 1685 to 1[illegible] ft. of altitude.

and further W. the interior is here and there studded with smaller knots; but, as far as has been yet observed, only in a belt of about 2°, namely, between the parallels of 31° and 29° S. The Canobolas is 4461 ft. in height, an altitude much exceeding that of the Blue mountains; and the Marga, another peak of the same series, attains the elevation of 2106 ft. (*Mitchell*, i., 162; ii., 10, 377.) Isolated mountains, which in other countries are rarely met with, except in the case of volcanoes, are common enough in this new land. (*Oxley*, 4–77, 234, 258, 261, 275, &c.; *Sturt*, i., 69–88; *Mitchell*, i., 39, 45, 48, 62, &c.)

All the usual formations are found in the Australian mountains (*Fitton King's Appen.*, 568, *et seq.*; *Sturt*, i., 197–200, ii., 249–256; *Mitchell*, ii., 349–369), but they seem to occur without order, and in defiance of all known geological laws in the Old World. A ferruginous sandstone forms the Blue mountains, granite being rarely met with, except when it appears to have cracked the thick overlying strata, in which case it is found in the valleys and the beds of streams. (*Mitchell*, ii., 349, 351.) Westward this fundamental rock is sometimes found in mountains of limited extent, and no great height, while more important ranges in their neighbourhood present regular horizontal strata. (*Dale*, 167.) In the interior the isolated hills are uniformly different in composition from the connected ranges, the latter being of granite, the former of sandstone (*Oxley*, 77); limestone, so common in the formations of the N. hemisphere, was unknown in Australia before 1813. It was first discovered, W. of the Blue mountains, in a district, named from it *Limestone creek* (*Oxley*, 6); and although it has since been found in other parts of the continent, it is far from abundant, and presents little or no appearance of stratification. (*Mitchell*, ii., 348.) Trap occurs in many places, but no location can be assigned to it with reference to the position of other rocks, and vesicular lava is abundant in the neighbourhood of the only volcano (an extinct one) hitherto discovered in Australia. (*Mitchell*, ii., 350.) This volcano, called by Mitchell (ii., 235–246) mount Napier, and by the natives Murcoa, lies between the Grampians and the S. coast, in lat. 37° 52′ 29″ S., long. *about* 142° 20′ E. A bituminous burning hill, belonging to a low range called Wingen (the native name for fire) a little to the S. of the Liverpool range, is chiefly remarkable for the great variety of rocks of which it is composed. The neighbouring peaks are chiefly porphyritic; but the burning mount itself contains within a very short distance, clay, shale, argillaceous sandstone, felspar, basalt, ironstone, trap, and hornblende. (*Mitchell*, i., 23.) Wingen has been burning, apparently, for a very considerable time, but no marks of any extensive change appear on the surface near the burning fissures. Red heat is found at the depth of about four fathoms.

Malte-Brun observes, that the remarkable polarity of the principal mountains here described, extends throughout the whole of what he terms Oceanica; and if this be a little strained with regard to some of the islands of Polynesia and the Indian archipelago, it is, at least, true with regard to New-Zealand and the other islands included in Australia proper. The same author (xii., 8) conceives the chain of the Blue mountains to be continued in the islands of Bass's straits and the axis of Van Diemen's Land, to cape Pillar, the S. termination of the latter. Mitchell also (ii., 337) thinks that geological appearances lead to the conclusion that the two lands were not always separated; and this is at least highly probable, and is supported by similar appearances in the Old World: but in the words of Oxley (81), "The whole form, character, and composition of this country is so singular, that a conjecture is hardly hazarded before it is overturned: everything seems to run counter to the ordinary course of nature in other countries." In other lands the rocks and reefs that run into the sea determine, in many cases, the direction and continuity or otherwise, of the mountain systems, but the rocks and reefs of Australia afford no such key to the inquirer; they belong not to geology; they are the work of the coral insect, rising perpendicularly from the depths of the ocean till they form ridges and islands above its surface, which have nothing in common with anything but themselves. (*Flinder*, ii., 113–116.) Even the fact that the geology of the continent and its adjacent islands is similar, is not conclusive, for the number of detached ranges and isolated mountains existing in the former, prepare the mind for a much more startling admission than that the Van Diemen systems may be wholly unconnected with that of the Blue mountains, from which it is separated by a deep sea, 140 m. in average width.

From the parallelism of the principal chains (the Blue mountains and the Darlings), it might be not unreasonably supposed that the interior was a table-land of moderate elevation. It has already been stated that early belief was directly contrary to this; and the course of discovery has shown both ideas to be erroneous. W. of the Blue mountains, a succession of terraces, commencing at a great elevation, descend rapidly to a very low level. Oxley, at a distance of less than 80 m. from Bathurst, found himself only 600 ft. above the sea; that is, 1370 ft. below the town. (*Journal*, 9.) The transverse mountains divide levels, apparently interminable, of the most monotonous character, and with a deficiency of vegetable matter, that, in the opinion of Sturt (i., 108), argues powerfully for their recent origin. The line of the horizon is, in these vast flats, as unbroken as it is upon the surface of the sea; and there is every reason to believe, not only that they were at a comparatively recent period under water, but also that a very considerable portion of them is flooded by the overflow of the interior rivers during wet seasons. The surface of these plains is extremely depressed, and so flat that the detached ranges and isolated mountains which rise out of them appear like islands surrounded by an unbroken ocean. (*Oxley*, 22, *et seq.*, 89, *et seq.*, 107, &c., 273; *Sturt*, i., 144, &c., ii., 52, 59, &c.; *Mitchell*, ii., 57, *et seq.*)

Rivers and Lakes.—The vicinity of the dividing ranges to the coast prevents the accumulation of large rivers towards the E. or W.; but from the fact of their running more or less through parallel valleys, these streams possess, in general, a longer course than might have been anticipated. The chief of those that rise in the Blue mountains are the Murroo, Clyde, Shoalhaven, Hawkesbury, Hunter, Hastings, and Brisbane. There is nothing remarkable in them, except the fact that some of them, as the Shoalhaven and Hawkesbury, notwithstanding their short courses, issue to the ocean in noble bays. They possess few facilities for internal navigation; and, from the tortuous nature of their currents, they are useless in communicating any idea either of the general shape or character of the country. Some of their affluents are, however, sufficiently striking. They flow through ravines in the sandstone rocks, of from 100 to 3400 ft. in depth, and of such width that Mitchell supposes that a mass equal to 134 cubic m. must have been removed from the single basin of the Cox, one of the tributaries of the Hawkesbury! The Grose, another affluent of the same river, flows through a valley of less extent, but of a more precipitous character; so that the amount of stone displaced is probably not less than in the case of the Cox. What adds to the peculiarity of this feature in Australian geography is, that the outlets to these stupendous ravines are generally very narrow: the disposal of the vast masses of earth is therefore as mysterious as their amount is marvellous. (*Mitchell*, i., 151, ii., 351.) The rivers here mentioned have their outlets between the parallels of 27° and 36° S. Oxley, in 1824, discovered the Boyne, a rapid mountain stream, falling into port Curtis, in lat. 23° 56′ 30″ S. (*Field's Mem.*, 7.) Pumice-stone river falls into Morton's bay, in 26° 54′ 30″ S. It was discovered by Flinder (*Introd.*, cxcvi.); but in consequence of only cursorily surveying the W. shore of that bay, he overlooked the more important Brisbane, probably the largest stream upon the E. coast. (*Oxley, in Field*, 12–23.) Endeavour river, in 15° 27′ 12″ S., is chiefly celebrated as the place where Capt. Cook repaired his ship after it had lain on a coral reef for twenty-eight hours: it has a wide and convenient mouth; but at a very short distance inland, it becomes incapable of floating the smallest boat. (*King*, i., 221.) On the W. coast the rivers are less numerous, and still less important. Burns or brooks of excellent water are tolerably abundant, and four or five streams issue to the sea by very large estuaries, which seem like the entrances of noble water-courses; but as they all have their sources in the farther W. mountain range, their length is insignificant, and they are useless for internal navigation. The Swan and Canning unite in Melville water, near the parallel of 32°. They are by far the most important streams yet discovered on the W. coast; and it is more than probable that none of greater magnitude exist in that quarter. (*Cross's Journals*, 110; *Irwin*, 7; *Dale*, 27, 30, 155; *King*, ii., 167, 191; *Adm. Ch. Erskine*, 92.)

On the N. the shore is still more destitute of river mouths. The Liverpool in 134° 15′ E., the Alligators in 132° 36′, 132° 26′, 132° 20′ E., the Hunter and the Roe, in 125° 27′ E., and Prince Regent's river in 124° 53′ E., are all that were found by Capt. King in his laborious survey (1818–19). Of these, the largest (Prince Regent) is not navigable for boats more than 50 m. (including windings) from its mouth; but they are all full and wide streams; and, like those upon the E. and W. coasts, issue to the sea by immense estuaries through which the tide sometimes rises as high as 30 ft. The Prince Regent, Hunter, and Roe, flow between steep, rocky hills, from 300 to 400 ft. perpendicular altitude. The Liverpool and Alligators through a flat, muddy soil, of the tamest and most monotonous description. (*King*, i., 99–107, 255–261, 292–302, 402–413, 433–439.) On the S. coast, the Blackwood falls into Flinder's bay, in 115° 10′ E. long.; and in 117° 56′ E., Oyster harbour, the N. part of King George's sound, forms the large estuary of the Kalgan or French river. Neither of these streams are of much importance; and though it would, perhaps, be too much to affirm that no others fall into the sea between the Kalgan

and 139th meridian, that is, for more than 1200 m. of long., it is certain that none have been discovered, and the nature of the coast renders it next to impossible that any should exist. In long. 139° E., a small mouth (that of the Murray) occurs; and, in 1836, Mitchell traced to its termination the Glenelg, a river which, rising in the Grampians, falls into the sea in 141° 17′ E.,* about 16 m. E. cape Northumberland. This is one of the largest coast rivers in Australia: its affluents are numerous, and its course, including windings, upward of 130 m., though its source be not more than 70 m. from the sea. It is wide and deep, *except at its mouth;* but, like most Australian streams, it first expands into a considerable basin, which, afterward contracting, presents a very narrow outlet to the sea, the entrance from which is choked up by sand-banks. No river farther E., except a few insignificant brooks, has yet been discovered upon the S. coast. (*Flinders*, i., 49–222; *Adm. Ch.*; *Cross's Journ.*; *Surv. Gen. Rep.*, 90; *Co. in Do.*, 169; *Mitchell*, ii., 199, 201, 209, 215, 225; *Sturt*, ii., 111–117.)

Along a coast-line of nearly 8000 m., there are thus not more than thirty river mouths; and of the streams to which these give egress, none have a course of more than 200 m., inclusive of windings, and but very few penetrate to a direct distance of 50 m. from the shore. Since it is evident that these cannot drain 1-10th part of the whole land, it is not very surprising that the belief of an internal lake or mediterranean sea should have been entertained by the first inquirers; and though this be now proved to be unfounded, the hydrography of the interior is scarcely less anomalous than such an arrangement would have been. A little pains is necessary, both to describe and to comprehend this internal water system, to which nothing bearing the least resemblance exists in any other part of the known world. Immediately W. of the Blue mountains, and in the very highest terraces and table-lands, a host of full and powerful mountain streams combine to form two *large* rivers, the Macquarrie and the Lachlan, which, nearly on the same meridian (the 149th), diverge towards the N.W. and N.N.W. in their progress to the interior. (*Oxley*, 9, 366.) Considerably farther S. another large stream, the Morrumbidgee, rises in the Warragongs (*Currie, Field's Memoirs*, 377), and, after receiving many short but full streams from the W. faces of the Blue mountains, runs a very tortuous course, settling finally into one varying but little from due W. Still more to the S., the Murray issues from the unexplored recesses of the Warragongs, and, after being joined by several important streams in the mountain country, receives the waters of the Morrumbidgee, in lat. 34° 45′ S., long. 143° 22′ E.† (*Sturt*, ii., 86; *Mitchell*, ii., 127–129); the latter river having, according to the surmise of Sturt (ii., 65, 73), fully verified by Mitchell (ii., 64, 69, 77), been joined by the Lachlan 34° 25′ S., 144° 23′ E.

N. of the Liverpool range, to as low a lat. as 28° 10′ 45″ S., the Gwydir, Dumaresq, and a very considerable number of other streams have been discovered—some of them, as the Castlereagh, of very considerable volume; but, though flowing at first in various directions, they all gradually unite in the channel of a very singular stream, the Darling. (*A. Cunningham's Geog. Journ.*, ii., 111, 112; *Oxley*, 223; *Sturt*, i., 138; *Mitchell*, i., 34–60, 106.) This river was first struck upon by Sturt in 1829, near the 30th parallel and 146th meridian. Its bed was here wide and deep; but the water lay low within it, was intensely salt, had scarcely any perceptible current, and there was no satisfactory appearance of a tide (i., 87). Mitchell, six years later, found the waters at this point perfectly sweet, though they had the green transparent tinge that usually accompanies saltness, and there was still no indication of a current. About 50 m. lower they were found to be salt, and continued so for 1½ m. to a cataract, where they again became sweet (i., 212, 229). In 1830 Sturt, in his expedition down the Murray, passed an important stream, which, though large, fresh, and running with a powerful current, he concluded to be the Darling. The history of geographical discovery presents few things more creditable to the skill and penetration of the traveller than this identification. Sturt had quitted the Darling in despair the year before, and left it a salt and all but stagnant stream about 300 m. distant towards the N.E.; yet the ingenious conjecture he hazarded as to its being this important affluent of the Murray, has been verified in most respects by the more extended and better appointed expedition of his successor on the same line of exploration. Mitchell, in 1835, traced the Darling from the point where Sturt had quitted it in 1829 to 32¾ S.; and in 1836 he ascended from its mouth to within 50 or 60 m. of his former camp, and sufficiently far to set at rest every possibility of doubt as to its direction and termination. He found, however, a strange difference in the appearance of its junction with the Murray from that observed by Sturt; instead of a full and rapid stream, its bed, in 1836, would have been dry had it not been for the dull and stagnant backwater forced into it from the principal river. The course of the Darling is now ascertained to be a curved line, enclosing all the country W. of the Blue mountains, from an unknown point N. and E. of the 30th parallel and 148th meridian to its junction with the Murray, in 34° 7′ S., 142° 3′ E. In this course, besides the rivers already alluded to, it receives the Bogan (New Year's creek of Sturt), and such part of the waters of the Macquarrie as are not absorbed in the soil. (*Sturt*, i., 86–96; ii., 106, 116–120; *Mitchell*, i., 213–268; ii., 109–116.) From its junction with the Darling, the Murray pursues a tortuous course, first towards the W., and then towards the S., receiving three or four tributaries in its way, till in 35° 10′ S., 139° 30′ E., it is received into the large shallow lake named ALEXANDRINA, communicating by a narrow outlet with Encounter bay, in lat. 35° 34′, long. 139°. (*Sturt*, ii., 111–177.) Thus every river W. of the Blue mountain chain and S. of the 28th parallel is conveyed to the S. shore by a single mouth, and is connected, directly or indirectly, with the Murray, the basin of which consequently includes more than 400,000 sq. m. The Murray itself, from the junction of the Morrumbidgee to the sea, is not less than 1500 m. in length, inclusive of the windings (*Sturt*, ii., 205); and it is certainly quite within the mark to allow it an equal length of course from its remote source among the Warragongs to that junction. The length of the Morrumbidgee cannot be estimated at less than 1000 m. (*Sturt*, ii., 29–84); that of the Lachlan is more than 1200 (*Oxley*, 104); of the Macquarrie, 700 or 800 (*Oxley*, 215–244; *Sturt*, i., 7–38); of the Darling, more than 1000 (*Mitchell*, i., 294); and of the others in proportion. Such a water system would, in any other part of the world, be indeed magnificent, and a means of internal communication almost illimitable. Such is not, however, the case here: the mouth by which these combined waters issue to the ocean is so miserably small that it was entirely overlooked by both Flinders and Baudin, who met in Encounter bay, where it is situated (*Flinders*, i., 189–196); and, when discovered in 1829, it was found to be defended by a double line of breakers, the foam of which extended from one end of the bay to the other. (*Sturt*, ii., 175, 239.) Its passage is, therefore, impracticable, even did its width and depth admit of navigation, but this they do not; and lake Alexandrina, into which the Murray first discharges itself, though 50 m. long and 40 m. wide, is so extremely shallow as to be incapable, in many places, of floating even a boat. (*Sturt*, ii., 169.) Whence is it that this combination of so many streams has such a poor and insignificant termination? The Macquarrie alone, at less than 100 m. from its source, is sometimes capable of floating a seventy-four-gun ship. (*Oxley*, 192; *Wentworth*, 101.) The Castlereagh is even more considerable (*Oxley*, 253); and the Darling, Morrumbidgee, and Murray appear, in some seasons and in some parts of their course, to be capable of supplying a host of such lakes as that which is the common recipient of the waters of them all. But in truth these rivers, notwithstanding their great length of course and width of channel, are of the nature of mountain torrents. Formed in the hills, by the confluence of many powerful streams, they rush from their mountain homes important water-courses; but quickly reaching a very level country, they become sluggish in their motion, except when urged by the influence of flooding rains; and, receiving few or no tributaries, their existence depends on the magnitude of their sources, so that they shoal and narrow as they proceed—an effect exactly the reverse of anything observed in older countries. When the mountains are saturated with water, the beds of these streams become fully charged, and then they foam and thunder along their track, till, in the flats of the low country, they meet with some opposition, when (their banks no longer able to contain them) they spread to the right and left in marshes, of which the overflow finds its way by insignificant channels to other streams. In dry seasons, on the contrary, these rivers dwindle to trifling brooks, even in the mountains, while in the plains their wide and deep beds become converted into dry and dusty chasms. This is the case with the Macquarrie and the Lachlan, which, issuing from the mountains in large and full streams, are lost in the interior flats in extensive swamps, which in wet seasons are everywhere inundated, while, after a long-continued drought, the beds of the rivers present nothing more of moisture than a succession of ponds, and their marshes, nearly or wholly dried, exhibit the creeks by which their imperfect communication is kept up during the inundation with the Darling and Morrumbidgee, which thus receive but little water from them, either during drought or deluge. (*Oxley*, 35–37, 102, 136, 142, 362,

* This is according to Mitchell's map; but this gentleman places Cape Northumberland 22′ 50″ farther E. than Flinders. (*Adm. Ch. and Voy.*, i., 202.) The latter, by bearing a little off the land, in consequence of blowing weather, did not see the small mouth of the Glenelg.

† The positions are given from Mitchell's work and map. They differ nearly 1° in long. from those of Sturt, but in consequence of the far superior appointments of Mitchell's expedition, they are more likely to be accurate. Among other casualties, Sturt's only chronometer was broken on the Murray.

383, &c.; *Sturt*, i., 36, 38, 62, 148; and *Mitchell*, i., 391, ii., 22, 771, &c.) Yet this last-mentioned supply, trifling as it is, is, perhaps, the greatest that the last-mentioned rivers receive, and, in consequence, the supply they bring to the Murray is very uncertain. (*Sturt*, ii., 108; *Mitchell*, ii., 113.) The latter, however, never loses the character of a permanent river, which can be affirmed of no other known stream of the interior, except, perhaps, its affluent, the Morrumbidgee. The quantity of water finally conveyed to the sea is not, therefore, great; absorption and evaporation perform their work unchecked by any liberal supply from the surrounding country; and were it not that the two chief rivers receive an occasional impetus to their current by the occurrence of rapids (*Sturt*, ii., 83, 98, &c.), it is by no means improbable that the whole might be exhausted before it reached the coast.

These rivers have their sources at very great elevations. That of the Macquarrie is 2669 ft. above the sea; of the Gwydir, 3000; of the Dumaresq, 2970; of the Lachlan, 3339. The source of the Castlereagh cannot be much lower; and the sources of the Morrumbidgee and Murray, lying in the Warragongs, are, probably, considerably higher. The descent of the country is, however, so rapid that the river-beds sink more in the first few miles than in all their subsequent course; that of the Macquarrie falls 2800 ft. in 200 m.; that of the Lachlan, 1789 ft. in less than 100 m.; while the united waters of the Dumaresq, Gwydir, &c., have fallen at least 2000 ft. before their junction with the Castlereagh. (*Sturt*, i., 156; ii., 118; *Oxley*, 9; *Currie*, in *Field*, 378; *Mitchell*, ii., 312.) In consequence of this formation of the country, falls and rapids are extremely numerous in the higher parts of the rivers. Becket and Bathurst falls, in the Apsley (though this is a mountain stream of no great importance), are exceedingly magnificent; the former has a pitch of 150 ft., the latter, one of 235 ft. perpendicular height. (*Oxley*, 297, 299.)

Lakes are abundant in Australia, as might indeed be inferred from the level nature of the plain country, but none of them are very large, and few appear to be permanent. Lake Alexandrina, the recipient of the Murray, has by far the largest surface; but, as before observed, it is extremely shallow; and lake George (lat. 35° 5′, long. 149° 15′), which, in 1828, was a sheet of water, 17 m. long, and 7 wide, was said, by an old native female, to have been a thick forest within her memory; and in 1836 it had dried up to a grassy plain. (*Mitchell*, ii., 313.) The lakes of the interior are subject to the same variation (*Oxley*, 120–130; *Mitchell*, ii., 34–37), and when excited curiosity has drawn the traveller from his road, to inspect one of these reservoirs more than commonly famous, the result of his examination is almost sure to be disappointment. (*Sturt*, i., 15.) These lakes, such as they are, abound along the banks of the Lachlan and the Murray, as far as the junction of the Darling: they are so far from yielding any supplies to the rivers, that their own waters seem, in part, to depend upon the latter overflowing their banks. Some of them are, however, quite isolated, and none have any outlet. Many, and those the largest, are salt; and small salt-lakes, or rather brine-pits, appear to be common in the dead levels of the interior both E. and W. (*Mitchell*, ii., 66, 82, 91, 140, &c.; *Cross's Journ.*, *Dale*, 162.)

Soil.—Were the soil of Australia merely extremely various in different parts of the continent, it would be no more than what is seen in every other part of the world. But the Australian soil varies according to laws of its own, apparently unknown in any other region. In other countries, rivers are the great fertilizers, and their influence is the greater the longer their course. In Australia, fertility is confined to the higher parts of streams; and, as has been shown, those which promise fairest at their outset from their mountain sources, invariably and quickly either dry in their beds, leaving the country an arid desert, or spread into marshes, rendering it an uninhabitable swamp, equally destructive of animal and vegetable life. Thus situated, it is not wonderful that productive soil should be found only on the sides and summits of considerable elevations; or that the explorers of the interior should look for the indications of mountain land with a feverish anxiety, which it is difficult for a native of the fertile plains of Europe and Asia to comprehend. "Had we picked up a stone," says Sturt, speaking of his abandonment of the investigation of the Darling (i., 144), "as indicating our approach to high land, I would have gone on. But this seemed a desert, that not even a bird inhabited—the vegetable kingdom was almost annihilated; and the native dog, so thin that he could scarcely walk, seemed to implore some merciful hand to despatch him." This was during a dry season, and the consequent failure of the streams. "There was not the smallest eminence," says Oxley (p. 89), under circumstances diametrically opposite, "whence a view might be obtained, the country appearing a dead level; and although we could see for some distance all round, yet there was not a rising ground in any direction. The margin of the stream was a wet bog, full of water-holes, and covered with marsh plants. It was only on the very edge of the bank, and in the bottoms of the bights, that any eucalypti grew. There was not the least appearance of natives; nor was bird or animal of any description seen during the day, except a solitary native dog; we seemed, indeed, the sole living creatures in these vast deserts." "From a tree near the camp," says Mitchell (ii., 148), "Burnett descried a goodly hill, distant 22 m. It was indeed (p. 155) a welcome sight to us, after traversing for several months so much of the dead levels of the interior; and I accordingly named this hill, Mount Hope."—"Within the water line" (of Regent's lake, now a grassy plain), observes the same authority, "stood dead trees, of a full-grown size, apparently killed by too much water, too plainly showing to what long periods the extremes of drought and moisture may extend in this singular country." (ii., 34.) Again (ii., 157) he speaks of a row of bare poles, the remnants of yarra trees, eight or ten years old, which occupy the very middle of a stream, though they must have attained their growth while the bed of the river was dry. The soil of these desolate and extensive plains is various; in some places red tenacious clay; in others, a dark hazel-coloured loam, rotten and full of holes: sand is not very abundant, but it is found; and whatever the composition, one unvarying appearance of dreariness and desolation marks the scene. Exceptions must be made, however, to some portions of land on the Murray and Morrumbidgee (*Mitchell*, ii., 136, &c.), but these are both permanent streams, their floods restrained by outer banks or *bergs*,* so that the neighbouring country is in some degree preserved from the fierce extremes of drought and inundation. Yet this more favourable description must be taken in a restricted sense: about the meridian, where the other known rivers (the Lachlan, Macquarrie, and Darling) cease to flow, the country on the banks of the Morrumbidgee begins to deteriorate; and the river, though it does not fail, contracts, soon after, both in breadth and volume, till, at its junction with the Murray, it has all the appearance of an ordinary creek. (*Sturt*, ii., 51, 87.) Compared with the gloomy sterility of these flats, no contrast can be stronger than the abundant fertility of the elevated terraces. A rich, dry, vegetable soil, broken into gentle undulations, and watered with the various streams that form the abundant sources of the internal rivers, is the general characteristic of Bathurst plains, Liverpool plains, Yap plains, and the other districts that stretch away upon the summits and N. sides of the Blue mountains, and N. of the Liverpool range. The W. valleys of the same mountains partake also of the same character; and a similar description will apply to the corresponding country on the E. faces of the Darlang range. (*Oxley*, 186, 267, 275, &c.; *A. Cunningham*, in *Field*, 131–191; *Sturt*, i., 6–14, ii., 11–36; *Mitchell*, i., 27–57; *Irwin*, 6–8; *Dale*, in *Cross*, 51–72, &c.) But the best land hitherto found in Australia, is that discovered lately (1836) by Major Mitchell, near the S. coast, and called by him Australia Felix. It lies among the Grampians and Pyrenees; and, though surrounded and intersected by mud and swamps, its high levels and valleys, abundantly, but not excessively watered, are so prolific, that the discoverer congratulates himself on "being the harbinger of mighty changes, since his steps would soon be followed by the men and animals for whom this fertile region seems to have been prepared." (ii., 157–289.)

So many theories have been hazarded to account for the host of anomalies in this S. world, and each in succession found to be erroneous, that great circumspection is necessary in offering even a surmise as to the causes of physical arrangements and appearances, so much at variance with all former experience. One fact, however, forces itself on our notice: the fertile parts of Australia, confined to the higher regions, are as effectually separated from each other by apparently irredeemable deserts, as though the ocean flowed between them. And how many centuries is it since the ocean did so flow? The different explorers unanimously declare the dead flats of the interior to be *new land*—new, that is, in comparison with the mountains by which they are bounded; while those mountains themselves, judging by their poverty in primitive formations, are apparently more recent than the similar elevations of the N. hemisphere. Sturt believes the Darling to have been the main channel which carried off the last waters of the ocean from the low lands, and its bed—which he esteems an estuary rather than a valley—to have remained the natural and proper reservoir of the streams falling from the E. and W. (ii., 119.) None, however, fall into it in 660 m. (*Mitchell*, i., 295); but the whole appearance of the country on its banks is strongly corroborative of Sturt's opinion. (*Mitchell*, i., 214, 307; ii., 109, 113–116.) But what then was the condition of the

* See Col. Jackson's paper on "Geographical Arrangement and Nomenclature." (*Journ. Geog. Soc.*, iv., 34.)

country, previously to that convulsion or change, of whatever kind it might be, which laid bare this extensive tract? Evidently that of island groups, at greater or less distances from each other, the surfaces of which (now the terraces and table-lands of the mountains) had remained exposed sufficiently long to enable mineral and vegetable decomposition to perform its work of creating a fertile soil. The rivers of these islands (now the sources of the anomalous internal streams) would, like other island rivers, run their short courses to the *then* sea, and having performed their office of irrigating the tracts through which they flowed, be there absorbed. On the exposure of the interior, all this would be changed. The newly-uncovered land, destitute of vegetation with the exception of marine plants, would of necessity remain sterile till the decomposition of these gradually, though slowly, began to form a soil. (*Flinders*, ii., 116.) The rivers, no longer received into a sea, at no great distance from their sources, would begin to wear themselves channels in the new ground—a process which, while the descent was considerable, would be rapid in its operations; but which, when the stream, reaching a level flat, had lost much of its initial impetus, would decrease in energy; and, on the occurrence of a hollow, would wholly cease, at least for a season. Such a hollow is the Marsh of the Macquarrie (*Sturt*, ii., 158), and a succession of such hollows seems to form the marshes of the Lachlan. (*Mitchell*, ii., 59–61.) The water losing its flow, and spreading over these hollows, deposites in them the fertile débris from its native hills, and thus gives birth to marsh plants, the decomposition of which still farther improves the soil; and, in the season of flood, the washing or this debris to the sides of the concavity, by gradually forming a channel, gives to the exhausted stream new strength to struggle, inch by inch, along its course. That some such process has been at work ever since this land was first explored, seems evident from the bergs, or outer banks of the Murray, Morrumbidgee, &c.; and Mitchell could no otherwise account for the remarkable appearance of many of the lakes which he passed, than by supposing that their hollows existed *before the rivers began to flow* (ii., 34). "We cannot doubt," says Humboldt (*Pers. Nar.*, iv., 150), "that in both continents (Africa and Australia) there are systems of interior rivers which may be considered as not yet fully developed, and which communicate with each other, either in the times of great risings, or by permanent bifurcations;" a sagacious remark, made more than ten years before the discovery of the extensive connexion between the channels of the Australian streams, by which it is so remarkably confirmed. (See also *Carl Ritter*, *Erdkunde*, i., 315.) But if Sturt's surmise be founded in truth, the bed of the Darling, or its continuation, that of the Murray, should be the common drain of all the land between itself and the older mountains towards the E. and S.; and this it is, or is in progress of becoming. The union is effected for all the known streams except the Lachlan and Macquarrie; and of these the former has completed its bed (*Mitchell*, ii., 78), though it has not yet been able to fill up the hollows which form its marshes in the wet season; and the latter, though much impeded by the extent and lowness of its swamps, is struggling to establish a permanent connexion with Castlereagh, through Morrisett's Ponds (*Sturt*, i., 146), and with the Darling direct, through Duck creek (*Mitchell*, ii., 32). The great deficiency of springs and tributary streams is one great cause of the slowness of this operation; but the deficiency itself is only what might reasonably be looked for in a country of recent formation, especially in one where the eminences are so few and so little elevated as they appear to be in the interior of Australia. Springs can be formed only by the accumulation of moisture in the cavities and gullies of hills; and this accumulation must, in the first instance, proceed with extreme tardiness. When overcharged, and not till then, these reservoirs will give forth their superfluous waters; at first, by a simple overflow, and, when the additional supply has given to the torrent thus first formed sufficient power to deepen its bed, in a continual stream. (See the very profound article RIVER, in the *Ency. Brit.*, xviii., 39–91, more especially at p. 70, *et seq.*) When this process has been long in operation, these streams will be numerous, and such is the case in the terraces and older mountains of Australia; where the land is comparatively new, they may be expected to be scarce, and they are scarce beyond parallel in the interior of the same continent. Even when become permanent, time must be allowed for them to cut their path to their final channel; and this is a most wise arrangement, since, did such new-born currents find their way directly to an extensive bed, the source from which they are supplied would be exhausted. Centuries, therefore, must probably elapse between the first appearance of the infant torrent and its final absorption into some river system. In the interval it will pursue its course surely, however slowly; and with a speed and direction varying according to the obstructions which it meets with, and the amount of initial supply. Many of these incipient streams are found in the interior of Australia, making greater or less approaches to what Humboldt calls the "development of their system;" the beds of some of them, though dry during the summer heats, exhibiting unquestionable signs of floods at other seasons; while others appear to be permanent to the point to which they have already cut their way. (*Sturt*, i., 123; *Mitchell*, i., 209, 249–253, 261, &c.; ii., 32, &c.) But, again, upon the surface of a new country, so singularly devoid of vegetable decay (*Sturt*, i., 108), production will necessarily be limited to those spots where the rivers and floods have deposited their fertilizing slime. The barrenness of the districts remote from streams and swamps is, in fact, the universal theme of all travellers (*Oxley*, *Sturt*, and *Mitchell*, *passim*); while yarra trees so distinctly mark the bed of a river, that the course of the latter may be kept in view even at the distance of the visible horizon, and every flat subject to inundation is crowded with dense shrubs, box-trees, polygonum, kangaroo grass, reeds, and other native vegetation. (*Mitchell*, ii., 34 and *passim*; *Sturt*, i., 717 and *passim*; *Oxley*, 97–103 and *passim*.) Here, then, are abundant elements of a soil, the process of forming which is expedited by the remarkably prolonged and fierce extremes of drought and flood to which this region is subjected. (*See* CLIMATE.) The vegetation of interior Australia, such as it is, does not live its natural term, or die of natural decay; but when a flood has given birth to that race of trees and shrubs which draw their sustenance from excessive moisture, a long-continued drought destroys nearly the whole tribe (*Sturt*, i., 145, &c.); while such plants as delight in a dry soil spring from the earth formed from their decomposition, to be in their turn destroyed, after ten or twelve years' growth, by the constant exposure to too much water in a return of the season of floods. (*Mitchell*, ii., 34, 148, 313.) It is quite clear that this alternation must tend to fertilize the land much more rapidly than if either race of plants continued to draw their nourishment from the newly-deposited and still meagre earth, till they perished from pure exhaustion, the more especially as deciduous trees are almost unknown,* and consequently one great source of supply, the scatterings of autumn in other regions, is wanting to the native soil of Australia.

It appears probable, then, that both the land and water are here still in a course of formation; that the various anomalies, in each, which fill the minds of Europeans with wonder, are only the natural appearances of an imperfect, or rather of an unfinished work; and that they will vanish when the causes, now in operation, shall have produced their full effect. These opinions are hazarded, however, with much diffidence; and only because they appear to result from the facts collected by actual observers.

Climate.—About a third part of the Australian continent, the N. part, together with the large island of New Guinea, and the other isles enumerated at the beginning of this article, with the exception of New Zeland, lie in the torrid zone. The other portion of the continent, the islands immediately adjacent, and New Zealand, are in the S. temperate zone. The proportion of inter-tropical to extra-tropical land is, therefore, altogether about as 5 to 12 (*Malte-Brun's Tab.*, xii., 270, 375). Of the general climate in the former portion little is positively known, though it may be too probably inferred that it resembles generally those regions of the N. hemisphere, similarly situated, where running water is scarce; that is, that a considerable portion of it is burned up with intense heat. On the N. coast a wind from the S. raises the temperature with extreme suddenness (*King*, i., 398), and a N. wind produces the same effect in the interior (*Mitchell*, i., 315; *P. Cunningham*, i., 174; *Wentworth*, 49); arguing, in both cases, a passage over a highly-heated soil. Tropical Australia is in the range of the Indian monsoons, of which the N.W. sets in usually about the beginning of November, and that from the S.E. in the early part of April. There is, however, much irregularity in their recurrence, the variation sometimes amounting to more than a month. (*Campbell's Geog. Journ.*, iv., 148.) In these regions the seasons can scarcely be divided into dry and rainy; for though the N.W. (or summer) monsoon be attended with very heavy falls, yet they seldom continue above two or three hours at a time, so that they rarely, if ever, put a complete stop to out-door labour. From June to September, no rain falls, though these are unquestionably the healthiest months of the year. A great quantity of moisture must, however, at all times be suspended in the atmosphere, though imperceptible to the senses, during the prevalence of the dry or S.E. monsoon: for iron articles are kept from rusting only by incessant care; and the exposed surface of the rocks, along the intertropical coasts, are so generally coloured by the oxide of iron, that the term red might without impropriety be adopted as descriptive of the N.N.E. and N.W. shores. (*Campbell's G. J.*, iv., 149; *King*, i., 398.) The

* *One* only is mentioned; namely, the white cedar (Melia azedarach). *Field*, 422.

average temperature at Melville island, on the N. coast, from April, 1827, to March, 1828, was 83° Far.; the winter average 80°; that of the summer 86°; and the extreme averages 75° (for July), and 87° (for Dec.). It may also be observed, that the coolest part of the day appears to be 6 A.M., the temperature of that hour being from 1° to 7° lower than that of midnight. (*Campbell's G. J.*, 152.) With regard to Extra-tropical Australia, it is a pretty common observation, that the climate of New S. Wales assimilates very closely to that of S. Italy; but this must be taken with some limitations; first, the atmosphere is very considerably drier; secondly, the extremes of temperature are greater: thirdly, the average heat is rather less; and fourthly, the temperature appears to decrease more rapidly by elevation. The following is a statement of the extremes of temperature, and quantity of rain at Sidney in 1821–2, Paramatta in 1822–3, Perth (Swan river) in 1831, and K. George's sound in 1831–2.

	Temperature.		Days Rain.	Rain fallen, in inches and dec.
	Max.	Min.		
Sidney	89°	46°	107	
Paramatta	108	40	—	29·948
Perth	106	33	—	
K. George's Sound .	67	52	139	30·7801

The mean temperature of the year is, from observations at Sidney, rather above 65°; from those at Paramatta, rather above 63°; from those at Perth, rather below 67½°; from those at K. George's sound, rather below 60½°. (*Brisbane* and *Goulbourne*, in *Field*, 385–397; *Irwin*, 123, 124.) In these districts, though frost be not unknown, it occurs very rarely, and snow never lies upon the ground; but on the mountain terraces a mean temperature is met with about equal to that of England, though its extremes are much greater. Cunningham (*Field*, 133) found his thermometer (varying from 66° to 83° E. of the Blue mountains) sink suddenly to 59° on reaching Bathurst, an elevation of 1970 ft. This was in April (corresponding to October in Europe), and warm winter clothing was necessary for the party who were proceeding to investigate the country towards Liverpool plains. Heavy snows are common in these high lands; and though they do not lie in the valleys, the upper flats and downs remain covered for many days. (*Wentworth*, 53; *P. Cunningham*, i., 184.) The low interior is hot, whether dry or flooded. (*Oxley*, *Sturt*, and *Mitchell*, *passim*.) The variations of the seasons in Extra-tropical Australia, occur, of course, in a reverse order to that observed N. of the equator; but it is to be noticed that their regular succession is much more distinctly marked on the high than on the low lands. In the latter, indeed, some of the peculiarities of a tropical climate are observed as high as 35° or 36° of lat.; among others, something very much resembling periodical winds, and the division of the year into a dry and rainy season. The prevailing winds in summer are from N.E. to S.E.; in winter, from N.W. to S.W. (*Oxley*, 148.) The showers, *when any fall* (see *post*), are generally confined to certain months, but differing on the different sides of the mountains; it being a remarkable but well-authenticated fact that floods on the coast occur simultaneously with dry weather in the interior, and conversely. Winter is from March to August; May is the rainy season on the coast; in the interior the rains fall during the summer, or between September and February, (*Oxley*, 146; *P. Cunningham*, i., 182; *Wentworth*, 50.)

But a more important division of the Australian climate into wet and dry is marked by periods or cycles of ten or twelve years each. Once in such cycles, a year of unmitigated drought prevails, during which *no* rain falls, and the effects of which are equally intense on the coast and in the interior. Close upon this visitation follows a year of flood; but the rains, which are at first continuous and as general as the preceding drought, decrease with every succeeding year, till they again wholly fail for a time. It follows, therefore, that the two or three years following the great rains may be denominated the wet *period*, and that an equal space of time preceding the great droughts may be regarded as the long dry season of Australia. It is only in the intermediate years that the regular recurrence of seasons, noticed above, is observable. (*Oxley*, vii.; *Sturt*, i., liv. 1.) In reference to the reverse order of the seasons in Europe and Australia, it is worthy of remark, that a cold winter in the one appears to be coincident with a hot summer in the other, and conversely. (*P. Cunningham*, i., 218.) For the rest, dews are very abundant, and fortunately, fall the heaviest during the summer heats and the long-continued droughts. Hail-storms are very frequent, as are also thunder and lightning; the latter flashing frequently for a succession of days, wholly unaccompanied by the former or by a single drop of rain. Earthquakes are occasionally felt on the N. coast. (*P. Cunningham*, i., 183; *Campbell's G. J.*, iv., 151.) The climate of Extra-tropical Australia is peculiarly favourable to the human constitution, probably from the deficiency of vegetable decomposition, more than once before alluded to. Endemic diseases are almost unknown; even small-pox, measles, and hooping-cough are strangers; but the hot N. wind produces ophthalmia; and the teres, or round worm, is the common pest of childhood. Dysentery is the most prevalent disease; but one proof, and that a strong one, of the healthy nature of the atmosphere, is the facility with which all disorders, even the worst cases of venereal affection, yield to the simplest remedies. Deaths from disease are exceedingly rare. The N. coast is unhealthy, but certainly less so than most other tropical countries. Typhus and acute fevers are there prevalent in the wet monsoons; and during the period of variable winds, pectolapia (moon blindness) appears to supersede ophthalmia; and scurvy seems to be an endemic, exhibiting itself with peculiar virulence where the tropical heat is exercised upon a damp soil. Even here, however, sickness puts on a generally mild form; the number of deaths, from disease, in Melville island was only one in nine for four years, or one in thirty-six per annum. (*P. Cunningham*, i., 171–173; *Campbell's G. J.*, iv., 149–151, 168; *Wentworth*, 55; *Irwin*, 4, 124.)

Mineralogy.—This, at present, is a very meagre topic: iron is the only metal of which unequivocal evidences are found; and it appears to be spread in great profusion over all the continent and its adjacent islands. The immense extent of iron oxide on the N. coast (*King*, i., 396) has been already alluded to, and several of the mountains violently affect the magnetic needle. (*Oxley*, 259; *Sturt*, i., 115.) It is even said that the compasses of vessels approaching the shore feel a similar influence (*Picture of Australia*, 120), but such statements should be received with much caution. Copper and lead (the latter mixed occasionally with silver and arsenic) are said to have been traced both in the Blue mountains and the Darling range; but no attempt has yet been made to turn such discovery to account; and this, also, is the case with the abundant supply of Australian iron. Under these circumstances, it would be rash to conclude that the mountainous strata in this reigon are *not* metalliferous; though the only ore that forces itself on the attention be iron. It may, however, be presumed from the comparatively small amount of old formations in the mountains, that they are destitute of the precious metals,* and of gems, only rock crystals, garnets, and agates have yet been met with. (*Pict. Aust.*, 190–194.) But the most useful of all the fossils exists here in profuse abundance. Immense coal-fields extend beneath the barren sandstone, and what enhances their value, they occur in strata much more horizontal than in the Old World, and rarely more than 18 fathoms below the surface. The Blue mountain and Darling ranges are equally rich in this treasure, and there is reason to believe that it exists also in the only half-explored regions of the N. and S. (*Fitton*, *King's Appen.*, 584, &c.; *Mitchell*, i., 14, &c.; *Berry*, in *Field*, 233; *Pict. Aust.*, 187.)

II. Botany.—It is well known that Botany bay received its name from the abundant vegetation which Capt. Cook and Sir J. Banks found flourishing on its coasts. It is scarcely less well known that the first attempt at colonization was made at that bay, and almost immediately abandoned by Governor Phillip, under the conviction that its soil was unprofitable and barren. (*Hawkesworth*, iii., 504; *Phillip*, 51.) Such opposite conclusions, by able men, seem at first sight rather startling; but, on farther examination, they are found to grow naturally out of the character of the Australian botany, which is as peculiar as most of the things in this region of peculiarities. "Picturesque and pleasing" Gov. Phillip allows the place to be, but justly adds (p. 52) that "something more essential than beauty of appearance must be sought in a place where the permanent residence of multitudes was to be established."

The first great division of plants is into two great classes: the Cryptogamous, which have no blossoms nor visible means of fructification; such are mosses, ferns, fungi, &c.; and the Phanerogamous, which are reproduced by visible organs. This class includes, of course, all the higher orders of vegetables, but is subdivided into Monocotyledonous plants, such as have but one seed lobe; and Dicotyledonous plants, which are possessed of two or more: the former comprises the grasses, cyperaceæ, &c.; the latter, those productions of the earth, the organization of which is most complicated, as the trees, superior shrubs, &c. The following table exhibits an outline of the arrangement of these primary orders in Australia. It is offered merely as an approximation, for knowledge on this subject is yet but scanty; but it has been constructed with much care from Brown's "Botany of Terra Australis." (*Appendix to Flinders*, 533–613); the botanical papers of A. Cunningham

* Gold is found at Timor, only three days' sail from the N. coast of Australia (*King*, i., 124); but the much greater elevation of the Timorean mountains implies a different composition from that observed in Australia. (*Flinders*, ii., 254; *King*, i., 181.

(*Appendix to King*, 497–565; *Field's Memoirs*, 325–365); P. CUNNINGHAM (i., 186–206); OXLEY, *passim*; STURT, *passim*; MITCHELL (i., xx., *et passim*).

Orders.	Whole No. of known species.	Whole No. of known Australian species.	No. of species common to Aus. and other regions.	No. of species peculiar to Australia.
Cryptogamous	6,000	760	210	480
Monocotyledonous	6,909	1,144	40	1,104
Dicotyledonous	31,091	3,766	20	3,746
Total	44,000	5,710	270	5,440

So profound were the early investigations of Brown in this newly-opened region of strange vegetation, that his name was given to it as a distinct botanical kingdom. (*Lindley*, 522.) In his day, the known plants of all the world amounted to 33,000 species, those of Australia to 4200. (*Flinders' Appen.*, 536.) The labours of succeeding botanists have done little more than enlarge the list, without at all affecting the arrangement, and only in a very trifling degree altering the various proportions. The first fact which strikes the observer in the foregoing table is the very great number of peculiar Australian species, amounting to nearly ⅛th part of those at present known. This is a proportion much greater than could be looked for from the relative magnitude of the region, and which, were the individuals of each species in anything like a similar ratio, or were the species themselves of a kind highly useful to man, would render Australia a paradise. Unfortunately, neither is the case. Ferns, nettles, flowers, and even grasses, having the form, bulk, and habits of trees, are some of the distinguishing features in Australian vegetation; for the rest, the timber is generally of the hard-wood kind, consisting of all the varieties of Eucalyptus and Casuarina, with some varieties of the rose-wood, sandal-wood, cedar, &c. Most of the eucalypti are called gum-trees, though the exudations of many of them are properly resins, being insoluble in water; while others yield a manna as fine and as pure as any of Arabia. Another species yields the purest gum Arabic. There is a tree here called the tea-tree, the leaves of which are used by the colonists instead of those of the Chinese plant; and there are also some medicinal trees, as the sassafras and the castor-oil tree. Palms are limited to the N. and E. shores, on the former of which the tropical mangrove grows in all its luxuriance; and, in fact, the peculiar aspect of Australian vegetation disappears in this part of the continent, being superseded by one assimilating more to that of India. It is in Tropical Australia that the greater number of those plants are found which are common alike to this and other continents. (*Brown, Flind. Ap.*, 586; *A. Cunningham, King's Ap.*, 532.) It has been before observed, that, with one exception, the Australian trees are evergreens: many of them are remarkable also for the inverted position of their leaf; the margin, and not either surface, being directed towards the stem. An Australian grove has, consequently, a peculiar and gloomy appearance; nor is the timber that it yields of the highest utility to the architect, being liable to rot at the heart, and so contractile that it has been known to shrink upwards of two inches within a week. (*P. Cunningham*, i., 192.) It remains to be observed, that the trees in Australia are rarely so numerous as to impede horse travelling; and as a remarkable fact, that they appear to be most abundant on inferior soils. (*Gov. Rep. Oxley*, 368.) Flowering plants of very great beauty are found; but the lily, tulip, and honeysuckle exist in the form of standard trees of great size. There are also odoriferous plants, which scent the atmosphere to a great distance; and prickly shrubs, which grow upon sandy soils, and bind them down, thus preventing that drift which is the bane of the Arabian and African deserts. (*Mitchell*, i., 222; ii., 106, &c.) Grasses are abundant and nutritious, but they grow in detached clumps, so that a heavy continuous sward, resembling an English meadow, is unknown. Flax, tobacco, a species of cotton, tares, indigo, chicory, trefoil, and burnet (the last a capital substitute for tea), are among the natural productions, but there is an unparalleled deficiency of fruits and of vegetables fit for human food. The *cerealia* are totally absent; and the best substitute for them appears to be a species of reed, which, however, Mitchell found to make a very light cake. The only native fruits are raspberries, currants (more like cranberries), one or two tasteless fruits, and a species of nut. The useful productions of other lands are now, however, extensively acclimatized, and corn crops and orchards are found in every fertile spot in the settled districts. Every species of corn, including maize, is cultivated with success; while of foreign fruits, the orange, lemon, citron, nectarine, apricot, peach, plum, cherry, fig, mulberry, quince, banana, guava, pine-apple, grape, and many others, have long been a source of profit to the smaller settlers. The capabilities of the soil are thus attested; nor can there be a doubt that the sugar-cane and other tropical productions would thrive in the lower latitudes of the N.; but at present the prejudice of the colonists is in favour of pasturage, for which it must be owned that the extensive plains on the terraces afford much facility, though the keep of a sheep upon the native grasses requires three times the extent of ground that in a moderately fertile district in England would fatten an ox in summer, and keep two sheep in winter. (*P. Cunningham*, i., 202.)

III. ZOOLOGY.—Animal existence in Australia assumes a form more anomalous and peculiar than even that which marks its botany. The following tables have been constructed with every possible care from the "*Règne Animal*" of Cuvier, with the additions of Griffith, Gray, &c., the Zoology of Shaw, the Transactions of the Linnæan Society, and the works of the various travellers in Australia.

*Class Mammalia.**

Orders.	Whole No. of known species.	Whole No. of Australian species.	No. of species common to Aus. and other regions.	No. of species peculiar to Australia.
Quadrumana	155	0	0	0
Cheiroptera	136	2	1	1
Insectivora	27	0	0	0
Carnivora	177	3?	5	3?
Marsupialia	50	35	0	33
Rodentia	192	6	1?	5
Edentata	21	4	0	4
Pachydermata	24	0	0	0
Ruminantia	142	0	0	0
Cetacea	27	5	5	0
Total	960	55	12	46

Aves (Birds).

Orders.	Whole No. of known species.	Whole No. of known Australian species.	Species common to Aus. and other regions.	No. of species peculiar to Australia.
Accipitres	251	16	6	10
Dentirostres	1,273	130	7	123
Fissirostres	128	12	1	11
Conirostres	440	20	3	17
Tenuirostres	213	20	1	20
Syndactyles	116	7	0	7
Scansores	482	34	0	34
Gallinæ	246	20	3	17
Grallæ	285	25	4	21
Palmipedes	289	22	2	20
Total	3,972	316	27	289

In these tables, Cuvier's great orders of Carnassiers and Passeres, are divided into their several families: the former into Cheiroptera, Insectivora, Carnivora, and Marsupialia: the latter into Dentirostres, Fissirostres, Conirostres, and Tenuirostres. For the following table the materials are by no means so abundant; and it has been found advisable to mark the number of genera only, not that of species. (*See* ASIA.) For fish and insects it would have been impossible to construct a table in the least satisfactory.

Reptilia.

Orders.	Whole No. of known genera.	Whole No. of known Australian genera.	Genera common to Aus. and other regions.	No. of gen. peculiar to Australia.
Chelonia	60	3?	1?	2
Saurla	117	12	1	11
Ophidians	88	8	0	8
Batrachians	35	0?	0?	0?
Total	305	23	2	21

From these results it appears, first, that the native animals of Australia are few in number; and, secondly, that

* Professor Von Ritter has lately (1836) given to the British public a table from which the above differs more than could be wished; but, after the most patient investigation, it has been found impossible to effect an agreement. As M. Von Ritter does not state his authorities, he may possibly have access to arrangements (MS. or other) inaccessible in England; or it may be the custom of the German naturalists to consider as distinct species animals which Cuvier and others regard only as varieties.

The following is Ritter's table, as given in the *Penny Cyclopædia*, iii., 198.

Orders.	Whole No. of known species.	Whole No. of Australian species.	No. of species peculiar to Australia.	No. of species com. to Aus. and other countries.
Quadrumana	186	0	0	0
Cheiroptera	191	2	2	0
Carnivora	260	10	5	5
Marsupialia	67	43	43	0
Rodentia	295	5	5	0
Edentata	28	2	2	0
Pachydermata	30	0	0	0
Ruminantia	157	0	0	0
Cetacea	76	13	4	9
Total	1346	75	61	14

It is not meant to question the general accuracy of this table, when it is remarked that *one* unquestionable error has crept into it. The Cheiroptera of Australia are marked as wholly peculiar, whereas the "Flying Fox" was described as early as 1750, under the name of the Great Bat of Madagascar, *Vespertilio magnus Madagascariensis*. (*Edwards's Nat. Hist. of Birds*, iii., 180, 247; *King*, ii., 412.)

they are very peculiar in kind. Of all the known Mammalia in the world, but fifty-eight species, little more than 1-17th part of the whole, belong originally to this region. Of these fifty-eight species, forty-six were never heard of till they were first met on this soil; and of the twelve species common to Australia and other regions, five are whales, and four (out of the five Carnivora) seals; so that, in truth, of the *terrestrial* Mammalia, only three species are common; of which one is the large and strong-winged bat of Madagascar, another (the single and questionable common rodent) is regarded by Mr. Ogilby as connected generically only with the Jerboas of America and Asia (*Linnean Trans.*, xviii., 129–132*); and the third is the dog, of which it is a most remarkable fact, that he is never found out of the society of man, and very rarely absent from any spot which man inhabits! The authority just quoted (p. 121) believes, indeed, that he is not an aboriginal inhabitant of this continent, but that he came to it with the first primitive settlers, in the same state of savage domestication in which he now exists. He was unknown in Tasmania (Van Diemen's Land) before the settlement of the British colonists there (p. 122). The other three Carnivora (probably only two) marked in the table as peculiar to Australia, are seals (*Griffith's Synopsis of Cuv.*, 180, 183); so that the whole of this important order, together with the numerous tribes of the Quadrumana, Pachydermata, and Ruminantia, are absolutely without any known land-representatives in this extensive portion of the globe.) (*Ogilby, Lin. Trans.*, xviii., 121.) Of the Edentata, four species are marked in the table, after the arrangement of Cuvier (iii., 263–265); but that arrangement was made in the utter despair of forming a better, and not because it had any systematic analogy to recommend it. Toothless, or all but toothless, the creatures unquestionably are; but classing them in this order reduces the naturalist to the dilemma of admitting that there are Mammalia which do not possess the distinctive mark of the class. The Echidni and Ornithorhynchi are *destitute of teats, and do not suckle their young*. The former genus consists of two species of porcupines, one entirely covered with thick spines, the other clothed with hair in which the spines are half hidden. The Ornithorhynchi consist also of two species—*O. paradoxus* and *O. fuscus*. Possessing the body and habits of a mole, the feet and bill of a duck, and the internal formation of a reptile, these creatures lead a burrowing life amid the mud of rivers and swamps. They are extremely shy, and hence their mode of reproduction is yet unknown. Should they be oviparous, it would be, perhaps, more consistent to class them with the Reptilia than with the Mammalia; but, at present, their hot blood seems to forbid such an arrangement. The Ornithorhynchus has two cheek-teeth in each jaw: but they are without roots, and are merely fibrous. (*Cuvier*, iii., 264.)

Of the Rodentia, two species belong to the sub-genus Hydromys, and consist of creatures that seem to unite some of the peculiarities of the dormouse, rat, and beaver. (*Cuv.*, iii., 72.) According to Griffith (*Synop. Cuv.*, 222), they are the *only* true Hydromys, are peculiar to Australia, and almost to Van Diemen's Land. A new genus of Rodentia was made known by Mitchell's expedition in 1835 (i., 305), which is called by Ogilby (*Lin. Trans.*, xxiii., 124) CONILURUS, to mark its general resemblance to a rabbit. It is, however, a rat; and the species found by Mitchell (the only one at present known) is remarkable for the formidable defence which it builds for itself against the dingo (native dog) and birds of prey. From this habit it has been named Conilurus constructor. Two species of mice (both peculiar), and the Dipus Mitchelli (the Australian jerboa), discovered by Mitchell in 1836 (ii., 143), complete the list of Australian Rodentia, unless a small animal, omitted in the table, from the uncertainty of its classification, belong to that order. Mitchell names it *Myrmecobius rufus*, but with considerable doubt, and says that it was generally called the "red shrew mouse" by his party (i., 17). Should it prove to belong to the genus Sorex, it is the first instance, in Australia, of the order Insectivora. With these few exceptions, the whole of the Australian mammalia consist of the very peculiar order Marsupialia, of which order more than 4-7ths are absolutely limited to this continent and its adjacent islands. The leading peculiarity in animals of this order is the birth of the young in an immature state; in such a state, in fact, as is scarcely comparable to the ordinary development at which other fœti arrive within a few days after conception. From the time of this premature birth, without limbs or other external organs, the little animal remains attached to the teat of its mother (which enlarges, so as completely to fill the mouth), and enclosed in a natural pouch formed by the skin of the abdomen. It is this pouch which is the distinctive mark of the order; and its use induced Linnæus to arrange such species of these animals as he knew, under his genus *Didelphis*, a word implying double matrix. At the period of full development, the young fall from the teat, and this may be regarded as the real moment of birth; but for a long time after the dam continues to carry her offspring in the same receptacle; and the latter, even after they can walk, constantly return thither on the approach of any danger. This remarkable conformation is observed in every marsupial animal, and the arrangement of bones and muscles necessary to it is found in the males as well as the females. In other respects, however, the several genera of the order differ so essentially, that the whole might be regarded as forming a distinct CLASS of Vertebrata, and divisible, like the other Mammalia, into various orders. (*Cuv.*, ii., 61–63.) The kangaroo, the largest animal of this order and of Australian Mammalia, has been known since Cook's first voyage. (*Hawkesworth*, iii., 576.) It is as large, in some of the species (of which Griffith enumerates ten), as a good-sized calf, is very large in its hinder quarters, and disproportionately small forward. Its fore-legs are very short, and quite useless to the animal's motion, which is effected by a succession of springs, assisted materially by its long and powerful tail. The attitude is erect, except when feeding; the colour various in the various species, but is generally of different shades of gray. One species (*K. rufus*), however, is red and white. The other animals are the Potorvus, Phalangers (so named by Buffon, because the only species with which he was acquainted had two toes united by a membrane, the Daysuri, the Parameles, the Petaurista, the Phascolarctos, and the Phascolomys. The different species of these genera vary in size from that of a rat to that of a dog; the largest, the dog-faced Dasyurus (*Thylacynus Harisii*), and Dasyurus ursinus (the devil of the colonists), being confined to Van Diemen's Land. (*Ogilby, Linn. Trans.*, xviii., 122.) The former resembles closely an ill-made dog, but is marked with zebra-like stripes; the latter is represented as an extremely ugly and disgusting looking animal, whence his colonial name. The other species of the Dasyuri approach in size and outward appearance to the weasel tribe. The Phalangers of Australia are not all distinguished by united toes; on the contrary, some of them, as the Vulpine Phalanger, approach, in the formation of their extremities, to the Quadrumana. (*Shaw's Zoology*, i., 489.) Some of these, the instance taken, for one, are pretty and graceful animals. The Petaurista are a sub-genus of the Phalangers, and distinguished by an extension of the skin of the side, so as to form a kind of parachute; they are sometimes called flying Phalangers. Of this genus the *Didelphis Sciurus* (squirrel opossum) has so much the appearance of a squirrel, that a close inspection is necessary to detect its marsupial character. (*Shaw's Zoo. N. Holl.*, 29.) The Parameles approach in form and habits to the badgers, and, indeed, are called pouched badgers; they differ from the other Marsupialia in the weakness of their tail, that member being generally serviceable to this order, either by its strength or its prehensibility. (*Griffith's Notes Cuv.*, iii., 39.) The Phascolarctos, or koala, as it is more commonly called, consists of only one known species; it has a clumsy body, about the size of a moderate dog, short legs and claws, adapted for both climbing and burrowing. The female carries her young, for a long time, on her shoulders, and not in her marsupial bag. Some naturalists have referred this animal to the Phalangers, and others have denominated it the New Holland sloth. It has, however, no resemblance to the Tardigrada, possesses cutting teeth, and is destitute of canines. (*Cuv.*, ii., 76; see also iii., 252; and *Griffith's Synops.*, 294.) The Phascolomys, like the last genus, contains at present but one species, the wombat of the colonists. It is a plantigrade animal, extremely slow in its motion, and is about the size of a badger. Shaw (i., 504) mentions this creature under the name of Didelphis ursina, and a second species is suspected to have been seen by Bass. (*Cuv.*, ii., 78.) The Potorvus is nothing but a diminutive kangaroo, of which there is only one species, called commonly the kangaroo rat. (*Phillip's Voy. to Bot. Bay*, 277.)

In habits the different genera of the Marsupialia differ as much as they do in form. There is scarcely, indeed, an order of the whole class Mammalia to which one or other of them does not assimilate. Thus, the Dasyuri are carnivorous, and have many of the habits of the Felinæ; the Phalangers are insectivorous, and it has been already stated that some of them approximate in form to the Quadrumana; a similar approach will, perhaps, be admitted of the Petaurista to the Cheiroptera; and the Phascolomys or wombat is a true rodent. (*Cuv.*, ii., 61–78.)

The kangaroos, though strictly herbivorous, cannot be compared with any known genus but themselves; and the useful orders of Ruminantia and Pachydermata are unrepresented by any marsupial form. But these tribes, comprising most of those animals that, by their strength, docility, fleece, or hide, and the nutritious quality of their flesh, are the most useful to man, though only recently imported, are

* In the very able paper here cited, the whole number of Australian Mammalia agrees much more nearly with that given in the text than with that assigned in the *Penny Cyclopædia*.

now pretty abundant in all the settled parts of Australia. On the 1st of May, 1788, there was a stock carried out by the first settlers, of one stallion, three mares, three colts, forty-nine hogs, twenty-five pigs; in all, eighty-one Pachydermata: two bulls, five cows, twenty-nine sheep, nineteen goats; in all, fifty-five Ruminantia. (*Phillip*, 110.) In 1813, the horses of N. S. Wales amounted to 1891; and in 1821, to 4014. (*P. Cunningham*, i., 277.) Leaving out of view the first period of twenty-five years, during which importation may be supposed to have aided the increase, it advanced during the second period, when importation certainly had ceased, at the rapid rate of nearly 11 per cent. per annum. At the same rate, the horses of the colony in 1838 must amount to nearly 21,000; and when the extent of pasture ground on the plains and terraces is taken into consideration, this number would not seem to be too high. The pigs have increased with equal rapidity. The horned cattle in 1813 were 21,513; in 1821, 68,149 (*P. Cunningham*, i., 269); but the farther increase of the latter cannot be surmised; they have wandered off from some of the distant stock stations, and returned to that wild state which they had long forgotten in the N. hemisphere; and Mitchell, besides seeing their tracks on various occasions, was in two instances surrounded by wild herds, amounting in one case to 800, in the other to 1600 head (ii., 271, 307). Of sheep, the number in 1813 was 6514; in 1821, 119,777 (*P. Cunn.*, i., 259); showing an average annual increase of nearly 44 per cent.; and three tables, given by Sturt (i., 191), of the increase on two breeding flocks for four years (1829–32), present a precisely identical result. Assuming, therefore, 40 per cent. as the general average increase, the number of these animals in New S. Wales will amount, in 1838, to nearly 5,000,000. Nor will this calculation appear exaggerated, when it is remembered that, in 1837, there arrived in the ports of England 7,068,595 lbs. of wool from a region where, fifty years before, a single hoof would have been a marvel and a prodigy. (*Mitchell*, ii., 404.) Sheep are apt to stray in the wide pastures; but there is, perhaps, little probability that they will, like the horned cattle, return to a wild state; such stragglers being most likely destroyed by the dingo, especially if the surmise of Mr. Ogilby be true, that the absence of some of the native animals from continental Australia is to be accounted for by the presence of this more powerful and fierce creature. (*Linn. Trans.*, xviii.) The goats have thriven and multiplied, though not to the extent of the other imported animals; and the same remark may be made as to the rabbits, of which five were landed in 1788. (*Phillip*, 110.) From these facts it may be concluded that the pasturage and climate of Australia are well adapted to the useful animals, so long strangers to its soil; it is, indeed, expressly stated, that the diseases of sheep and cattle are scarcely worth notice (*P. Cunn.*, i., 254); and the beneficial changes which their introduction has effected in this new land, is one of the most interesting instances of the power possessed by man of modifying the physical peculiarities of the world which he inhabits.

The ornithology of Australia is less anomalous than its mammalogy; no order of birds is without its representative, and there are but two, the Australian species of which are wholly peculiar. Yet the common species bear a very small proportion to those which are peculiar; and, for the most part, are common only to N. and E. Australia and S. Asia, or the nearer Polynesian islands. Several genera are wanting; all the tribes of usual singing birds, for instance: and of the common species, the most numerous are, as might be expected, those of strong flight and comparatively light bodies; such as the Accipitres (birds of prey) and the Dentirostres (shrikes, pies, &c.). Among the rapacious birds, the most singular is a white eagle, which Cuvier thought was only an albino of some other species (vi., 49), and which Shaw referred to the list of hawks (vii., 93), but which subsequent investigation has proved to be a true eagle. (*Griffith's Notes Cuv.*, vi., 50.) Among the order Dentirostres are some species of great beauty; the superb warbler, a bird having the habits of the redbreast, is perhaps the most beautiful. There are also some *variegated* thrushes; but of these and other birds of this order, though very accurate descriptions be given of their appearance (*Phillip*, 157; *Shaw's N. Holl. Zoo.*, 25), nothing is said respecting their notes; and it may be inferred that, notwithstanding their names, they are songless. A species of thrush, called thunder-bird (*Cuv.*, vi., 434), has obtained from the colonists the name of the *laughing jackass*, from his peculiarly loud and discordant cry. Swallows and goatsuckers, of the order Fissirostres, are numerous; and of the Conirostres, the most remarkable species are the beautiful birds of paradise, which are almost confined to New Guinea. There are also several crows and magpies of this order; but the larks (so called) are but poor imitations of those of Europe, and appear all to belong to Cuvier's genus of field larks (vi., 480), and, consequently, to the order Dentirostres. Of the Tenuirostres, the various species of the Epimachi are, like the birds of paradise, confined to the N. parts of Australia; like them, their plumage ranks among the most beautiful; and like them, too, they have been the subjects of innumerable fables. (*Cuv.*, vii., 382.) The Syndactyles give to Australia its kingfishers and bee-eaters, of which the sacred kingfisher of the first, and the variegated bee-eater of the other, are worthy of notice for the extreme beauty of their covering. (*Phillip*, 156; *Shaw's N. Holl. Zoo.*, 13; *Cuv.*, vii., 401, &c.) All the Australian species of this order are peculiar, as are also those of the Scansores, consisting of the parrots, paroquets, cockatoos, &c. These last are very numerous in the Australian woods, supplying there the place of the European songsters. (*P. Cunn.*, i., 216.) The pheasants, quails, and pigeons of the order Gallinæ, are tolerably numerous; and, according to P. Cunningham, the mountain pheasant is a bird of song. The same gentleman makes the same remark upon one species of Australian magpie (i., 302), and states farther, that wild turkeys, of two varieties, are found; but these are, most probably, a species of bustard, and belong to the order Gallæ, which yields also the emu, or Australian cassowary, nearly equal in size to the ostrich, and resembling it in many important particulars. (*Cuv.*, viii., 298.) Of this order, Australia has also some species of Curlews, herons, avosets, rails, &c. (*Cuv.*, viii., 349–394.) Lastly, of the Palmipedes, there are in this region pelicans, boobies (so numerous as to have given name to an island on the N. coast), petrels, penguins, ducks of a peculiar kind, and swans, which realize the *rara avis in terris* of the Latin poet, being coal black. (*Cuv.*, viii., 561–694.) It remains to be observed, that the eighteen turkeys, twenty-nine geese, thirty-five ducks, and eighty-seven chickens, which arrived here in 1788 (*Phillip*, 110), have multiplied to an extent not surpassed by the sheep; and there can be little doubt, unless the deficiency of grain were fatal, that the songsters of Europe might be acclimatized to the woods, were the attempt made. (*P. Cunn.*, i., 307.)

The reptiles of Australia are comparatively more numerous than either the Mammalia or the Aves. They consist of two or three genera of turtles. (*King*, ii., 433; *Shaw's N. Holl. Zoo.*, 19), as many varieties of alligators, a considerable number of lizards and serpents, both venomous and harmless. The land lizard and the Coluber porphyriacus (crimson-sided snake) are represented as of extraordinary beauty. (*Phillip*, 279; *Shaw's N. Holl. Zoo.*, 27). The seas and rivers "abound in fish, many of them peculiar; and the Watts' shark, the smallest of the species at present known, is remarkable for having the mouth near the end of the head, instead of underneath, as in other animals of this genus. The insect tribe are very numerous, but they appear to differ far less than the other animals from those in other countries similarly situated.

Fossil Zoology.—The old theory of the post-diluvial formation of the Australian continent was supposed to be strengthened by the absence of limestone, and, consequently, of fossil remains. But those evidences of former existence, though not very numerous, have, however, been found in Australia under circumstances precisely similar to those under which they occur in the Old World. In passing down the Murray, Sturt's attention was called to a remarkable change in the geology of the country: the sand and clay ceased, and were succeeded by a fossil formation, rising like an inclined plane, from one foot to 200 or 250 ft. in height. This formation proved to be a compact mass of shells, and it continued to the very coast. The shells were of various kinds, univalve and bivalve; twenty-eight specimens were collected, and the traveller remarks that a closer examination would lead to the discovery of numberless species (ii., 140; *Appen.*, 253–256). Corals and marine shells of *recent* formation had before been seen in great abundance, and at considerable elevations, on the coast (*Fitton, King's Appen.*, 593); but Sturt's specimens were all ancient, though chiefly such as occur only in the tertiary formations. The basin of the Hunter yields also its fossil shells, of which seven new species have been arranged by Sowerby from the specimens of Mitchell (i., xix., and 15); and in 1830, the last-named gentleman made the first discovery of Australian fossil Mammalia in the limestone caves of Wellington valley and Burce. These remains consist of bones of marsupial animals of nine species, none of which are referrible to any now existing, either in Australia or beyond its limits. They consist, however, of kangaroos, dasyuri, phalangers, and wombats, but all larger than the largest of the existing species, though some of them, as the kangaroos, are exclusively the remains of young individuals. (*Mitchell*, i., 19; ii., 353–366.) From these remarkable data it may, perhaps, be inferred, that, though not post-diluvian, Australia is geologically much more modern than other regions of the globe, and also that it has suffered less physical change in the convulsions to which it may have been subjected.

IV. Races of Men in Australia.—If the division of the

great human family, by Blumenbach, into five varieties, be rigorously abided by, the Australian must be classed with the Ethiopian or negro, as approaching, upon the whole, nearer to his conformation than to that of any other race. But Mr. Crawford (*Hist. Ind. Arch.*, i., 24), whose experience and intelligence are alike undoubted, says, that the "east insular negro is a distinct variety of the human species;" and, indeed, he has peculiarities quite sufficient to make his classification with the African Ethiop one of considerable violence. "The skin is lighter; the woolly hair grows in small tufts, and each hair has a spiral twist; the forehead is higher, the nose much less depressed, and the buttocks are so much lower than in the African, as to form a striking mark of distinction." It is to this race, if any, that the Australian must be referred; and the inhabitant of the continent recedes still more from the true negro, by having straight, or, at all events, curling hair. Captain Cook's description of this race has been verified by every succeeding observer. "The skin," says he, "is of the colour of wood soot, or what is commonly called chocolate colour. Their features are far from disagreeable; their noses are not flat, nor are their lips thick; their teeth are white and even, and their hair naturally long and black: it is, however, cropped short; in general it is straight, but sometimes it has a slight curl; we saw none that was not matted and filthy, though without grease, and, to our great astonishment, free from vermin. Their beards were of the same colour as their hair, bushy and thick; but they are not suffered to grow long." (*Hawkesworth*, iii., 639.) The colour of the Australian does not appear to be uniform; some, even when cleansed from their filth, are nearly as dark as the African, while others have a tint not deeper than that of the Malay. (*Prichard*, i., 390.) In form, the Australian is generally tall and slender, with no great development of muscle, and more remarkable for agility than strength. It must be remarked, however, that the Tasmanians (inhabitants of Van Diemen's Land) are woolly-headed, as are also the natives of New Caledonia, New Guinea, and the other islands considered in this article as constituting Australia, with the single exception of New Zealand, which, though more remote from the Polynesian islands than any of the others, is inhabited by the brown race of those groups described by Mr. Crawford (i., 18) as exhibiting the same superiority over their sooty neighbours as the white men of the West have over the African negro. The physical distinction between the continental and insular Australians does not, however, appear to be one of importance; and this recently discovered region may, with great propriety, be regarded as the native home of a distinct, and, according to Crawford (i., 24), a decidedly inferior variety of the human race, which has spread itself to a considerable distance N. and E. among the islands of Polynesia and the Indian archipelago, and even to the S. extremity of continental Asia. (*Prichard*, i., 390.) That this variety is, physically considered, the lowest in the scale of rational beings, is sufficiently evident. Puny and weak, in comparison with the African negro, the Australian is hunted down, without making any effectual opposition, whenever he is encountered by any of his fairer neighbours; while the African is subdued only by superior intelligence, and successfully resists mere physical force. As personal strength is one effect of superior physical structure, the following results may be interesting. They are the averages deduced from the power exhibited in the arms and loins of 39 Australians, 56 Timoreans, 17 Frenchmen, and 14 Englishmen. These people were found capable of bearing respectively the following pressures:

Strength	Of arms, in kilogrammes.	Of loins, in myriagrammes.
12 Tasmanians, av.	50·6	
17 New Hollanders, av.	50·8	10·2
56 Timorians, av.	58·7	11·6
17 Frenchmen, av.	69·2	15·2
14 Englishmen	71·4	16·3

(*Lawrence*, 404.) The Timorians, it should be observed, are of the brown race; and it may be seen that in strength of arm they exceed the Australians more than they fall short of the Europeans. Between these two, the *weakest* English arm was more powerful than the *strongest* Australian, and the most muscular of the latter could bear upon his loins only ½ a myriagramme more than the weakest of the former.

But the physical character of the Australian is not more marked by a general inferiority than are his moral and intellectual attainments. His is the only race (at least the only one at present known) that goes completely naked. Of arts or manufactures he has scarcely an idea; of agriculture, even in its rudest form, he possesses not the smallest knowledge; nor does he seem to have the least idea of barter, except where intercourse with Europeans has taught him the convenience of giving his labour for a regular supply of food. He may be described rather as a gregarious than as a social animal; for, though some personal respect is paid occasionally to a kind of chief among a tribe (*Mitchell*, i., 192; ii., 322, &c.), it would seem that it is altogether *personal* (*Sturt*, ii., 105–202), and independent of any right, either hereditary or elective.

The Australian is arraigned by the European as a thief; but, destitute of almost every form of social life, he has, of course, no notion of the rights of property. Excepting women, all things appear to be in common with a tribe; and, accustomed to supply his wants as he best may, it would be unreasonable to suppose he should make distinctions between the food which he finds promiscuously on the earth and the hatchet or nail which comes in his way, and which he knows will be of use to him. In short, this race, the last and lowest of the human species, appears to be as barbarous as can well be imagined; and in this state they have existed for centuries, without either the power or the wish to make the first step in civilization. (*Hawkesworth*, iii., 506, 634, 657, &c.; *Prichard*, i., 370–411; *Flinders*, i., 128; ii., 212, &c.; *Oxley*, *Sturt*, and *Mitchell*, *passim*.) From these facts it has been concluded that the Australians are incapable of civilization (*Field*, 944); that they are essentially, and not accidentally, inferior even to the negro. But, degraded as they are, this inference is perhaps hardly warranted, at least to its full extent.

Nature has been singularly unkind to the Australian, not in his conformation only, but in the circumstances by which he has been surrounded. The fertile spots fitted for the supply of his limited wants are separated by deserts as wild and inhospitable as the sands of Arabia; and to pass these, he had not, like the Arab, the assistance of patient, strong, and faithful servants of the brute creation. No rivers flow through his strangely-constituted land; and thus communication, the great refiner and improver of man, was rendered difficult and of rare occurrence. His soil was destitute of those plants which, though "eaten in the sweat of his brow," are the incentives to man's labour, and the reward of his toil; nor did it feed a single animal like those which, in more favoured regions, have formed from time immemorial the shepherd's occupation and wealth. The Australian being thus shut out from the two grand primitive employments, his life could be neither pastoral nor agricultural. Under less adverse circumstances, the red man continued a hunter in the greater part of America, during the ages that preceded his discovery by the European; but even this resource was only very partially available to the Australian; for not only were the animals around him inferior in kind, but also remarkably few in number. Even the excitement of danger, which may be supposed to have roused the African to exertion, by making his life a constant struggle with the fierce and powerful tenants of the woods, was wanting here; for in Australia there was nothing dangerous, except some noxious reptiles, which do not, however, appear to have very fatal powers. The Australian has had nothing but hunger to contend with; and this he has endeavoured to appease by picking up the spontaneous products of his ungrateful soil, and the shell-fish found on the sea shore, with insects and reptiles; to which he occasionally added a kangaroo or bird overtaken or destroyed by accident. And Mitchell mentions, that such is the scarcity of the latter kind of food, that young men are forbidden to eat it. (ii., 340.) Of superfluities the Australian has had no knowledge; and the surmise of Cook, that it was impossible the inland country should subsist inhabitants at all seasons (*Hawkesworth*, iii., 631), was found by Sturt to be fatally verified in the dry year of 1828. (i., 137.)

But the adverse circumstances now alluded to do not, as some suppose, fully explain the barbarous condition of the Australian. The stupidity of his nature, and the inertness of his faculties, are evinced by his having made few or no efforts to increase his supply of food, or to obviate those incessantly recurring attacks of famine to which he has always been exposed. His want of other things should have made him an expert fisher and hunter of such animals as are native to his country: but he is neither one nor the other; and though it be probably going too far to say that the Australian is incapable of improvement, the fair presumption seems to be, that he is destined to remain forever at the bottom of the scale of civilization; and to be inferior in the point of comfort, as he has hitherto hardly been superior in contrivance, to many of the lower animals.

Mitchell thinks, apparently with some probability, that the increase of wild cattle will materially improve both the comforts and the character of the natives (ii., 345); but at present it is not possible to imagine a closer approximation to the least intelligent of the brutes than the Australians. Their arts are confined to the erection of extremely rude huts (and these are not numerous in the warmer latitudes), spears and fish-hooks, stone hatchets, a kind of shield, and a wooden missile, thin and curved, which, when thrown by

a skilful hand, rises with a rotatory motion in the air, strikes at a considerable distance, and returns to within a few yards of the thrower. A rude species of canoe serves to carry them across narrow creeks; but the greatest skill and taste is displayed in their burial mounds, which nearly resemble the barrows of the Celts, and, like them, have the corpse always disposed with the head towards the E. The Australians believe in good and evil spirits; but it does not satisfactorily appear that they offer either prayers to the one, or deprecations to the other. (*Hawkesworth*, iii., 631–645; *Collins' Appen. pass.*; *Oxley*, 136, *&c.*; *Sturt*, i., 129, *&c.*; *Mitchell*, i., 260; ii., 193, 335–346, *&c.*)

V. History and Discovery.—Some accidental discoveries were made by the Spaniards as early as 1526; but the first accurate knowledge that was gained in Europe of these S. lands was by the voyage of the Dutch yacht Duyfhen, which, in 1605, explored a part of the coasts of New Guinea. In the following year, Torres, a Spaniard, passed through the straits, which now bear his name, between that island and continental Australia; and, under the name of an island, gives the first account of the N. part of the latter mass of land. The Dutch continued to be the chief discoverers for the next forty years, chiefly from their possessions in the E. Indies; and between the years 1642 and 1644, Tasman completed the discovery of a great part of the Australian coast, together with the island of Van Dieman's Land, which is now pretty generally, and we think properly called Tasmania. During these forty years, the Dutch navigators succeeded in surveying about half the continental coast line; and the names bestowed upon various parts of the land, as Carpentaria, De Witt's Land, Arnheim's Land, Endiacht's Land, Nuyt's Land, Leuwen's Land, Edel's Land, *&c.*, commemorate the names either of the discoverers themselves, or of the ships in which they sailed. It was late before the English entered on the career of discovery; but, once entered, they prosecuted it with vigour. Dampier, between 1684 and 1690, explored a part of the W. and N.W. coasts; and in the remaining part of the 17th century, completed this survey, gave his name to the archipelago lying E. of N.W. cape, and pushed his inquiries to the islands of New Guinea, New Britain, and New Ireland; the straits between the first two being called by his name. Between 1763 and 1766, Wallis and Carteret, the latter miserably appointed, followed in the track of Dampier, and added to his discoveries the investigation of New Hanover and other islands. These were followed by Cook, who first made known the E. coast of continental Australia, the previous discoveries having been confined to the N. and W. This was in 1770; and this great navigator discovered, in the same voyage, the island of New Caledonia. It is scarcely too much to affirm, that Cook's survey of the E. coast did more for Australian discovery than the united labours of all who preceded him; nor should the name of Bligh be forgotten, who, after the mutiny of the Bounty, in 1789, though in an open boat, and devoid of almost every necessary, carried on a series of observations on the N.E. coast, which added considerably to the general stock of knowledge. The colonists had, however, arrived on the soil the year previously to this; and, simultaneously, home and colonial expeditions were set on foot for exploring the new land which had become the residence of Englishmen. It should be observed, however, that, previously to this, France entered on the task of southern discovery, but with no great success; Navigators' islands, and the Louisiades, explored by Bougainville, between 1768 and 1770, being the most important additions. Edwards, in 1791, Bligh (2d time), and Portlock, in 1792, and Bampton and Alt, in 1793, nearly completed the knowledge of Torres' straits and a great part of the N. coast; but the greatest discoverers, towards the end of last century, were Bass and Flinders, who surveyed a great extent of coast, mostly in open boats. In 1798 they sailed through the strait between Tasmania, or Van Dieman's Land, and the continent, these two being marked in Cook's chart as continuous, and their junction having been, down to this time, a subject of speculation. In the last year of the 18th century, Grant explored a portion of the S. coast, which bears his name; and, in the five following years, Flinders completed a survey of the S. and E. coasts, and the gulf of Carpentaria, which may be regarded as nearly perfect. In the same years, Baudin's expedition was employed on the same coast and Van Dieman's Land, the French and English commanders having met in Encounter bay, so named in consequence of that event. The unwarrantable detention of Flinders for six years in Mauritius, despite the letter of protection from the French government, is matter rather of political than of geographical history; but it is right to advert to the fact, that the French authorities made use of his discoveries, while they omitted his name. The present generation has, however, done him justice, and the extent and value of his labours are universally acknowledged.

The voyages of Captain King completed the survey of the Australian coast, except for about 500 m. between the lats. of 22° and 14°. The progress of inland discovery has been already noticed. (*Flinders' Introduction*; *Burney's Chronol. Account of Discov. in S. Ocean*; *Sir J. Narborough, Hawkesworth, Dampier, Flinders, and King, passim.*)

Extent and Population.—The following table of the extent and population of the different portions of Australia has been partly adopted from Malte-Brun; but with some material modifications:

	Surface in sq. miles.	Colonial Population.	Native Population.	Total Population.
New Holland . .	2,940,880	110,000	60,000	170,000
V Diemen's Land .	12,000	50,000	3,000	53,000
N. Caledonia . .	6,108	. .	40,000	40,000
N. Hebrides . .	2,491	. .	150,000	150,000
Q. Charl. Isles .	1,527	. .	30,000	30,000
Solomon's Isles .	17,610	. .	100,000	100,000
Louisiades . .	764	. .	10,000	10,000
N. Britain . .	24,433	. .	65,000	65,000
N. Guinea . .	305,540	. .	500,000	500,000
N. Zealand . .	. .	. .	250,000	250,000
Total . .		160,000	1,208,000	1,368,000

The number of native inhabitants, though a good deal less than that given by Malte-Brun, is probably overrated; every traveller speaks of the deserted nature of the interior; and Mitchell, whose travels extended over nearly 1-7th of the continent, does not estimate the aborigines at more than 6000. The white population, on the other hand, is rapidly increasing. Four English settlements have been made: New S. Wales, established 1788; Van Diemen's Land, 1808; Swan River and K. George's sound, 1829; and S. Australia, on Spencer's gulf, 1834.

AUSTRIA (THE ARCHDUCHY OF), the nucleus and centre of the Austrian empire is divided into the two provs. of Austria above the Enns, and Austria below the Enns, commonly termed Upper and Lower Austria. The lower prov. has for centuries experienced no alteration in its boundaries; but Upper Austria was enlarged in the present century by the incorporation of the archbishopric of Salzburg, with the exception of the lordship of Berchtesgaden, which fell to Bavaria, and of the district lying along the right bank of the Inn from the Salza to the mouth of that river. The archduchy of Austria lies between lat. 46° 57′ 25″ and 49° 0′ 30″ N., and long. 12° 46′ and 17° 7′ E.; and, according to the measurement of the imperial engineers, contains 15,017 Eng. sq. m., of which 7317 belong to the lower, and 7700 to the upper prov. But Blumenbach estimates the area of Upper Austria at only 7298 sq. m. The boundary of the archduchy is formed towards Tyrol and Carinthia by the central chain of the Noric Alps, in which the primitive formations predominate. The highest summits of these Alps are found within this short space; viz., the Gross Glockner, 11,782 ft., Sulzbach Kees, 11,270 ft., Krummhorn, 11,104, *&c.* The Gross Glockner is the highest point of that range of the Alps which stretches from the Brenner pass to the Danube. Immense glaciers and beds of eternal snow fill the clefts and cover the higher declivities of these lofty summits, from which several important rivers derive their origin. The N. limestone range of the Alps runs parallel to this central chain, with which it is connected by a branch which abuts against it between Gerlos and Wald, at the sources of the Salzach and Valley of Zill. Between the Salza and the Inn these mountains cover the former archbishopric of Salzburg with a number of steep and extensive ranges. Such are the Tannen and Untersberg. From the right bank of the Salza this chain continues to run parallel to the central chains, and its highest summits form the frontier of Austria towards Styria. Near Hallstadt the highest summit rises in the Thor Stein, with several peaks, to the height of 9448 ft. Near Eisenerz the Enns traverses the chain which runs out, diminishing, both in elevation and extent, towards the Danube near Vienna. Other remarkable hills of this line are the Gros Priel, 8580 ft.; the Oetscher, 6062 ft.; and the Schneeberg, near Wiener Neustadt, 6858 ft. To the N. of the Danube the Bohemian forest throws out its offsets to that river's bed, whose banks offer, in consequence, highly picturesque scenery during its course from Passau to Vienna. Near Krems the highlands recede from the river, and the frontier between Moravia and the archduchy is marked by a row of insignificant heights, which run parallel to the Danube as far as the March. The lesser Carpathians and the Leitha hills mark the frontier towards Hungary on the E. The southern, or limestone range, is traversed at several points by the Inn, Salza, Traun, and Enns, which are navigable along the greater part of their course, and fall into the Danube. Several smaller streams likewise unite with the Danube; such as the Ybs, Erlaff, Trasen, and Wien. The Leitha falls into the Danube in Hungary, and the Morawa, or March, which rises in Moravia, unites with that river on its left bank, a little to the W. of Presburg, after having for some distance marked the Hungarian frontier. The Mur, which rises among the lofty summits of Lungau in Salzburg, flows into Styria.

AUSTRIA, ARCHDUCHY OF.

The Danube enters the Austrian territory at Innstadt, opposite Passau, where it is joined by the Inn, which at that spot is almost larger than the stream into which it merges. The elevation of the surface of the united river under the bridge at Passau is, according to Lamont, 868 Paris feet above the sea; its breadth is 650 feet. The left bank, for some distance below Passau, belongs to Bavaria; but from Engelhard's cell the river belongs, on both sides, to Austria. At Linz the breadth of the Danube is 654 feet; and, as this place is looked upon as the key to the navigation of the river, strong fortifications have been erected to protect it, those on the left bank being quite independent of the works which surround the town. The navigation of the Danube between Passau and Vienna is accompanied with no difficulty except that of overcoming a strong current in mounting the stream. The high rocky banks confine the river in one bed, and its depth is considerable, with the exception of one spot near Grein, where reefs of rocks occasion a surf which used formerly to be much dreaded. Under Maria Theresa and Joseph II. these rocks were, however, so far reduced by blasting, that they offer no serious obstacle to navigators. Between this point and Presburg the fall of the river is said to amount to 450 ft., and the rapidity of its current in the canal of Vienna to be 8 feet a second. This canal is an arm thrown off from the main stream a few miles above the city, under the walls of which it passes. The main stream is separated from it by the Prater island, and one or two small islets called *Auen*, and which together have a breadth of nearly 3 m. Between Vienna and the Hungarian frontier the river forms numerous islands; and, as its course lies through the plain, is apt to change its bed after floods. It is here only navigable at periods of drought for vessels drawing but little water. The greatest breadth which its various arms embrace is, now, near Gross Enzersdorf, where, from shore to shore including the island of Lobau, it measures 6325 yards. It was near this spot that Napoleon erected his bridges; but the main stream runs now in a less favourable position for an enterprise of this kind. On the frontiers of Hungary the Danube is once more shut in between the fall of the Alps, which flatten down almost to its level on the S., and the rise of the lesser Carpathians on the N. bank. This passage divides the river into the Lower and the Upper Danube; and in antiquity the name Danubius, from this spot onwards, gave place to that of Ister.

Two canals unite with the Danube. One in Upper Austria, which connects the immense forests of Krummau, the property of prince Schwarzenberg in the Bohemian forest, by means of the little river Mühl, with the Danube, is 40,000 Vienna klafter (47 m.) in length; but is only used for floating down timber. The second leads from Wiener Neustadt, through the plain, to Vienna, and is navigable for barges; but little traffic is at present carried on by its means, although coals are found in the neighbourhood of Wiener Neustadt. The lakes of Upper Austria are not only celebrated for their highly picturesque scenery, but are eminently useful as means of internal communication. The most remarkable are those of Gmunden or Traun, 7½m. in length, and nearly 2 m. across in the broadest part; the lake of Hallstadt, 5 m. long, and about 1 m. broad; the lake of Aussee, which is much smaller, is connected with the other two by means of the river Traun, and the salt produced along the line it traverses, together with the produce of the extensive forests of the *Salzkammergut*, as this portion of the duchy of Salzburg is named, are forwarded by its means to the Danube. The Atter lake is 11½ m. long, and 2½ m. broad. The Mondsee and lake of St. Gilgen are also extensive, but are not connected with any navigable river, except for the purpose of floating down wood. The Traun circle alone, in which these are situated, is said to contain 27 mountain lakes, the greater part of which are very small. In Lower Austria some small lakes are found on the frontiers of Steiermark; the most considerable is that of Erlax, which is but 1500 yards in length and about 600 in breadth. The number and variety of the waterfalls add greatly to the beauty of the mountain scenery. The cascades of Gaskin and of Golling, near Salzburg, the latter of which is nearly 300 feet in perpendicular descent; and the cataract of the Traun, where that fine river falls over a rocky ledge 55 feet in height, rank among the most picturesque in Europe.

Extensive morasses are found in Upper Austria, in the vale of Pinkgau, or of the Salza. These marshes extend 15 m. in length by 3½m. in breadth. In the Mühl circle, on the N. side of the Danube, and in the neighbourhood of the principal lakes, large tracts of marshy land also occur.

The climate of the archduchy varies according to the elevation of the ground. In Upper Austria the mean temperature at Linz has been found to be +7° 6′ Reaumur's scale (=48° 28′ Fahr.); at Salzburg it is 7° 4½′ R.; at Kremsmünster, 7° 4′. In the year 1825 the mean temperature was 7° 41′ at Kremsmünster, the greatest heat +23° R. (=83° 45′ Fahr.); the greatest cold, —10° 7′ R. (=0° 15′ Fahr.). At Vienna the mean heat is 8° 30′ R. (=51° 7′ Fahr.); in 1836 it reached +8° 53′ R. The greatest heat in that year was +26° 9′ R. (90° 48′ Fahr.); the greatest cold, —14° 4′ (=0° 21′ Fahr.). The mean elevation of the barometer was 28′ 2″ 4‴. In 1837 the greatest cold was —15° 5′ R. (=—1·55 Fahr.). The elevation of Vienna is 954 feet, that of Salzburg 1230 feet above the level of the sea. Baron Welden has fixed the limit of forest vegetation at 5000 feet, that of eternal snow at 8000 feet.

The surface of the country in Upper Austria presents a succession of mountain tracts, whose elevation, in the southern parts, admits of little cultivation, but which are extensively clothed with fine and valuable forests. As they subside towards the Danube, the country assumes a more cultivated appearance, but the effects of the cold winds from the snow-covered summits is detrimental to the growth of more delicate plants. The vine is first met with at Krems in Lower Austria, but follows thence the course of the Danube, and where the mountains open near the capital, both their sides and the plains are covered with vineyards, interspersed with fruit-trees of every description. The valley of the Enns is remarkable for its luxuriant growth of corn, as is the plain of Tulln on the Danube. The Marchfield between the Moravian frontier and the Danube is also highly productive, although much exposed to drought.

The Archduchy of Austria is portioned into ten Divisions.

Lower Austria.			Upper Austria.		
Provinces.	Germ. Sq. m.	Pop.	Provinces.	Germ. Sq. m.	Pop.
Capt. Generalship of Vienna.	.8	336,699	1. Traun circ.	77	177,000
1. Circle below the Vienna Forest	80	256,700	2. Muhl do.	58	202,100
2. Do. below the Mannhardsberg	67	268,160	3. Hausruck do.	43	174,760
3. Do. above the Vienna Forest	101	233,760	4. Inn do.	40	135,936
4. Do. above the Mannhardsberg	91	231,460	5. Salzach do.	130.8	157,204
Lower Austria	359.8	1,310,·69	Upper Austria	348.8	847,000

The movement of the population has been as follows during the last 5 years:

Births.

Lower Austria, without Vienna.

	Legitimate.		Illegitimate.	
	Male.	Female.	Male.	Female
1836	16,241	15,046	2,161	2,201
1837	15,955	15,180	2,320	2,260
Total of 5 years including Vienna.	100,717	95,714	28,548	27,417

Upper Austria.

1836	10,371	9,746	2,449	2,230
1837	10,364	9,065	2,256	2,154
Total of 5 years including Vienna.	52,530	49,366	11,507	11,182

Deaths.

	Lower Austria, without Vienna.		Upper Austria.	
	Male.	Female	Male.	Female.
1836	17,496	17,468	11,966	12,098
1837	17,468	16,614	12,965	12,698
Total of 5 years with the Capital.	130,786	121,967	61,283	59,985

Marriages.

	Lower Austria, without Vienna.	Upper Austria.
1836	7,838	5,526
1837	8,168	5,486
Total of 5 years including the Capital.	55,220	27,056

The Specification of the Kinds of Death in the Archduchy is for 1836 and 1837, without the Capital.

	Sickness.					Violent.				
	Ordinary.	Local.	Epidemic.	Smallpox.		Suicides.	Hydrophobia.	Murdered.	Accident.	Executed.
1836	54,384	103	3,805	102		76	8	12	514	4
1837	58,634	67	388	33		80	3	20	53	1

The subjoined table gives a survey of the amount of cultivated land, and of the estimated produce, from official

sources; but that of the produce must be considered as too low. The agriculture of the archduchy is in general good, although open to many improvements, especially in the cultivation of the vine. The best wines are produced near Vienna, and are the growths of Vesselau, Gumpoloskirchen, Closternenburg, and Weidling. The produce of the vintages in the plain are inferior to those on the hills. Cider is extensively made in Upper Austria. A remarkable circumstance is the low value of land in the neighbourhood of so large and rich a capital as Vienna; the common price of a joch (=1·4 acres) not exceeding 300 fl., or £30. The price does not fall much in a circumference of several miles.

Amount of cultivated Land, with its Distribution, in the Archduchy of Austria, per Eng. Acre, from Becker's Handel's Lexicon.

Arable.	Vineyards.	Meadows.	Commons.	Forests.	Total.
3,177,410	114,020	1,391,236	257,414	3,219,561	8,259,631

Amount of Produce of cultivated Land in the Archduchy of Austria.

Wheat.	Rye.	Barley.	Oats.	Wine in Imp. Gals.	Wood, in cub. Vienna Fathoms.
397,326	328,316	466,562	1,647,909	25,1·7,210	2,053,131

Number of Head of Cattle in the Archduchy of Austria, from the National Encyclopædia.

	Horses.	Oxen.	Cows.	Sheep.
Lower Austria	57,728	90 509	199,920	252,761
Upper Austria	43 134	86,349	278,366	191,514

Mining is an extensive branch of industry in both provinces.

Table showing the Produce of the mines in the Archduchy of Austria during 5 Years, from 1830 to 1834.

Lower Austria.

	In Marks.		In Cwt. Vienna weight = 1 1-10 Cwt. Avoirdupois.										
	Gold.	Silver.	Copper.	Lead.	Litharge.	Pig Iron.	Cast Iron.	Alum.	Copper Vitriol.	Arsenic.	Sulphur.	Coals.	Graphites.
1830	.	.	.	.	.	11,564	.	1,296	.	.	.	243,405	56
1831	.	.	.	.	.	11,624	.	1,340	.	.	.	178,565	266
1832	.	.	.	.	.	11,715		670	.	.	.	214,045	197
1833	.	.	.	.	.	12,410		1,006	.	.	.	231,020	93
1834	.	.	.	.	.	13,440	.	1,630	.	.	.	358,865	1,390
Total	.	.	.	.	.	60,753	.	5,942	.	.	.	1,225,900	2,002
Aver.	.	.	.	.	.	12,151	.	1,189	.	.	.	245,180	400

Upper Austria.

1830	124	300	510	200	1	24,168	714	487	.	330	736	19,793	
1831	89	358	434	240	1	18,750	178	380	.	350	598	28,230	
1832	84	294	292	75	1	12,102	513	192	250	694	707	12,950	
1833	112	288	388	.	.	20,028	307	312	630	290	812	22,136	
1834	94	280	422	45	.	22,746	506	88	654	340	453	30,120	
Total	504	1,610	2,016	560	3	97,794	2,218	1,459	1,534	2,034	3,306	113,229	
Aver.	100	322	403	140	1	19,534	444	292	512	407	661	22,646	

The official returns of the produce of the salt-pans of Aussee, Hallstadt, Ischl, Ebensee, and Hallein, in Upper Austria, are not published; but the *Nat. Encyclopædia* estimates it at 46,000 tons, and supposes that from 5000 to 6000 individuals are employed in the works. Owing to the great consumption of all articles in the capital, the province exports but little produce, while its imports are very great. For the trade of Vienna we refer to that article. As the high roads from Trieste and Hungary to the western and northern provinces pass through Vienna, the carrying business is very great, and in general well managed; and the communication between the capital and all the provinces is very brisk. The roads throughout the archduchy are excellent, and the communication between Vienna and the upper province, as well as with Hungary, is facilitated by steam navigation on the Danube, by means of which the journey from Linz to the capital is performed in a day, and that from Vienna to Pesth in eighteen hours. In the spring of 1839 the iron railway, now forming, to Poland, will be opened as far as Brunn, in Moravia, a distance of 80 m.; and another leading from Vienna to Raab, in Hungary, will be commenced.

The inhabitants of the archduchy are all Germans, and are distinguished for their industry and quickness of apprehension. As the population is more sparingly distributed in the mountainous parts than in the plains and valleys, there is an appearance of well doing throughout all classes of the inhabitants; and the schools for the lower classes are both numerous and well attended. The dress and manners of the inhabitants of the mountainous parts, especially of Salzburg, resemble those prevailing in Styria and Tyrol, as the manners and customs, as well as the occupations, of the Austrian mountaineers are nearly the same with those of the neighbouring provinces. The business of driving the cattle up to the Alpine pastures in summer, whence in the autumn they are brought down with festive parade, is the department of the women. Wood-cutting and mining are the occupations of the men. Hand-weaving and spinning of flax, cotton, and wool, are much carried on, especially during the winter. As many as 23,000 individuals are said to have been employed by the carpet manufactory at Linz, while it was carried on upon its largest scale. Along the Enns and the Yps the iron manufacturing district is situated; but agriculture is the chief employment of the inhabitants of the grand duchy, and is managed with considerable skill. The mountaineer is confined to more frugal fare than the inhabitant of the plain enjoys; oatmeal or barley puddings, prepared with the milk and butter of his cows, being his chief support. Whether this species of nourishment, or the quality of the water, or the nature of his occupations, be the cause of the *goitre* or swelling of the neck, which commences on the mountains on the Styrian frontier, is not known. The lowlanders' enjoyments are sought in the dance and in the wine-pot, of which his libations, especially of the one-year-old liquor (*heuriger*), are both deep and frequent. The large earnings which a slight exertion of industry secures in a country whose climate and soil are highly adapted to furnish the blessings of plenty, give a cheerful appearance to a large portion of the lower classes, that is scarcely to be met with anywhere else; and the lower Austrian deserves credit for both earning the good things of this life, and for enjoying them.

The Gubernia at Linz and Vienna are the chief provincial authorities for the provs. of Upper and Lower Austria. Under these is the captain of the circle, who unites the judicial and administrative powers, in as far as the inhabitants of the country are concerned. In towns the administration of police is confined to a special commissary, and the magistracy performs the judicial functions. The manorial courts of the large proprietors are placed under the courts of the circle, and may be appealed from to the latter. The governor of Upper Austria resides at Linz; which, as the cap. of the prov., is the seat of the authorities. Those for Lower Austria reside at Vienna. The Archbishop of Vienna is the head of the clerical authorities in the Catholic church for Lower Austria; the Archbishop of Salzburg exercises the same functions for the Upper prov. Superintendents at Linz and Vienna conduct the clerical affairs of the Protestants under the Consistory of Vienna. The commander of the forces for both provinces resides at Vienna. The military conscripts of the provinces of Austria are enrolled in the 4th, 14th, 49th, and 50th regts. of infantry, in the 3d and 4th regts. of cuirassiers, the 2d regt. of dragoons, and the 1st light cavalry. They farther supply two rifle corps and a regiment of artillery, amounting in all to 20,000 men.

AUSTRIA (EMPIRE OF), one of the largest, most populous, and most important of European states.

Situation and Extent.—The empire of Austria is situated in central and southern Europe; and, with the exception of a narrow strip at its S. extremity, projecting along the coast of the Adriatic, its territory forms a very compact mass. It extends from about 42° to 51° N. lat., and from about 8° 30′ to 26° 30′ E. long. Its length, from lake Maggiore, in Italy, to the E. frontier of Transylvania, is about 860 m., and its breadth (exclusive of Dalmatia), from the S. frontier of Croatia to the most N. point of Bohemia, about 492 m. The total area is estimated, in the map of the Austrian engineers, at 12,153 sq. Germ. or 257,368 sq. Eng. m. On the S., Austria is bounded by Turkey, the Adriatic sea, and the inde-

pendent states of Italy; W., by the states of the King of Sardinia, Switzerland, and Bavaria; N., by Prussia, the free city of Cracow, and Russian Poland; and E., by Russia and Moldavia. The extensive frontier of the empire, upwards of 4950 m. in length, has the rare advantage of being advantageously defined by natural boundaries; such as mountains, large rivers, lakes, and the sea, offering favourable military positions for defence, with the exception of a portion of the frontier of Galicia, towards the Russian provinces, which is open.

Divisions, Population, &c.—The Austrian empire is composed of many states, differing widely in extent and population. As the far greater part of the provinces were united under the imperial sceptre by peaceable means—that, is by inheritance or by treaty*—the boundaries of all remain as they existed while they formed independent states, with the exception of the Italian provinces, whose frontiers and divisions date only from 1815.

The following table shows the area and pop. of each prov. A division, of no less importance than the political one, is noticed in the margin; showing to what race the mass of the inhabitants of each prov. belongs. The amount of pop., down to the close of 1837, has been found, by adding the surplus of the births over the deaths, to the amount found by enumeration in all the provinces, except Hungary, in 1834. The pop. of Hungary and Transylvania—in which countries the nobles and the clergy make no returns of their number, and which are not subject to the military conscription—can only be found by approximation:

	Provinces.	Area in Germ. sq m.	Population in 1836.	Pop. to a Germ. sq. m.	Chief Towns.	Population in 1836.
Germans.	Lower Austria	708·6	1,341,039	2,989	Vienna	326,350
	Upper Austria		850,321		Linz	23,310
	Tyrol	510·4	831,298	1,609	Innspruck	10,730
	Styria	399·4	940,951	2,355	Gratz	39,770
Slavonians.	Carinthia	519·6	748,785	2,331	Klagenfurt	12,000
	Carniola		461,166		Laybach	13,000
	Illyrian Coast				Trieste	44,530
	Bohemia	952·9	4,128,661	4,328	Prague	102,918
	Moravia and Silesia	481·5	2,143,052	4,430	Brunn	36,700
					Troppau	12,550
	Galicia	1,547·6	4,642,627	3,000	Lemberg	54,960
	Dalmatia	272·7	381,476	1,398	Zara	6,461
	Hungary, with the military frontier	4,894·8	12,505,631	2,555	Ofen (Buda)	40,600
					Pesth	64,000
Magyars.—Transylvania		1,006·8	1,963,435	1,950	Clausenburg	14,500
Italians.	Lombardy and Venice	851·9	2,528,854	5,424	Milan	150,900
			2,100,500		Venice	97,150
	Totals	12,152·6	35,670,996	2,927		

In S. Hungary the greater part of several countries, besides Croatia and Slavonia, are inhabited by Slavonians. On the N. side of the Danube, eleven counties of the prov., "*on this side the Danube*," and a great part of the prov. "*beyond the Theiss*," are Slavonian; the latter prov. containing the *Rusniaks*, or Red Russians; the former the *Slowaks*, or Slavonians of Moravian descent. The total number of Slavonians in Hungary is estimated at 5,800,000, inhabiting 5789 towns and villages. The Magyars (Hungarians) are 4,500,000 in number, dwelling in 4739 towns and villages; the Wallachians have 1094, and the Germans 921 towns and villages. The various races of the inhabitants may be classed under the following divisions:

Slavonians in the N. prov. Bohemia, Silesia, Moravia, Galicia, and N.E. part of Hungary	14,000,000
Ditto, in the S. prov. Illyria, Dalmatia, Croatia, Slavonia, and military frontier	4,800,000
Magyars in the plains of Hungary, on each side the Danube and the Theiss, and in Transylvania	4,500,000
Germans in the Germ. provs.	8,500,000
Ditto, scattered through the Empire	2,500,000
Italians, in Lombardy, Venice, and S. Tyrol	4,400,000
Wallachians in Hungary and Transylvania	900,000
Armenians, Albanians, Zigeuner, &c.	150,000
Jews	600,000

Nearly every prov. differs from the others in the density and distribution of its population. In Galicia and Hungary, both agricultural countries with comparatively little trade, the villages are usually very large and populous, but widely scattered. In Lombardy and Venice the inhabitants are so much scattered over the face of the country, that the inmates of towns form but a small proportion; and are almost exclusively the nobility and traders. The German and Slavonic provinces show a medium between the two. Czornig gives the following calculation respecting the density of the population in 1836;

Provinces.	Number of Towns and Villages in a German sq. m.	Number of Houses in a German sq. m.	Number of Inhabitants. To a Village.	Number of Inhabitants. To a House.
Hungary	3	391	931	7·1
Galicia	4	425	712	6·6
Austria	11	898	202	7·6
Lombardy	25	751	250	8·4

Considerable difficulty attends the determination of the precise rate of increase of the pop. and of mortality in the Austrian empire, owing to the ravages occasioned by the cholera morbus. This disease visited every prov. twice within the last ten years, and caused, for the time, a serious decrease of pop. From the experience, however, of the years in which this epidemic did not prevail, it seems that the increase in the greater number of provs. is very rapid. The following tables have been calculated, expressly for this work, from the annual official returns published in the *Vienna Gazette*. No returns are given for Hungary or Transylvania:

Annual Average of five Years, from 1833 to 1837 inclusive, for the under-mentioned Provinces.

Marriages.	Births. Legitimate.	Births. Illegitimate.	Deaths.	Annual Increase of Births over Deaths.
	Males 377,694	Males 42,087		
	Females 355,282	Females 40,230		
175,865	732,966	82,317	629,877	133,407

Table, showing the Increase of the population, &c., calculated from the Returns of each Province for two Years, in which there was no Cholera.

Provinces.	Normal Years.	In proportion to 100 of the Population. Av. Increase of Pop.	Deaths.	Marriages.	Births.	Proportion of Legitimate to Illegitimate Births.
Austria	1833. 1836.	·11	3·4	·77	3·5	3·7 to 1
Styria	1836. 1837.	·58	2·8	·69	3·8	4·4 —
Bohemia	1833. 1834.	·97	3·0	·79	3·9	3·3 —
Moravia and Silesia	1833. 1834.	·91	2·2	·85	4·8	6·0 —
Galicia	1836. 1837.	1·42	3·8	1·09	5·0	12·0 —
Corinthia	1833. 1837.	·78	2·0	·66	3·2	2·0 —
Carniola	1833. 1837.					12·1 —
Illyrian coast	1833. 1837.					15·4 —
Lombardy	1834. 1837.	·77	2·4	·87	4·2	24·0 —
Venice	1834. 1837.	·75	2·3	·94	4·1	25·0 —
Dalmatia	1834. 1836.	1·10	2·3	·91	3·4	27·4 —
Tyrol	1836. 1837.	·49	2·6	·70	3·1	18·1 —
		·78	3·17	·90	3·97	8·4 to 1

Among the different manners of death specified, we notice the following:

Annual average of five years, from 1833 to 1837 inclusive, for the same provinces.

Small-pox.	Still-born. Legitimate.	Still-born. Illegitimate.	Hydrophobia.	Murdered.	Suicides.	Executed.
	Male . . 4562	Male . . . 1028				
	Female . . 3027	Female . . 872				
4869	Total . . 7589	1900	66	429	765	33

* Galicia and a part of the military frontier were the only acquisitions by actual conquest.

From the extreme strictness of the Austrian prov. administration, these official returns, extending over a population of upwards of 20,000,000, form a most valuable contribution to the statistics of European population and mortality. It will be observed, that, in Galicia, where the cheapness of provisions encourages early marriages, not only the increase of pop. is greatest, but the number of illegitimate births is remarkably small in proportion. A nearly similar result is given by the Italian provs., in which an unremitting industry and judicious distribution of labour afford a competence even where the prices of provisions are higher. For a comparison of the prices we refer to the head *Trade, &c.* In the calculation of the proportional longevity in the provs., the same order does not occur which is shown in the increase of the population. The average of six years for the above named provinces, gives 338 individuals in 10,000 who attain 80 years and upwards; of which number Dalmatia had the most (during the six years 666), and Galicia the fewest (208). Of 100,000 individuals 82 attained 100 years and upwards: here, again, Dalmatia stands first, with 196 in six years; Galicia and the other Slavonic provinces rank next; Lombardy (21) and Venice (14) show the fewest.

Face of the Country.—Mountains.—The Austrian empire exhibits every variety of surface. Two grand mountain ranges, branching from the central group of the Alps, traverse it in different directions, throwing out numerous and extensive dependent branches. The first of these, which has been termed the *Hercyno-Carpathian* chain, divides the regions of the German ocean and Baltic from those of the Black sea and Mediterranean. Leaving the canton of Grisons, in Switzerland, this mountain range traverses Vorariberg in a N. direction to the lake of Constance; thence it passes through Wirtemberg and Bavaria, separating the regions of the Rhine and Elbe from that of the Danube, and re-enters Austria on the N.E. frontier of Bohemia, where it throws off an extensive branch of the Erz (Ore) mountains, which stretch into that kingdom and into Saxony. Taking a S.E. direction from the sources of the Eyer, this chain runs, under the name of the "Bohemian forest," nearly to the Danube, where it once more diverges to the N.E., and, dividing Moravia from Bohemia, sends out a branch into Prussian Silesia and Lusatia, named the Riesen (Giant) mountains. On the frontiers of Galicia and Hungary it joins the Carpathians, which branch off to the Danube near Presburg. The central Carpathians form the boundary between the above-named provinces, as far as the sources of the Sau and Dniester, where a chain of low heights stretch from them into the Russian territories, separating the region of the Vistula from that of the Dniester. The eastern Carpathians cover the N.E. counties of Hungary, the Bukowina, and Transylvania, as far as the Danube.

The second mountain range, which has much more elevated summits, and covers a larger tract of country, divides the region of the Mediterranean from that of the Black sea: it stretches from the frontiers of Switzerland and Piedmont in three chains, which, through Tyrol, run nearly parallel to each other. The central chain exhibits the primitive formations of granite and slate: its summits are covered with eternal snow, above the elevation of 8000 ft. Following the right bank of the Inn, as far as the point of junction of Salzburg and Carinthia, it takes a N.E. direction through Styria into Hungary, and subsides in the Leitha chain near the Danube. The two accompanying chains are of limestone: that on the N. covers northern Tyrol, Salzburg, and great part of the archduchy of Austria, and is intersected by the numerous streams which flow from the central chain to the Danube. The S. parallel chain sends its ramifications from S. Tyrol into the kingdom of Lombardy; and, passing through Illyria and the Croatian frontier district, unites with the Balkhan on the borders of Bosnia. Three important branches strike off from this chain, one of which stretches between the rivers Raab and Drave, under the name of the *Bakony* forest, into Hungary; a second divides the region of the Drave from the valley of the Save; and the third, stretching along the Adriatic through Dalmatia, is called by the natives, from its dark colour, *Monte Nero*, or *Negro*.

The length of the different mountain chains in the empire, when added together, exceeds 3000 miles.

The principal valleys in Austria are situated in the southern provinces, and run parallel with the Alps, in the direction of W. to E. They are found in Tyrol, Salzburg, Styria, and Illyria. Croatia belongs, for the greater part, to the valley of the Save; and Slavonia to the fertile vale of the Drave.

Large plains are also found within the empire; they follow, for the most part, the course of the principal rivers. Of the plain of the Po, between the Adriatic sea and the fall of the Apennines, the Northern part belongs to Austria. The plain or basin of Vienna, which stretches from the Leitha mountains to the heights of Moravia, is traversed by the Danube and the March. In Hungary there are two very extensive plains; one in Upper Hungary, situated between the Carpathians and the Bakony forest; the second, extending from the E. fall of the last-named forest and the Matra hills to the rise of the Transylvanian mountains, and from the central Carpathian chain on the north, to the mountains of Slavonia on the S. This, the largest plain in central Europe, is traversed by the Danube, Theiss, Maros, Drave, and their tributaries. The plain of the Vistula and the Sau, in Galicia, is a portion of the great level which stretches from the fall of the Carpathians on the N. to the Baltic sea.

Rivers, Lakes, &c.—The Austrian empire belongs to the regions of the Rhine, Danube, Elbe, Oder, Vistula, Dniester, and Po. The Rhine forms part of the frontier of Vorariberg, towards Switzerland from near Feldkirch, until it falls into the lake of Constance. The Danube enters the Austrian territories at Engelhardt's Zell, near Passau, where its depth is 17 ft., and its breadth 650 ft.: in its course through the provinces of Upper and Lower Austria and Hungary, it receives all the waters falling from the two grand mountain ranges, described above; the chief among which are, on its left bank, the March, Waag, Gran, Theiss, &c.; on its right bank, the Traun, Ens, Raab, Drave, Save, &c. All of these rivers, with many of their tributaries, are navigable, and, with the gradual development of the resources of this vast empire, must afford facilities for commercial communication of the easiest kind, and on a gigantic scale. The Elbe has its source in Bohemia, which it traverses in a direction from N. to S., being navigable for barges from Prague after its junction with the Moldau, which is navigable from Budweis. Besides the Moldau, it receives the Adler, Sapawa, Wattawa, Eger, and other streams of inferior note, before it crosses the frontier of Saxony. The Oder has its source in the chain of hills which connects the Silesian mountains with the Carpathians; it leaves the Austrian states without assuming the importance of a navigable river. The Vistula is formed by the junction of two mountain streams, which fall from the Carpathians, near Jablunka. It is navigable nearly along the whole of its course from Oswieczin to Zawychiest, a distance of upwards of 200 m., in which it forms the Austrian frontier. It receives the Dunajec, the Wisloka, and the Sau, the last of which is navigable from Przemysl, along its course of 120 m. The Dniester, which rises at the N. side of the Carpathians, where they branch off towards the Danube, through Transylvania, is navigable from the little town of Koniuszki, 38 m. S.W. of Lemberg. In its course through Galicia, it receives fourteen streams upon its left, and six mountain-brooks upon its right bank. The sources of the Sau, which falls into the Vistula, are situated farther to the E. in the Carpathians than those of the Dniester; and where these two rivers are large enough to be navigated by boats, they are almost connected by a series of lakes or ponds stretching through the sandy plain which extends from Przemysl and Jaroslow to Jaworow and Komarno, thus offering a natural communication between the Black sea and the Baltic. The Pruth rises in the same chain of hills, but soon enters to Moldavia. The main channel of communication for Lombardy is afforded by the Po, which, in its course through and along the borders of the Austrian territories, receives from the Alps the Ticino, Adda, Oglio, and Mincio, besides smaller streams. The Adige, the Tagliamento, and the Lisonzo, traverse the provinces of Venice and Illyria to the Adriatic.

Lakes, &c.—The lake of Constance may be counted among the Austrian lakes, although only a portion of its E. shore belongs to Austria. On the S. side of the Alps, the lakes Maggiore, Lugano, Como, Iseo, and Garda, are the most considerable. On the N. side of the same mountains, the largest lakes are those of Atter, Gmünden, or Traun, Hallstadt, and Augsee, which are connected together by the Traun, and the lakes of St. Gilgen and Monel See. The lake of Zirknitz, with others in the limestone hills of Illyria, although remarkable as natural curiosities, are of trifling extent. The Neusiedler and Balaton lakes, in Upper Hungary, are the largest in the empire; the water of the former is saltish.

Climate.—Four distinct climates are found within the limits of this extensive empire. The most southerly part of Dalmatia produces the palm-tree, and at Ragusa, the mean elevation of the thermometer is stated by Blumenbach to be $+11^{\circ}$ 8′ R., or 57° 3′ Fahr.: upon a line drawn along the S. foot of the Alps, the mean temperature at Milan is $+9^{\circ}$ 4′; at Temeswar, $+9^{\circ}$ 2′. On the N. side of that chain, in Linz, it is $+7^{\circ}$ 6′; in Vienna, $+8^{\circ}$ 5′ (nearly the climate of Strasburg); Buda, 8° 8′; in Klausenburg, $+8^{\circ}$ 3′. In Prague, the mean heat is $+7^{\circ}$ 9′; in Olmutz, $+7^{\circ}$ 3′; in Troppau, $+7^{\circ}$ 3′; in Lemberg, $+6^{\circ}$ 1′ R. Wine and Indian corn do not thrive to the N. of the last-drawn line, except in unusually favourable situations; but corn of all other descriptions, flax, hemp, and hardy fruits, attain perfection. The observations, at the observatory of Vienna, for 1837, give for the mean temperature

only + 7° 9′ R.; 26 days in that year were clear, 172 cloudy, with sunshine; 166 cloudy. Rainy days were 144, snow 58; and there were 139 fogs, 26 thunder-storms, and 17 storms. In the northern provinces, the air is mostly clear and salubrious. The greatest quantity of rain falls in the kingdom of Lombardy, the smallest quantity in the central districts of Hungary and in Dalmatia, which often suffer from excessive drought. In this last province, the fall of rain averages 12 inches: at Vienna the average was, for 1836, 15·99 inches; for 1837, 15·86. Tyrol has many varieties of climate, resulting from the elevation of its mountains in a southerly situation. The classification given by Francini for Switzerland has been found to suit Tyrol with equal precision. 1. The region of the vine, from 700 ft. to 1700 ft. above the level of the sea. 2. The region of the oak, from 1700 ft. to 2800 ft. 3. The region of the beech, 2800 ft. to 4100 ft.; the walnut only reaches 3500 ft.; the plum-tree, 3720 ft.; pear and apple trees 4100: but little wheat is grown in this region, but the meadows are excellent. 4. The region of fir, from 4100 to 5500 ft. 5. The lower Alpine region famous for its pastures, 5500 ft., to 6500 ft. 6. The Upper Alpine region, 6500 ft. to 8200 ft., above which is the region of eternal snow.

Natural Productions, Minerals, &c.—A statement of the produce of the mines in the Austrian empire is given under the head manufactures. We may here remark, that the amount produced is very far below the capacities of a country so highly endowed with mineral riches, that the extent of this source of wealth and industry is very imperfectly explored, and that what is worked neither attracts the amount of capital nor the degree of skill necessary to a successful result. In that statement, the amount of iron is not distinguished from the quantity of native steel obtained in Styria and Illyria, the only part of Europe in which the carbonated iron ore occurs, and where it is found in masses that require rather to be quarried than excavated. Platina is not found in Austria. Of the rarer metals, *titan* is found near Roese, in Hungary, *uran* in the Sudesen in Bohemia, *tellurium* in Hungary and Transylvania. Besides the opals of Hungary, the most beautiful that are known, an inferior kind is found in Moravia; carnelian, beryl, chalcedon, topaz, garnet, and amethyst, in Bohemia and Hungary, of superior quality.* Beds of coal have been found in nearly every province, but the cheapness and abundance of firewood have hitherto prevented much search from being made after them. Upwards of 100 descriptions of marble, quartz for the manufacture of glass, clays for porcelain and mineral dyes of all kinds, are also found in abundance. Of mineral springs, no country has so great a number; upwards of 100 are annually frequented, for the purposes of bathing and drinking the waters; among which Carlsbad, Toeplitz, Marienbad, Ischl, Gastein, Baden, Pistyau, Treutchin, Mehadia, and Roquero, attract visiters from all parts of the world.

Animals.—All the domestic animals found in England are met with in the Austrian empire. Exclusive of these, the brown bear is indigenous in the Alps and the Carpathians, the wolf in both these mountain chains, and the lynx is found in all the provinces. The chamois, red and fallow deer, roebucks, wild boars, all descriptions of game known in England, with the exception of grouse, and several kinds of birds unknown in our islands, are objects of chase. The urus and elk are sometimes found in the E. Carpathians, but only as stragglers. The ibex is nearly exterminated. Herds of wild horses of a diminutive size range the Hungarian plains; and even where the improvement of the breed is attended to, they are allowed to rove almost in a state of nature. The golden eagle inhabits Slavonia, and other large species are found in the Rhetian and Noric Alps. Herons of various kinds, some of the choicest plumage, abound in the morasses of Hungary; and there also the land tortoise is found in great numbers. The same morasses furnish an abundant supply of leeches, whence they are regularly transported by means of a series of ponds, that serve as so many stations, to Paris and the W. of Europe. Wax is an important product of the Bukowine and other S. provinces. Cantharides are found in several parts of Hungary; cochineal in Galicia; and pearls of a beautiful water are annually fished in the Moldau.

Products (Vegetable).—These comprise the different sorts of corn and of cultivated grasses found in Europe, with vines, flax and hemp, tobacco, hops, saffron, woad, some species of indigo, yellow wood or *rhus cotinus*, galls, and an immense variety of fruits, &c. The forests are of vast extent, and will, no doubt, come to be of great value. The mountain chains of the northern provinces and of the Alps are covered with fir, pine, beech, larch, &c. The low grounds, including the vast forest of Bukony in Hungary, with others in Transylvania, the Bukowine, Galicia, Slavonia, &c., produce oaks of a gigantic size, with beech, ash, alder, elm, &c. Every prov. is well supplied with wood, with the exception of Lower Austria (into which large quantities are imported from Tyrol and Upper Austria, to meet the great consumption of the capital), Lombardy Proper, and Hungary, where, from neglect of management and bad economy, the stock has in many parts been alarmingly reduced. In the other provs. the forests are well managed, and care is taken to supply the annual consumption by sowing and planting in proportion to the quantity felled. The proprietors of estates are obliged, in Austria, as all over Germany, to employ foresters, who have been educated in forest schools, and who have passed the necessary examination. Their business is to calculate exactly the quantity of timber that may be felled without diminishing the stock. The simple means at their command in back ranges of mountains are generally applied with great ingenuity to forward the felled trees to the common channels of communication. A kind of hollow railroad of timber (*Riesen*), sloping down the side of a mountain, often several thousand yards in length, and down which the trunks of trees are precipitated, is one means of transport. The trunks are raised from a valley to the summit of a neighbouring chain, over which they have to be transported, by means of ropes and pulleys, worked by a rude water-wheel temporarily erected by the woodman on a little brook (*Holzaufzug*); and the springs near the summits being led into a temporary reservoir on the ridge of the hills, the burden thus raised is received by it in order to be precipitated into the hollow on the other side, when the sluices confining the waters are opened (*Klause*). But while this ingenuity is shown in the management of the mountain forest-tracts of fir, the far richer wooded districts of Slavonia, the military frontier, and upper Hungary, in which the more valuable forest trees attain a size unusual in Europe, are neglected, and but little known. The carriage, instrument, and cabinet-makers of Vienna (who furnish the cheapest goods of the kind in Europe), are supplied from the better known, and rather more accessible forests of Illyria and Lombardy; but the want of capital is equally visible in this branch of trade as in the mines, and but little management is displayed either in economizing the stock or in seasoning the supply brought to market. The forests cover more than a third part of the productive soil of the empire, and are distributed in the following proportions, according to the statement of Becker (*Handel's Lexicon*, Vienna, 1837), who, we have been assured, had access to official sources of information:

Provinces.	No. of acres of forest land.	Produce in cubic Vienna fathoms.	Av produce per acre in cub. fath.
Austria	3,219,561	2,053,131	·64
Styria	2,523,006	1,820,234	·72
Illyria	2,174,177	1,832,497	·52
Ditto, coast.	431,124	234,039	·52
Tyrol	2,767,496	932,300	·83
Lombardy, Venice	1,618,451	809,257	·53
Hungary	12,716,576		
Dalmatia	394,580	252,060	·64
Military Frontier	3,070.995	1,113,717	·45
Transylvania	3,936.056	2,120,000	·56
Galicia	6,046,143	2,423,699	·40
Bohemia	3,363,215	2,165,092	·63
Moravia, Silesia	1,566,215	1,310,657	·84

We may remark, that André, a competent judge, estimates the annual produce (of 1 joch = 1·4 acres) of well-managed forest, as averaging three cubic Vienna fathoms of timber and fire-wood. Becker does not give the probable annual produce of the Hungarian forests; and we do not think it necessary to supply the deficiency from other authors, without access to authentic information. Some idea of the extent of the oak forests may, however, be formed, from the fact that nearly 200,000 bushels of gall-apples are annually exported, besides what is used in the country. The distribution of the forests is, however, very irregular; and, while in the mountainous tracts they are of immeasurable extent, the want of fire-wood is so great in the plains, that dried dung is a common substitute for faggots. In Transylvania especially, and the military frontier, the forests are both of great extent, and filled with trees of the finest quality, equally adapted for the use of the builder and the naval architect.

Facilities for Internal Communication and for Commerce.—We have already alluded to the laudable attention paid by the Austrian government to the means of communication throughout the empire. From Pavia, on the S.W. frontier, an uninterrupted *Macadamized* road conducts the traveller through fine provinces to Czernowitz in the Bukowina, a distance of upward of 1120 m. From Milan to Vienna there are three lines of road, and through Galicia the line is double. Three grand high-roads from Venice, and two from Trieste, lead to Tyrol and Germany, and double lines

* Graphite, or black lead, occurs in Bohemia and in Lower Austria. Sulphur, vitriol, saltpetre, the latter especially, in Hungary, are extensively obtained.

run from each of these cities to the capital. Prague is connected with Vienna by numerous lines of communication, which are continued to the frontiers of Bavaria, Saxony, and Prussian Silesia. Materials for making roads abound in every province; and the art is well understood in Austria, where the roads are equal to those of Prussia. Upward of sixty mountain passes, through the most extensive ranges of mountains that any single state possesses, have been made not only practicable, but commodious for travelling and commercial purposes. The lowest of these, as measured from the level of the sea, is, perhaps, the road along the Danube from Drenkova to Orsova, in the Transylvanian military frontier. The most celebrated is that of the Stelvio or Wörmser Joch, in S. Tyrol. In length these passes vary from 10 to 70 miles. On the roads across the Alps from Tyrol and Illyria, the greatest sums have been expended; their importance in a military point of view, and the necessity of facilitating the communication with a powerful and not very well affected province, rendering them indispensable. The roads across the Splügen, the pass of Finstermünz, and the Wörmser Joch to the lake of Como, must be classed among the greatest undertakings of the kind. The road over the Wörmser Joch passes over an elevation of 8400 feet above the level of the sea, and is protected in dangerous parts by covered ways of solid stone, which receive the fall of the avalanches, and cause them to glide into the depths below. This undertaking has surpassed the passages of the Simplon and mount Cenis, both in boldness and splendour of execution. But the exertions of private industry have not remained far behind those of the state. In Hungary many nobles still consider it a *privilege* not to be obliged to contribute to the cost of making roads which tend so much to enhance the value of landed property. Individuals, however, have at no time been wanting among that respectable body who were sufficiently enlightened to set a laudable example on this point. A joint-stock company, chiefly composed of Hungarian nobles, undertook the execution of a road between Caristadt in Croatia, and Fiume on the Adriatic sea; it was carried over part of the Julian Alps in a very splendid manner. On that part, known by the name of the Karst, the porous nature of the rocks made it necessary to construct cisterns to catch the rain-water; and stout parapets have been added, which protect travellers and carriages against the furious blasts of the *Bora*, which, without this check, would sweep away everything in its course. This road was commenced in 1803, and named after the archduchess Maria Louisa. Two other lines, one between the same points, the other running from Caristadt to Zeng and Cariopago, across the same mountain range, each of which was scarcely less expensive, although not so serviceable as the "*Louisenstrasse*," had been erected by, and called after, the emperors Charles VI. and Joseph II. The iron railway between Budweis in Bohemia, and Linz in upper Austria, finished in 1829, was executed at the cost of a private company, and has since been extended on the S. side of the Danube as far as Gmunden. It is 75 m. in length, but consists of one line only, and the carriages are drawn by horses. The line from Budweis to Linz was rendered unnecessarily expensive by ill-judged economy in the first instance, as it became necessary to exchange the original wooden rails, covered with metal plates, for others of cast-iron. The traffic has chiefly consisted hitherto in the salt conveyed from the mines of upper Austria, to be consumed in Bohemia. The report of the committee for 1837 shows the transport to have been,

Salt	291,896 cwt.	Nett revenue for the year, £8130.
Merchandise .	151,258	
Wood	2,538 cub. fath.	
Fish	157 loads	
Persons . . .	3,888	

The number of shareholders is 13,183, at 500fl. per share; but owing to the increased expense attending the works, they have, as yet, divided no profit. The line from Linz to Gmünden being a part of the high-road from Vienna to Ischl, which is much frequented as a watering-place, has a greater number of travellers, and was better managed from the beginning, as the experience of the first attempt was turned to good account. Its traffic, in 1837, was,

Salt	512,319 cwt.	Nett revenue for the year, £5325.
Merchandise .	130,328 cwt.	
Persons . . .	77,905	

This left a profit to be divided among the new shareholders, to whom the first proceeds are guaranteed to a certain amount, beyond which the shareholders, in general, are to participate. The length of this line is 32 miles; and the cost, inclusive of magazines, station-houses, forty-five carriages, and 230 wagons, did not exceed £65,000. The charge for transport of goods is three kr. (1½d.) per cwt. A second railway, upon a similar plan, was commenced about the same time between Prague and Pilsen, in Bohemia, but was abandoned for want of funds, when only 39 miles of the distance had been completed. Prince C. E. Fürstenberg purchased it subsequently of the company, and let it to an enterprising individual, who keeps it in repair, and is said to derive some advantage from it. The railroad, now constructing by a joint-stock company, from Vienna to Bochnia in Gallicia, for steam-carriages, will have a length of nearly 400 m. It follows the valley of the March or Morava, through Moravia, as far as Napagedl, with side branches; one to Presburg, along the Danube; another along the Thaya to Brünn, and a third following the March to Olmutz. From Napagedl the line follows the Beczwa, a tributary of the March, to Prerau, where it crosses over the heights near Weisskirchen, into the valley of the Oder, passing the grand European water-shed, with a rise of one foot in 400 feet. A branch here follows the Oder and the Oppa to Troppau, where it is to unite with the Prussian Silesian railway; while the main line crosses the heights near Seibersdorf into the valley of the Vistula, and throwing off another short branch to Bielitz and Biala, follows that river to Cracow, whence, with a gentle undulation, it reaches Bochnia, leaving Wieliczka a little to the S. This railroad is to be for steam-carriages; and the total estimate of its cost, with station-houses, &c., amounts to £20,000 per German mile, which was subscribed in 12,000 shares, of 1000fl. each. Of the probable importance of this spirited undertaking, not only for the internal, but also for the foreign trade of the empire, we shall have an opportunity of speaking under the head *Trade, &c.* The sanction of the government was obtained, in the year 1838, for a railway between Vienna and Raab in Hungary; as, however, in granting the privilege, a reserve was made in favour of any company undertaking the establishment of a railroad from the capital to Trieste, there are grounds for supposing that it is in contemplation to give every possible aid to such an enterprise whenever it is undertaken. The face of the country through which a railroad from the Danube to Trieste has to pass, presents the greatest difficulties that have as yet been encountered by a railroad company; but when we consider the means at the command of the Austrian government, the circumstance that the materials lie along the track itself, and the probable immense gain upon a line which should unite two such provinces as Gallicia and Hungary with the sea, it is rather matter of surprise that it has not, as yet, been attempted, than that the difficulties should discourage from the undertaking. Between Venice and Milan the works have been already begun upon a railway, intended to be carried through Padua, Vicenza, Verona, Peschiera, on the lake of Garda, Brescia, and Treviglio, to Milan. The length of this railway will be 300 kilometres, and the estimate of the outlay gives £1600 per kilometre, including the cost of buildings and carriages.

We have seen that the river system of Austria is upon a grand scale, and it is likewise, to a great extent, made available for the purposes of internal navigation. In order to give an idea of the facilities for commerce which this immense empire possesses, we subjoin a rough estimate of the length of the navigable rivers, lakes, and canals, measured on the beautiful map drawn up from actual survey by the Imperial Engineer corps, and published in 1832. The length of each river is measured by straight lines, following the principal bends, but not the windings of the stream; and the result is, for

Provinces.	Length in Eng. Miles measured by straight lines.			Direction in which the rivers flow.
	Rivers.	Lakes.	Canals.	
Austria . .	358	44	21	Danube and Black Sea.
Styria . .	272	. .	. .	Danube and Black Sea.
Tyrol . .	190	L. of Constance.	. .	Danube and Black Sea, Adriatic Sea.
Illyria . .	117	. .	. .	Danube and Black Sea.
Lombardy .	280	124	110	Adriatic Sea.
Venice . .	315	. .	200	Adriatic Sea.
Moravia . .	45	. .	. .	Danube and Black Sea.
Bohemia . .	125	. .	. .	Elbe and German Ocean.
Gallicia . .	500	. .	. .	Vistula and Baltic, Dniester and Black Sea.
Hungary and Transylvania . . .	2100	61	500	Danube and Black Sea.
Totals.	4302	229	831	

No allowance is made in this calculation (which is intended only to draw attention to so important a feature of these rising countries, and is offered in the absence of an authenticated statistical statement), for the double bed or arms of the Danube, the Theiss, and other rivers in Hungary. If these be taken into account, the length of the navigable (or, rather, of the navigated) rivers might perhaps be trebled. It is remarkable that both the Danube and the Dniester are interrupted in their course to the Black sea by rocky prominences in their beds, which impede their free navigation. It has, however, been proved, that although a difficult and expensive undertaking, it is by no means impracticable to free the beds of both rivers from rocks. The

hint thus given by nature seems scarcely to have been required to point out the superior advantages of a communication with the Adriatic in the present state of European trade; and which is likewise nearly accomplished in a natural way by means of the little river Kulpa, a tributary of the Save, which, when its water is high, may be navigated to the heart of Croatia, to within 70 miles of Fiume, and which might with ease be transformed into a regular canal. A better line of communication might perhaps also be established between Caristadt and the Adriatic, near the fall of the Villebit mountains, to the S. of Cariopago, for which a part of the Josephine road might be used; but Astaria, instead of Cariopago, might be chosen for a point from which coasters could keep up a communication with some of the numerous harbours on the Austrian coast. Another grand private undertaking was the introduction of steam-boats on the Danube by a company at Pesth; under the direction of Count Stephen Szicheny, which has proved most successful; and companies have since been formed in Austria and Bavaria, who have established a steam communication from Ratisbon to Vienna, and thence to Trebisond, Constantinople, and Smyrna. In 1838, these companies had ten vessels plying on the Danube between Linz and Constantinople, two of which were used for towing ships of burden, one between Presburg and Drenkova, the other between Orsova and Brailoff on the lower Danube. The journey from Vienna to Constantinople is now performed in twelve days, including a day of rest at Pesth, and two days for disembarkation at Drenkova, and re-embarking at Orsova, where the rocks of the *Eisernen Thor* impede the steam navigation. This passage, which formerly was altogether impracticable, was opened for vessels of light draught in 1834, by a corps of engineers and miners, under the guidance of Count Szicheny: 1000 miners were employed for some time between Lyupkawa and Szviniza, and removed upward of 1000 cubic fathoms of rock, after which the first barge floated in triumph down the stream. A close investigation of the spot (the result of which was published in the *Vienna Gazette*) showed that a renewal of those exertions would effect, without any extravagant outlay, the opening of the stream for navigation by all vessels downward. But, until this can be effected, a road along the river has been constructed, which must be used for heavy goods brought up the river, even if the passage were improved, on account of the rapidity of the stream in this part.* Of the numerous rivers in Hungary, the Theiss and the Maros are the most extensively navigated. They carry barges of 300 to 400 tons; and 50,000 tons of salt alone are conveyed upon them from the Transylvanian mines to different parts of Hungary. Steam-boats are likewise building for the navigation of the principal lakes; that intended for the picturesque lake of Gmunden will commence running in 1839. On the lakes Maggiore, Como, and Garda, steam-boats have been established for some time, and a steam-boat communication is kept up between Venice and Turin on the Po. In the summer of 1838, a steam-vessel, belonging to the Dresden Company, ascended the Elbe as far as Teschen in Bohemia, and demonstrated the possibility of introducing this species of navigation with vessels of light draught upon that river. Nearly at the same time the first attempt with a steamer was made upon the Save, which ascended from Semlin to Sziseek in Croatia (at the mouth of the Kulpa) in fifty-seven hours. In a few years we may, therefore, expect to find in Austria a most extensive and well-arranged system of internal steam navigation.

Ports and Harbours.—The principal commercial port belonging to Austria is Trieste, upon the Adriatic, which has been declared a free port, and is accordingly shut out of the customs line as well as Venice, which has the same privilege; so that the duty on imported goods, instead of being paid on the landing of the wares, is not demanded until they are sent into the interior. Venice is the seat of the admiralty, and has splendid dock-yards and naval arsenals, which, however, have long been left in unprofitable repose. Fiume is the port of Hungary; and though not a good place for vessels to lie at, is likely to attract a great deal of the attention of English traders, in consequence of the treaty recently concluded between England and Austria. Pola, in Istria, has one of the finest harbours on the Mediterranean; but it is so unhealthy from the prevalence of malaria, that it is almost uninhabited. Schenico, Cattaro, and Ragusa in Dalmatia, are all good harbours. The merchant shipping of Austria in 1834, is stated by Becker, from official sources, to have been,

Province and Harbour.	For Foreign Trade with Patents.			Large Coasters with Passports.			Small Coasters with Licenses.		
	Ships.	Tons.	Men.	Ships.	Tons.	Men.	Ships.	Tons.	Men.
Venice:									
Venice	91	19,638	974	111	9,518	700	1	11	3
Chiozza	1	133	7	206	9,678	851			
Illyria:									
Trieste	458	89,033	5,998	195	7,152	795	195	1,692	605
Rovigno	. .	. . .	. . .	415	11,311	1,715	112	740	412
Hungary:			(Approximative.)			(Approximative.)			(Approximative.)
Fiume	31	8,169	410	68	2,789	296	27	83	61
Buccari	2	467	25	19	707	80	16	55	38
Porto Ré	. .	. . .	. . .	5	327	29	24	64	53
Foreign ships, with passes from the Authorities of Fiume	15	3,257	178						
Military Frontier:									
Zeng	2	310	22	23	790	103	6	13	13
Cariopago	. .	. . .	. . .	15	153	52	16	33	38
Jabianacz	. .	. . .	. . .	9	215	34	5	10	10
St. Giorgio	. .	. . .	. . .	3	115	15	13	37	34
Dalmatia:			(Approximative).			(Approximative.)			(Approximative.)
Zara	1	71	8	105	1,414	307	129	697	349
Spalatro	5	523	43	248	5,127	893	374	1,895	1,007
Ragusa	30	6,280	346	63	1,756	234	143	713	383
Portorose	4	655	41	33	1,254	141	12	38	28
Totals	640	128,536	7,282	1,518	63,306	6,175	1,073	6,081	3,034

A very spirited company at Trieste has been established, within a few years, under the name Loyd's Austriaco. They have had a number of steam-boats built at Porto Ré, near Fiume, with which a communication is now kept up between Trieste and Venice, the Dalmatian harbours, Greece, Smyrna, and Alexandria. The tenth steam-boat of this company was launched in 1838.

The post-office department published, in 1835, the following tariff for passengers by its diligences. The price is per German mile for one seat, in kreutzers (30=1*s.*):

	Common Diligences inside.	Cabriolet.	Separate Carriages with post-horses, 4 seats, at per seat.
	kr.	kr.	kr.
Lower Austria	28	"	35
Upper Austria, Tyrol Illyria	28	"	33
Bohemia, Moravia	30	15½	31½
Italy	30	"	39
Hungary and Galicia	.	.	28
Heavy diligences in Hungary 18½	16		

The furnishing of post-horses is, throughout the empire, a branch of the General Post-office. The traveller is well supplied in every province on the grand lines of communication; and the rate of travelling is as good as in Prussia and France.

Tariff for 2 post-horses per post of 2 Germ. miles.

	fl.	kr.
In Italy	2	6½
Austria, Styria, Carinthia, Litorale, Dalmatia	1	52
Carniola	2	0
Bohemia and Moravia	1	52
Galicia E. of the Sau	1	20

* The nett profits of the boats on the Danube amounted, in 1837, to 68,080 fl.: the proceeds of two vessels having left a loss. The expenses amounted to double the above-mentioned sum. The *brutto* receipts of three vessels, running between Constantinople, Smyrna, Trebisond, and Salonichi, amounted, in the same year, to 266,733 fl. The total number of passengers in all vessels, in 1837, was 47,496; being 19,233 more than in 1836.

Tariff for 2 post-horses per post of 2 Germ. miles.

	fl.	kr.
Galicia W. of Sau		30
Hungary, Croatia, Slavonia, and Military Frontier	1	40
Transylvania	1	30

The manner of charging the postage of letters is peculiar to Austria. If the distance do not exceed six posts, the charge varies from 6 to 14 kr. for a single letter; 14 kr. is the highest charge made within the empire, whatever be the distance of the places. The Austrian post-office keeps no running account with foreign post-offices. All letters must, therefore, be franked to the frontier.

State of Agriculture.—The following tables, which we extract from *Becker's Handels-Lexicon*, printed at Vienna in 1836 (the statements in which, relative to Austria, are stated to be derived from official sources), give a survey of the agricultural industry of the empire, which will be more fully detailed under the heads of the different provinces. These official sources appear to be the returns from the collectors of the land-tax, in which the amount of cultivated land is given for all the provinces, excepting Hungary and Transylvania, with the greatest exactness. The amount of produce, however, is considerably underrated, as it is calculated upon the worst description of tillage, and upon low averages, as is usual with calculations which form the basis of taxation:

Table showing the Amount of Cultivated Land of each Province, reduced to English Acres, from Becker's Handels-Lexicon, Vienna, 1836.

Provinces.	Arable.	Vineyards.	Meadows and Gardens.	Commons.	Forests.	Total.
Lower and Upper Austria	3,177,410	114,020	1,391,226	357,414	3,319,561	8,995,571
Styria	1,008,407	78,032	649,797	847,996	2,523,008	5,107,240
Carinthia and Carniola	678,993	23,909	792,015	1,085,089	2,174,177	4,755,285
Illyrian Coast	359,439	37,159	243,523	740,671	451,124	1,862,018
Tyrol	536,520	78,636	615,626	922,593	2,767,496	4,920,873
Bohemia	5,532,509	6,357	1,338,930	869,662	3,393,215	11,050,673
Moravia and Silesia	3,148,101	73,649	554,796	658,525	1,585,215	6,020,286
Hungary	6,963,843	1,295,692	10,848,757		12,739,576	31,694,870
Military Frontier	2,113,066	69,072	1,198,950	1,122,249		7,574,335
Transylvania	3,833,252	396,836	1,622,502	1,652,364	3,936,096	11,597,050
Dalmatia	220,923	137,872	41,063	824,963	390,580	1,619,405
Galicia	8,205,292	42	2,941,196	1,936,296	6,046,143	19,128,897
Lombardy	1,592,290	767,547	720,275	576,183	1,618,451	4,672,496
Venice	553,243	1,744,119	676,108	715,635		4,301,492

Table showing the estimated Agricultural Produce of the Cultivated Land in the under-mentioned Provinces.—*Becker's Handels-Lexicon.*

Provinces.	Wheat.	Rye.	Barley.	Oats.	Wine.
	Eng. Qrs.	Eng. Qrs.	Eng. Qrs.	Eng. Qrs.	En. Im. Gal.
L. and U. Austria	397,335	389,318	489,562	1,647,908	25,117,210
Styria	196,222	608,276	26,996	423,588	10,607,928
Carinthia and Carniola	88,134	187,261	126,862	351,674	3,050,691
Illyrian Coast	73,817	176,133	41,805	22,356	12,167,687
Tyrol	41,190	191,578	46,179	32,559	7,537,162
Bohemia	394,155	2,129,508	877,568	1,739,763	333,911
Moravia and Silesia	359,315	1,159,772	492,109	1,220,345	3,671,151
Dalmatia	16,255	47,038	50,888	25,331	13,189,953
Galicia	592,906	1,597,720	2,227,119	3,104,191	3,257
Lombardy	546,169	1,027,186	10,025	56,635	32,764,541
Venice	518,767	913,908	9,576	53,221	33,726,033
Mil. Front	12,000,000 qrs. of all descriptions.				12,770,000
Hungary	11,000,000	ditto	(Schwartner).		380,000,000

Provinces.	Horses.	Oxen.	Cows.	Sheep.	Authorities.
Lower Austria	57,725	99,509	198,220	352,761	Nat. Enc. (1834.)
Upper Austria	43,134	86,349	279,386	191,514	Ditto.
Styria	52,690	100,115	230,343	145,611	Hand.-Lex. (1836).
Carinthia	38,352	110,346	165,942	227,671	Ditto.
Carniola	14,803	48,369	65,696	69,004	Nat. Enc.
Illyrian Coast	9,085	133,210	47,242	344,342	Econ. Neuig.
Tyrol	23,778	770,054	294,097	420,798	Hand.-Lex.
Bohemia	137,807	240,252	690,969	1,240,409	Econ. Neuig. (1836).
Moravia and Silesia	139,234	63,944	343,992	749,189	Econ. Neuig. (1836).
Hungary	761,000	4,000,000			20 millions* Hand.-Lex. Craplowitz. Large herds of pigs are annually fattened in the forests of oak and beech.
Military Frontier	296,864	229,695	284,526	160,565	Hand.-Lex.
Transylvania	350,000	600,000		900,000 sheep and goats	Benigni (1837.
Galicia (1837)	821,385	542,317	953,199	1,241,687	Vien. Gaz. (1838).
Dalmatia	14,146	55,045	33,398	639,809	Hand.-Lex.
Lombardy	54,778	159,300	263,334	198,331	Ditto.
Venice	50,100	207,051	201,508	385,077	Ditto.

To the produce of the kingdom of Lombardy (provinces of Lombardy and Venice), the following additions must be made: Millet and buck-wheat, 184,000 qrs.; rice, 148,800 qrs.: oil, 124,000 cwt.; silk (cocoons), 288,000 cwt.; tobacco, 249,000 cwt.; besides fruit of all kinds, cultivated in great abundance. The Lombards devote more refined industry to agricultural pursuits than any other country in Europe; and perhaps no spot on the face of the globe is made to yield so much produce, in proportion to the quality of the soil, as the district extending from the fall of the Alps to the Po, and from the Ticino to the Adige. The water from the great Alpine lakes, and from the rivers through which they discharge it, is conducted by innumerable canals to a large portion of the fields, in which the most beautiful and effective system of irrigation has been introduced. It is common to mow these meadows three times in the year, and to graze them besides during the autumn. Dr. Bürger estimates the average produce of these meadows at 8 tons of hay per Eng. acre, which he calculates is equivalent to 24 tons 16 cwt. of grass. It is the produce of these meadows which nourishes the cows that produce the beautiful Parmesan and Stracchino cheeses, the preparation of which is attended with no farther mystery; so that the author above cited supposes that, with equal care, these descriptions of produce might be raised in Hungary, or in any other country where the climate is mild. The greater part of these meadows are broken up every three years, and crops of wheat and maize taken; when they are again laid down with rye-grass. The acre yields, on these occasions, on an average taken for the four classes of soil, according to Bürger—Wheat, 8 bushels; Maize, 11 bushels; but this is, undoubtedly, too low an average; a crop of 8 bushels of wheat would not pay the expense of labour.

These fields are farther surrounded with plantations, and sometimes with a kind of hedge of mulberry trees, the leaves of which furnish food for the silkworms; the rearing of which, on its present extensive scale, is a benefit accruing to his country from the talents and unwearied exertions of the late Count Vincenz Dandolo. The extent to which the cultivation of silk has of late years been carried is shown by the fact that, in 1824, when the exports from Lombardy alone amounted, according to Bürger, to 956,605 lib. pic.; that province produced as much silk as sixteen years previously was raised in all Italy; whereas the average exports of the three years, 1835-6-7, for Lombardy, exhibit an amount of 4,905,850 lib. pic. of spun, raw, and waste silk. Bürger reckons to 5 and ⅔ths Vienna lbs. of silk, 1 loth of eggs, the worms from which consume 794 and ⅔ths lbs. of leaves; the mulberry trees in Lombardy produce between 20 lbs. and 60 lbs. leaves; so that if we estimate them at 40 lbs. all round, it gives nearly 10,000,000 of trees for that province. Although the mulberry tree is cultivated all over the north of Italy, yet it is more especially planted in the dry and stony districts near Verona. It would appear, too, that a cooler climate is more favourable to the rearing of the silkworm, as the attempts in the north of France have been eminently successful. Near Paris, M. Cam Beaunis produces 170 lbs. of cocoons from one loth of eggs, whereas the calculation here given is based on a production of only 70 and ⅔ths lbs. In the south of France the production is only 50 lbs. This branch of industry is particularly valuable from the circumstance of its only occupying the partial labour of six weeks to two months in the year, which is over before the harvest commences. The production of oranges and lemons is confined chiefly to the neigh-

* This calculation includes Transylvania and the Military Frontier.

bourhood of the Lago di Garda, where the trees are kept in covered gardens or terraces, against the sides of the hills. Blumenbach gives the number of these trees in the neighbourhood of Salo alone, at from 15,000 to 16,000, many of which produce 800 fruit annually. The division of agricultural labour is curious in these provinces. Not only a number of persons occupy themselves with silk-growing, who have no land, and are obliged to purchase the leaves from others, but the greater part of the cheese is made by persons who purchase or farm the milk of the cows, and whose whole vested property consists in the pans and utensils. It will be supposed that profits are but small where such divisions exist, and the landowner's interests are those best consulted. Land in these provinces is perfectly free from feudal services and contributions, but is most exorbitantly taxed. According to Bürger, the land-tax, which appears to be very unequally divided, amounted, in 1826, for Lombardy alone, to 22,280,480 lire; the extra expenses of executions on dilatory contributors amounted to 8½ per cent.; for Venice it produced 15,977,011 lire: in the prov. of Venice the county rates amounted to 2,809,764 lire; in Lombardy, to 3,793,939 lire. These four sums added together give an impost of 7*s.* 4½*d.* per English acre, on 550·2 sq. German miles, that being the estimated amount of cultivated land upon which these rates are levied. The practice of letting land prevails to a great extent in Lombardy; and the usual rent paid by the farmer (Colone) is large, being half the gross produce of the land. The stock and valuations, however, in such cases, generally belong to the landlord.

The statement given in the table, of the produce of Hungary, is one of the most moderate among the many varying estimates of the produce of that extraordinary country. If an approximative estimate be sought of what Hungary could produce, were more skill and industry introduced among her agricultural population, the statement given is exceedingly below the mark. The two great plains on the upper and lower Danube present not only an excellent soil, with the finest climate in Europe, to the farmer, but offer facilities for irrigation not inferior to those so admirably used by the Italians in the neighbouring province. The largest plain is 66 German m. long, from W. to E., in its greatest length, and nearly 50 in breadth from N. to S., its area is upward of 11,000 sq. English miles. In the greater part of this plain the soil is of so rich a quality that no manure is required for the choicest crops, and the dung of the cattle is either thrown away into the rivers, or burned as fuel by the peasants. When excessive drought does not burn up the grass, its growth is so luxuriant that the descriptions given of it exceed belief. Owing, however, to the long contest which has been carried on, since the expulsion of the Turks, by the Hungarians against the Austrian emperors for the support of their privileges, the policy of the government has hitherto shut up this valuable portion of Europe; and it is only since the conclusion of the Milan treaty, in the last year, that the expectations of the country have been roused to a state of confidence. Here the agricultural skill of the Lombards transferred to Hungary, this province would, in time of scarcity (which in other lands is usually the result of cold and damp seasons), supply food for all Europe; while the immense amount of produce in ordinary years will ultimately, no doubt, cause a great change in the value of many articles suited to this climate. Of these, wine is a principal object; and more care is annually bestowed both on the culture of the vineyards and the manufacture of the liquor. The king of wines, Tokay, owes its celebrity entirely to the care with which the ground is tilled and the grapes sorted. The process of dressing the vines is performed with as much care and at nearly the same expense that are bestowed on the celebrated vineyard of Johannisberg. Other good kinds are, the wines of *Menach*, in the Banat, of *Carlowitz* and *Neusmill*, *Ofen*, and *Oedenburg*. Silk is increasing rapidly in cultivation, and might be raised in every part of the kingdom. For fuller details respecting this we refer to the article Hungary; and, under the head *Trade*, we have offered some remarks on the best means of making its riches available to foreign countries. The great obstacle to a flourishing state of agriculture was removed by the Diet of 1836, when a law was passed for fixing the division of land. Down to that period the peasant only tilled his portion for three years, after which another was allotted to him by his lord, and the share he possessed was either given over to others or turned into grazing land. This arrangement alone must have proved the bane of all improvement; besides which, the unthriftiness habitual among the inhabitants of a highly productive soil, exposes them constantly to the distress of famine, even in the year following a very abundant season. Hence the singularly contradictory accounts circulated respecting this highly-favoured country. The want of a market for their corn has obliged the Hungarians to prosecute, on a large scale, the raising of sheep and wool. The number of sheep had been estimated by Lichtenstern at six millions, in 1805. How much this number must have increased since then is evident from the augmentation stated by Czaplowitz (in *Econom. Neuigk.*) to have taken place in the amount of wool annually produced, and which he estimates at 400,000 cwt., produced by at least 20 millions of sheep. According to the official reports, the exports of wool from Hungary to the other provinces amounted, in

1832—1833, to 24,538,410 flors.
1833—1834, to 19,036,140 —

which would give an average of from 180,000 cwt. to 200,000 cwt. annually; a quantity which we may look to see yearly augmented: the internal consumption is estimated at about as much. Galicia, the second rich source of agricultural produce, has also been compelled to substitute wool-growing for the cultivation of corn. The increase in the number of sheep in this province, since 1816, was, in 1837, 728,120; the increase, since 1834, amounted to 279,791, of which number 90,000 belong to the circles of Zarnow and Breczow with the Bukowina. The remarkably fertile part of this province begins to the E. of the Sau, and follows the course of the Dniester, being part of the great plain extending nearly from the Carpathians to the Black sea, and embracing Podolia, the Ukraine, and Moldavia. The soil in this part of the province is nearly as rich as that of the great plain of Hungary, and produces the beautiful white Danzic wheat, so much prized in the London market. The cattle returns for 1837, however, show, in the four circles which embrace this fertile district 492,456 head of sheep; while 63,830 oxen, besides cows and horses, with 156,413 head of sheep, are counted in the Bukowina only. The large portion of the land, which in all the provinces is held in small parcels by the peasants, is, in Galicia, particularly ill cultivated and unproductive. The large estates of the nobility are, however, in general well farmed, and may be classed with those of Bohemia, Moravia, Austria, and the provinces to the south of the Danube. On these estates regular rotations of crops with artificial grasses, are now universal; and many of the machines in use in England, such as improved ploughs, sowing and threshing machines, &c., have been introduced. A gentleman, who farms his own estate in a part of Moravia, where the soil is of average quality and the climate has a mean temperature, has furnished us with the following details:

An estate of mean size contains from 850 to 1400 English acres of arable land, 140 to 420 acres of meadow land, and 1000 to 2500, or more, acres of wood, according to the situation; that is, whether near the mountains or in the plain. The estates conferring the right of representation (landtäfliche Güter), and which are only held by knights or nobles, are of all sizes from a few acres to several German square miles. These estates can, strictly speaking, be held also by a commoner, but only on paying a portion of the taxes twice over, and on his renouncing the right to all kinds of patronage and judicial authority. The estates of mean size may be estimated at two thirds of the whole. In Moravia about thirty are found to exceed 32 Eng. sq. m. in extent. In purchasing land, a profit of from 4 to 4½ per cent. per annum is generally looked for. The size of the peasant's holdings is also very various. In the plains, a peasant's holding may be about 98 Eng. acres. In the hilly parts, where the population is thinner, and the soil less productive, it is 30, 40, and in some parts 70 acres. Half holdings, quarter holdings, as well as cotters with small gardens, are also frequent. It is, however, supposed that of the peasant families two thirds hold land, and about one third may be considered as mere labourers. The mode of cultivation adopted by the peasants in the low lands is a rotation of three crops, viz., wheat, rye, summer-corn, fallow; the fallow being only partially used. In the hilly parts the fallows are more used for potatoes, turnips, flax, &c.; in the mountains, tillage is more irregular. Oats, potatoes, and flax are grown; and in the more elevated spots oats and buckwheat. On the greater part of the small estates of the nobles a better rotation of crops, with clover, green food, and meadows prevail, according as the soil or the local advantages of common grazing (which is very extensive everywhere) render it necessary. "I have found the following rotations do very well: 1, potatoes, with manure; 2, barley, or oats, with clover; 3, clover hay; 4, clover, as pasture; 5, rye; 6, oats.—In heavy soils: 1, winter corn, with dung; 2, barley, with clover; 3, clover; 4, wheat; 5, green fodder, with manure; 6, wheat; 7, Peas and beans; 8, rye.—In the low lands, millet is much sown; and in the mountains, flax. My own experience has given the following produce of various kinds of corn:

	Greatest.	Mean.	Least.
Per acre Wheat . .	39 bush.	24 Bush.	14½ Bush.
" Rye . .	35	21	10¾
" Barley . .	46	26	16
" Oats . .	49	28	17½
" Potatoes .	284	233	184."

Distilleries and even breweries are commonly established on large farms in the country, and within a few years sugar manufactories, in which sugar is extracted from beet-root, have become frequent. Twenty-one sugar manufactories are enumerated by Becker as existing, in 1836, in the various provinces.

It is not usual to let land on lease in these parts of the empire. The few cases in which this mode of tenure occurs must rather be considered as exceptions than as a rule, although it is the opinion of competent judges that the incomes of the large landholders would be increased by the introduction of the practice. In Poland, villages are often let for short terms, that is, an estate with the resident labourers upon it, who are bound to labour so many days in the week in lieu of rent for their lands. "In the management of his holding the peasant enjoys the liberty of turning at pleasure vineyards into meadows, or tilling pasture fields, or of converting the tillage fields into pasture; only in the case of woods the landlord reserves a right of inspection, to prevent and punish their being dealt with contrary to contract. But the peasant cannot let his land, nor leave it uncultivated, nor sell it in parcels. From the peasants' holdings the lord usually derives 1°. All that was stipulated on the original cession of the land, whether in the shape of a rent-charge in money or otherwise. 2dly. The *Landemium*, or fine, on transfer, whether by sale or inheritance (usually 5 per cent.). 3dly. The *Robot*, or personal service, the maximum of which has been fixed by law. This consists generally in three days' work, with a wagon and horses, weekly, for the peasant's whole holding; the half holding gives one and a half days' work, and the quarter holding two or three days' hard labour, weekly: cottagers give from ten to thirteen days per annum. 4thly. The right of grazing on uncultivated fallows and stubbles; which, however, the peasant may exercise upon the land of his lord. 5thly. The great and small tithes, which are often ceded to the church, or have been otherwise transferred. Dominical property (allodial estates) pay, in general, no tithe. The peasant may cede or leave by will his holding to whichever of his sons he pleases; but it is then usually charged with a sum for each of his brothers and sisters. The custom prevails of leaving it to the eldest son; but it is often ceded during the father's life, who retains a certain quantum of the produce for his own use: this generally happens when the father wishes to free his son from liability to the conscription."

Manufactures, Trade, &c.—The subjoined table, which we take from *Becker's Handels-Lexicon*, gives the actual average produce of the mines within the empire during the five years from 1830 to 1834: it is taken from official sources, and is the latest statement of the kind that has been published. The cwt. is that of Vienna =123·4 pounds English:

Table showing the average of five years' actual produce of the Austrian mines between 1830 and 1834 inclusive.

Provinces.	Gold. In marks ½ = lb. Vienna. weight.	Silver.	Bar Iron.	Cast Iron.	Lead and Lead Ore.	Tin.	Copper.	Coals.
			Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Upper Austria	100	322	12,151	. .	. .	. .	. .	245,180
Lower Austria	. .	. .	19,559	444	140	. .	403	22,646
Styria	6	709	500,327	24,181	697	. .	1,019	329,054
Carinthia and Carniola	. .	. .	271,925	9,942	60,893	. .	78	49,614
Illyrian coast	. .	. .	. .	. .	. .	. .	. .	35,668
Tyrol	32	818	43,418	3,539	2,503	. .	3,903	39,935
Moravia and Silesia	. .	. .	96,490	24,832	. .	. .	. .	465,664
Bohemia	2	22,124	214,005	70,949	18,102	. 992	25	2,213,095
Galicia	. .	638	24,191	3,862	292	. .	1,633	176
Lombardy	. .	. .	65,179	8,001	. .	. .	. .	33,441
Venice	. .	. .	. .	. .	210	. .	3,437	1,997
Hungary	2,148	63,754	217,282	24,892	17,222	. .	33,500	342,573
Military Frontier	1	386	6,441	2,448	2,243	. .	137	
Transylvania	2,845	4,611	41,477	241	2,541	. .	816	
Totals	5,134	93,362	1,521,445	173,331	104,943	992	44,350	3,779,043

To these quantities must be added graphite, or black-lead, 13,330 cwt.; alum, 26,531 cwt.; sulphur, 17,288 cwt.; vitriol, 41,000 cwt.; litharge, 21,155 cwt.; zinc, 468 cwt.; cobalt, 606 cwt.; calamine, 4636 cwt. The production of quicksilver was as follows:

Average produce of five years, from 1830 to 1834:

	Cwt.
Illyria	3230
Transylvania	30
	3260

The amount of salt annually produced is not officially published, but the estimate of the *Nat. Encyclopædia* gives, for the produce of the salt pans of—

	Cwt.
Upper Austria	750,000
Illyria, boiled and rock salt	268,000
Tyrol	200,000
Illyrian coast, bay salt	400,000
Galicia, rock salt	900,000
Ditto, boiled	250,000
Hungary	900,000
Transylvania	1,000,000
Dalmatia	400,000

Some years back, the entire produce of the empire was estimated at 175,000 tons, English, of rock; 107,000 tons of boiled; and 600,000 tons of bay salt. Of this quantity, a large portion is annually exported to Russia, Poland, and Turkey. With the exception of the article of salt, the amount produced by the mines is exceedingly small in proportion to the capacities which almost every province possesses, and of the remarkable facility with which the ore is in all produced. A remarkable circumstance is, the indifferent quality of nearly all the metals produced in the mines worked by the agents of the government; a fact which is substantiated by the annual importation, to a great extent, of Russian copeks by the wire drawers, who are unable to use the produce of the Austrian mines for that purpose. It is a curious fact, that although a Russian ukase exists, prohibiting the exportation of coin, yet the Russian mint has officially requested the Austrian wire-drawers to notify to them any deterioration that may occur in the quality of the coin thus exported! Surely the capital now so ill employed in keeping up forced manufactories, under the shelter of high import duties, and thus contributing to the taxation of the people, without enriching the coffers of the state, would be much better employed in ameliorating the system of mining, and in improving the means of transport within the country.—We refer to our articles on STYRIA, ILLYRIA, HUNGARY, and TRANSYLVANIA, for a description of the inexhaustible mining wealth of the Austrian empire.—Iron and native steel are especially found in such abundance in Styria and Illyria, that the ore is merely quarried from mountains several thousand feet in height, and which are solid blocks of carbonate of iron ore. Yet it is a fact, although almost incredible, that an advertisement of the new Polish railroad company, in the spring of 1838, in the *Vienna Gazette*, set forth that, "having proved by official statements that a sufficient quantity of rails could not be furnished by the mines and foundries of the empire, they had received permission to import from foreign countries the required supply." The article of native steel is worthy of serious attention from every country in Europe; for though, owing to the bad state of the means of communication, English artificial steel be, at present, sold cheaper at Trieste, yet not only is the quality of the Styrian and Illyrian metal far superior, but it is found in such abundance that it could supply a demand which would cause a serious fall in the price of artificial steel. The use of this metal for machinery must be very advantageous, and not less so for the chain cables of ships, which might be made much lighter; and perhaps ships of war and Indiamen would then be able to take two such cables instead of one. The suspension bridge at Vienna, hanging from two main chains instead of four, is a practical illustration of what is here suggested. The prosperity of the provinces of Lombardy and Venice—where agriculture employs the main attention of the inhabitants, and whose cheese, raw and spun silk, choice fruits, rice, and macaroni, are exported, at a great profit, to all Europe—furnish another illustration of the natural direction which the trade of Austria would take. And yet how much might even be done, in those provinces, to improve the production of wine! The range of hills in Lower Austria, Styria, Italy, and Hungary, which, from their southern aspect, are suited to the cultivation of the vine, may be roughly estimated at more than 2000 English m. in length; of this the largest portion falls to Hungary, with its dependent lands, Croatia, Slavonia, and the Military Frontier. What trees-

ures does not Austria possess in this article alone, to say nothing of the immense increase in her produce of corn and cattle that must take place on the adoption of a liberal system of commerce? By abstracting capital from agriculture, the price of the necessaries of life is farther so much advanced, that the very aim of manufacturing at home is defeated; as the statement of the Vienna market prices, which we give below, will prove. Truly, when an Englishman has surveyed the immense resources of the Austrian empire, he is tempted to imitate the exclamation made by his captive countryman in ancient Rome, and to wonder "that a nation, possessed of such riches, should envy us our cotton factories, and sugar plantations." In the survey of the Austrian manufactures for 1834, given by Becker, we find—

Silk spinning mills and manufactories	2990
Woollen and cotton spinning and weaving establishments	298
Flax and hemp spinning mills, linen and calico factories	869
Cloth factories	165
Leather and leather wares	580
Porcelain and earthenware	165
Glass and plate glass	210
Iron foundries, &c.	700
Copper mills, &c.	185
Steel mills and factories	210
Rosoglio factories and distilleries of spirits and perfumes	250
Chemical wares and dyeing stuff factories	89
Beet-root sugar factories	21

The total number of registered manufactories amounted, in that year, to 11,064; and were supposed to give employment to 2,330,000 individuals; their produce being 1425 millions of florins. Among the most remarkable, and those which are the most rapidly increasing, are the beet-root sugar factories; of which, according to André's *Economischen Neuigkeiten*, twenty-five, besides three factories of molasses, were in operation in Bohemia alone, in the year 1835–1836; and seven additional sugar factories, and one molasses factory, were expected to be at work in 1837. These twenty-eight factories, according to the same authority, though able to make 30,000 cwt. of sugar, only produced 10,000 to 15,000 cwt., for want of a sufficient supply of beet-root. We have already remarked, that the greater number of these factories, together with the country breweries and distilleries, are carried on by the large landed proprietors. It is, however, singular that other branches of manufacture are likewise, to a great extent, carried on by the members of so proud an aristocracy; but who find themselves obliged by so doing to obviate the loss accruing from the system of restrictions on trade and manufacture, which is peculiarly discouraging to small beginners. Thus Count Bucquoy has five glass-houses; Count Harrach one; Prince Schwartzenberg three; besides others belonging to counts Desfours, Klinsky, &c. Among the earthenware manufacturers we find the emperor, and counts Wrtby and Falkenhayn, Prince Coburg, counts Salm and Egger, and many others, are large iron founders; and counts Wrbna and Prince Windishgrätz manufacture tin plates. The list might be much extended; and it will be supposed that neither the public nor the noble tradesmen are so much benefited by the arrangement as they would be by a more natural one, which would make them, in their senatorial capacity, the protectors of tradesmen who should work cheaper. The principal seats of the cotton and woollen manufactures are Bohemia, Moravia, Silesia, and Austria. Coarse cloths are everywhere manufactured; and large exports of cotton and woollen wares, especially of inferior shawls and red caps, are annually made to Turkey and the East. Linen is a great article of manufacture; spinning and weaving forming the principal employment of the peasantry during the winter, especially of the women, in the northern provinces. In Galicia, not only a portion of the rent, but, in many large establishments, a part of the wages of servants is paid in linen.

Notwithstanding all that has been done to facilitate the means of internal communication, large portions of the empire still find themselves isolated from the rest, to a degree highly injurious to internal traffic. Much has been achieved for Hungary by the introduction of steam-boats on the Danube; and Galicia will be brought nearer to the capital by the rail-road now constructing from Vienna to Bochnia. The subjoined statement of prices will, however, show the different value of marketable produce in the three grand divisions of the empire; and at the same time illustrate the advantages of employing capital to facilitate the transport of produce, in preference to the forced establishment of manufactures. The prices at Prague and at Gratz are usually the same with those of Vienna.

1836.		Per English Imperial Quarter.								Per English lbs. avoirdupois.	
Markets.	Month.	Wheat.		Rye.		Barley.		Oats.		Bread.	Meat.
		s.	d.	s.	d.	s.	d.	s.	d.	d.	d.
Vienna	October	22	2	13	7	12	3	10	8	1 1/20	2 1/4
Pesth	Ditto	21	9	12	1	12	1	6	6		
Lemberg	Ditto	16	8 3/4	4	4 1/2	4	9	3	9		
Olmutz cattle market, beef 3s. 6d. per stone.											
1837.											
Vienna	Oct.	23	3 1/2	13	10 1/2	13	2	12	9 1/2	1 1/2	2 1/4
Pesth	Nov.	16	5 1/4	8	7 1/2	6	4 3/4	4	4		
Lemberg	Oct.	14	3	9	6	7	1 1/2	4	9		
Olmutz cattle market, beef 3s. 6d. per stone. Sadagura beef, 2s. 9d. per stone in Bukowina.											
1838.											
Vienna	Sept.	23	9	17	4 1/2	15	0 1/2	11	9 1/2	1 1/2	2 1/2
Pesth	Aug. 30.	21	11 1/2	13	2 1/2	9	10 1/2	6	6 3/4		
Lemberg	Sept.	14	3	9	6	5	8 1/2	3	9 1/2		
Olmutz cattle market, beef 3s. 4d. per stone. Sadagura beef, 2s. 9d. per stone.											

At the market of Olmutz, 90,007 oxen were sold in 1837, of which number 74,184 came from Galicia, including the importations from Bessarabia: 4515 head were driven by, to Vienna, without stopping. The dearest pair was sold for 200 florins (£20). In 1836, the dearest pair brought 220 fl.; in 1835, 240 fl. A fat ox weighs usually about 6 cwt., with the offal (verte). Prices taken from the market reports in the *Vienna Gazette*.

The number of cattle imported into the other provinces from Hungary, in 1837, was,

Horned cattle	70,830
Sheep	93,450
Pigs	197,831

See HUNGARY.

It will be seen, on a comparison of the prices in this table, that the fluctuations of the respective markets are, as far as corn is concerned, nearly independent of each other. The high price of meat induces a considerable importation of cattle, which pay a duty of 4 fl. per head.

The price of manufacturing labour is, in the large towns, from 20 to 24 kr. per diem (8d. to 10d.) for men. A master mason, or carpenter, receives 2 fl. per diem, at Vienna, for job-work. Agricultural labour is much lower in price, and varies in the different provinces, to which we refer for details. Balbi has published a statement of the patents taken out since 1811, which shows,

From 1811 to 1820	.	92 patents were granted.
1821 to 1832	.	1,893 ditto.
1833 to 1837	.	825 ditto.

The last figure gives an average of 165 patents annually, during the last five years.

The following official statements, regarding the trade of the empire, are taken from *Becker's Handels-Lexicon*, and are the latest published:

Provinces.	1832–33.		1833–34.	
	Imports.	Exports.	Imports.	Exports.
	Florins.	*Florins.*	*Florins.*	*Florins.*
Lower Austria	23,473,890	26,378,470	23,782,490	26,298,300
Upper Austria	2,113,340	3,027,880	2,943,980	2,841,080
Bohemia	15,237,210	20,202,850	15,078,570	18,953,870
Moravia and Silesia	3,641,730	2,084,320	3,274,080	2,088,680
Styria	1,081,170	225,030	1,354,280	949,380
Illyria	6,586,060	6,541,940	5,746,700	7,190,030
Tyrol	4,949,735	4,480,790	5,347,060	3,421,160
Galicia	5,716,450	7,847,880	5,104,220	3,806,230
Hungary	8,746,920	6,254,220	8,169,920	5,451,970
Transylvania	4,346,850	2,154,870	3,341,240	2,146,660
Lombardy	18,953,140	20,314,850	18,242,660	23,584,030
Venice	16,423,720	7,017,370	16,006,190	6,376,680
Totals	106,270,000	116,624,300	107,781,360	111,0 2,910

Commerce of Austria with foreign States and free Ports of the Empire.

	Imports.	Exports.	Imports.	Exports.
	Florins.	*Florins.*	*Florins.*	*Florins.*
South Germany	6,057,980	19,725,980	6,886,320	17,801,670
Saxony	11,025,370	20,777,740	14,324,110	19,246,980
Prussia	4,599,970	7,181,100	5,002,960	7,107,700
Cracow	404,940	2,105,310	474,690	1,758,620
Poland	174,640	2,224,070	165,620	1,897,250
Brody	1,515,770	1,186,410	1,354,070	1,189,840
Russia	2,722,960	1,106,800	1,970,000	2,373,000
Turkey	13,943,250	9,231,420	11,825,370	10,414,020
Fiume	173,040	1,410,420	201,480	1,499,790
Trieste	28,651,870	13,993,230	29,309,280	13,589,560
Venice	5,725,500	5,270,300	5,783,600	4,410,160
Illyrian and Frontier Coast	12,586,470	1,192,870	10,581,380	1,172,110
Italy	16,899,640	24,435,690	18,499,310	22,905,850
Switzerland	1,759,930	6,8[illegible],250	1,409,280	6,311,500
Totals	106,270,000	116,624,200	107,781,360	11[illegible],992,910

We subjoin a statement, drawn from the reports of the principal harbours in the Mediterranean, of a later date.

Principal Articles of Importation and Exportation in 1834.

Articles.	Imported.	Exported.
	Florins.	*Florins.*
Iron	118,180	3,565,810
Gold	1,567,120	
Silver	911,550	
Silver, wrought	24,120	99,1'0
Quicksilver		172,2 0
Jewels	178,040	94,500
Tobacco	227,720	231,760
Cattle	5,680,380	3,716,400
Corn	4,075,750	5,182,040
Wine and Spirits	5,200,770	2,088,100
Wax and Honey	847,340	1,875,850
Fish, fruits, cheese, &c.	4,157,120	2,805,700
Timber and wooden wares	1,074,270	2,472,270
Cotton, linen, and woollen yarn	8,762,780	770,500
Furs	5,220,100	946,190
Raw and thrown flax and hemp light linen wares	3,157,680	2,264,260
Fine linens	5,790	5,187,770
Silk, raw, spun, &c.	1,294,100	22,272,760
manufactured	19,900	1,348,140
Cotton wool	10,230,320	30,440
wares	157,980	5,877,880
Wool	2,261,980	10,652,560
Woollen wares	38,220	24,312,240
Coffee	5,804,110	9.0
Pepper	1,098,810	100
Sugar, raw	15,054,330	
refined	119,000	640
Dye stuffs	6,100,980	105,760
Olive oil	10,502,670	5,360
Potashes	72,300	282,890
Salt		679,650

The usual coins in circulation are the ducat of Holland = 4 fl. 30 kr.; the sovereign = 13½ fl.; the florin of 20 = 1 fine mark, divided into 60 kr.; £1 sterling, at par = 9 fl. 31 kr. Bank notes, of 5 fl. and upward, circulate, as well as the notes belonging to the depreciated currency, of which 5 fl. = 1 fl. in silver, and 1 fl. = 24 kr. This is denominated *Vienna value;* the silver value is called that of the *Convention.* Pieces of 20 kr., silver, 3 of which form a florin, with smaller pieces of 10, 5, and 3 kr., form the silver coinage. The 20 kr. piece is termed, in Italy, lire Austriaco. The lire di Milano was introduced by the French = 1 franc = 22·6 kr. The zuado = 2 fl. 20 kr., in silver.

The principal duties on importation fixed by the tariff (which the Milan treaty has not affected) are,

	Duty.		Value per cent.
Cotton goods, of all kinds	36 kr.		per florin 60.
Ditto, yarn	15		cwt.
Ditto, thread	30		do.
Cast-iron wares	5 fl.	24 kr.	do.
Steel, in bars	6	—	do.
Iron plates	9	36	do.
Tinned ditto	15	36	do.
Glass	30	—	do.
Leather, Cow and ox skins	10	50	do.
Calf	25	50	do.
Kid, goat, deer, &c.	37	30	do.
Linen	3	20½	lb.
Cambrics, &c.	18	—	do.
Coarse linens, in small packages of 10 lbs. and under	—	11	do.
Liqueurs, rum, and brandy	13	21	per cwt.
Mahogany in blocks	1	15	do.
Ditto sawed	5	50	do.
Groceries, not specified	15	—	do.
Brass, and brass wire	43	30	do.
Ditto, wares	—	36	per 1 fl. 60 per cent.
Paper	2	40	per cwt.
Spun silk	50	50	do.
Ditto, dyed	63	19½	do.
Sewing silk	152	16½	do.
Silk wares	10	—	per lb.
Tobacco	15	—	per cwt.
Cloth	—	36	per fl. 60 per cent.
Carriage springs	60	—	per cwt.
Sugar, refined	21	—	do.
Ditto, raw, for consumption	21	—	do.
Ditto, ditto, for refining	14	—	do.
Earthenware	15	—	do.
Pepper	20	—	do.
Coffee	21	—	do.
Indigo	7	30	do.
Colours, not named	15	—	do.

It will not excite surprise to find, that with these duties, which farther impose the necessity of giving permits with many of the articles specified on their being transported from place to place, the regular importation is but trifling, while the quantity smuggled is said to be enormous. If we add the immense cost of covering a frontier of the extent of that of Austria with custom-house guards, the chances of bribery, &c., there is reason to believe that the gain of the state cannot be much in this department, whereas the loss to the country must be evident, the inhabitants being compelled to buy dear and inferior articles, without being able to export their produce on favourable terms.

How much the trade of the empire may be increased by a treaty of commerce with England, in which concessions are made on both sides, must be evident from our remarks on the extent and produce of the Austrian forests, on the corn that may be grown, and on the state of the wine and silk production. The town of Stry, near the Dniester, in Galicia, is as near Carlstadt, in Croatia, as it is to Dantzic; and from the plain which the Dniester waters, the finest wheat is drawn, which supplies the Dantzic market. How easy, therefore, would it not be for Austria to draw a large share of this carrying trade through its own territory instead of sending it to the Baltic! and to do so nothing is requisite but perseverance on the part of the government in the improvement of the means of communication, and some relaxation in the strict measures in force respecting Hungary. To this the whole of the produce of Moldavia, Wallachia, Servia, Bosnia, and Bulgaria may be added; which, by the aid of towing-steamers, might be brought up the Save to Sissek, and by the Kulpa to Carlstadt, within 70 miles of the Adriatic; so that, even as matters now stand, England, on an emergency, is in a great measure independent of Russia and the Baltic ports as long as she is on friendly terms with Austria. On the other hand, by importing silk direct from the Mediterranean, England has it in her power to do without supplies from France; while Austria, as is evident from the list of exportations, could almost starve the Lyons market. It appears from these, that the importation of raw and spun silk into France averages 50,000,000 fr.; consequently more than ⅓d of the exportation of manufactured silks, which averages 144 millions of fr. (Calculation of M. Arlé Dufour, in Lyons.) Now the export of silk from the Milanese direct to France, in 1837, amounted to 1,227,000 libre Piccole, which may be estimated at 30,000,000 fr., or 4⅕th parts of the whole exportation; and of the 1,383,000 lib., exported to Switzerland and Germany, no doubt a considerable portion found its way also into that country. The exports to England, in 1837, were,

Raw silk	673,500 lib.	Piccole.
Spun	51,250	do.
Waste	681,800	do.
Strasse	211,100	do.

The nature and amount of the circulating medium in the empire may be approximatively estimated from the following statements. The official publication of the Bank accounts showed that, on Dec. 31, 1827,

The advances on security amounted to	5,666,990 fl.
Ditto, on discounted bills	41,251,627
	46,918,617 fl.

Paper money still in circulation, part of the depreciated currency of 1811, 16,064,488 fl., or, in silver value, 6,025,795 fl. Farther, if the sum stated in the view of the national debt to be due from government to the bank be correct, it amounts to 140 millions of florins; which would make it probable that little short of 200 millions of florins circulate in paper currency—about 20 millions of pounds sterling. M. Becker, in his latest work upon the Austrian Mint, states the sums coined during the reign of the late Emperor Francis to have been,

Years.	Gold.	Silver.	Copper.
1792—1802	19,232,626	949,031,018	32,337,745
1803—1812	10,659,916	104,066,665	139,788,940
1813—1822	24,680,983	44,730,490	8,791,601
1823—1834	73,100,431	70,367,870	

The usual substitutes for money, such as bills of exchange, checks, and drafts, are of remarkably limited extent; and Hungary may be said not to know what commercial credit is, owing to the small protection afforded to creditors by the existing laws. These, however, it is thought, will be ameliorated at the approaching meeting of the Diet; a circumstance which must tend to enhance the value of all kinds of property in that kingdom. On the other hand, arrangements, of which we are quite ignorant, render a smaller amount of circulating money sufficient—for instance, the payment of a great proportion of rents, in kind or in labour: some of the public contributions are also delivered in kind; and the public functionaries constantly receive a portion of their salaries in corn and fuel. We believe that, on one occasion, a sum due to Great Britain by Austria was paid in Dalmatian oak timber, to the mutual satisfaction of both parties.

Revenue, Taxes, &c.—The financial system of Austria is covered with a thick veil of secrecy. The total revenue is stated by Crome (1826), with whom the *Nat. Encyclo.* (1836) agrees, at 150 millions of florins in silver. André

(1893) estimated it at 116 millions. The estimate of the receipts of taxes, given by the last-named writer, is the only one which has been attempted. The direct taxes, in all provinces excepting Hungary, Transylvania, and Dalmatia (which have separate financial systems), consist, 1st, of the *land tax*, levied on the carefully-estimated produce of the land, whose area has been ascertained by trigonometrical measurement. Cultivated land is divided into classes, according to its ascertained quality: but commons, sandpits, quarries, ponds, and marshes, are valued by investigation into their annual produce. The average rate of taxation, according to Kremer, is, for meadows, gardens, and fishponds, 17·55 per cent. (highest value of produce). Commons and forest-land, 21·15 per cent. (least employment of labour and capital). Vineyards, arable land, lakes, rivers, &c., 10·37 per cent. (greatest labour and capital), on the nett produce, valued according to the market prices of the district. 2d. The *house tax* is levied on buildings in the capital and provincial chief towns, according to the rent of each. In Vienna, a special commission, and in the provinces the respective circles, controlled by commissaries, fixed originally the rate of taxation; but the principles laid down, and the rate thus fixed, have not been made public. Houses in smaller towns and in the country are classed under 12 divisions, which contribute from 20 kreutzers (3*d*.) to 30 fl. (£3) each. There is, however, no proportion between the taxation of the houses in the large towns and those classified; the former paying nearly 30 per cent. of their rental under one denomination or other. 3d. Rents, tithes, and services due from tenants to landowners are rated at 12½ per cent. per annum. 4th. The *industry tax* on traders, manufacturers, and professions of all kinds, ascends, according to a scale, from 5 fl. annually; and the lowest class in Vienna, in which no capital is supposed to be employed (in the provinces, 1 fl. 30 kr.), up to 1500 florins (£150) per annum as the maximum. 5th. The *class tax* is imposed on all clear revenues above 100 florins (£10) per annum, with the exclusion of rents of houses, and the revenue derived from landed property farmed by the owner: certain investments in the funds are also exempted. The statements of individuals and corporations are controlled by the local authorities; and the trading and mercantile classes, although already taxed under the former head, are included in this contribution. The rate varies from 2½ per cent. for 100 fl. income, to 20 per cent. on a revenue of 150,000 fl. as the maximum. 6th. The *personal*, or poll tax, is paid by all individuals on attaining their 15th year, with the exception of paupers receiving parish relief, and the military; labourers contributing 15 kr. to 30 kr., and the highest contribution being 1 fl. 30 kr. annually. Strangers pay this tax at much higher rates during the shortest residence in the Austrian states; and Jews are subject to peculiar and highly-rated impositions. The legacy and stamp-duties are likewise productive sources of revenue. The estimate of the annual revenue arising from these taxes, as given by André, is,

	Florins.
Land, house, and rent taxes	50,000,000
Industry tax	1,500,000
Income tax	5,000,000
Poll tax	2,800,000
Jews' taxes	3,000,000
The indirect taxes:	
Customs	6,000,000
Salt monopoly	8,000,000
Tobacco ditto	2,500,000
Legacy duties	700,000
Stamps	3,650,000
Excise (levied on all articles of consumption, flour, meat, vegetables, groceries, beer, wine, &c.)	12,340,000
Other branches of revenue from several provinces:	
Post-office	3,500,000
Mines	5,000,000
Domains	6,000,000
	110,990,000

To these 1,000,000 is added for other taxes, not included above; which raises the *nett* revenue to 112 millions, or £11,200,000. The cost of raising it is reckoned at 15 per cent., which raises the gross revenue to 130 millions. It must, however, be observed, that several of the above items are evidently stated too low, especially the industry, income, and poll taxes, and the cost of collection; so that, if we take into account the time that has elapsed since this calculation was made, and the great increase in the population and prosperity of the empire that has taken place in the 20 to 25 years that have elapsed since many of these estimates were made, the sum of 150 millions will not appear overrated. The greater share of these burdens fall upon the Bohemian, Galician, German-Illyrian, and the Italian provinces. Hungary only contributes a moderate sum voted by the Diet, and defrays the cost of a certain quota of troops. In Dalmatia, a tithe of the produce of the land is taken in lieu of taxes. The parochial and country rates have to be added to the above named burdens in all provinces, and are defrayed by labour on the part of the lower classes, and by local imposts on the more wealthy. It is, consequently, impossible to state their value in money. The quartering of troops is also an important charge, especially in Galicia, Hungary, and Italy, where the greater part of the large standing army has, of late years, been cantoned. The cavalry is mostly distributed through the villages of the different provinces, for the easier procuring of forage. The peasant receives 8 kr. per deim for house, fire, and diet, per man: the dung of the horse is the remuneration for stable-room. We subjoin the details of the taxes now paying by three different properties in Vienna and the neighbourhood, as illustrative of the amount and distribution of taxation in Austria:

1. An estate in the circle "*Below the Forest*," sold for 33,000 fl., C. M. (£3300), in 1838.

	Florins.
143½ joch (203 acres) sold for	15,140
House and offices	3,000
Tithes and various revenues from several small houses valued at 1326 fl. per annum	15,000
Value of the estate (fl., c. m.)	33,140
Land tax, house tax, with supplementary contributions	159 49
Taxes on tithes, and other revenues	223 20
Annual taxes (exclusive of quartering of troops and parochial assessments) (fl., c. m.)	383 9

The owner is lord of the manor, and has the presentation to the living of the village and to its school.

2. A small country house and grounds 2½ miles from Vienna.

	fl. kr.
House and garden, estimated at	7000
Produce of garden	24 42 per annum.
The house pays in rent and service	11 15 annually.
	fl. kr.
Land-tax	3 16
House-tax	6 0
Parochial dues	10 0
Taxes and parish rates (fl., c. m.)	19 16

3. A brewhouse in a suburb of Vienna, with land in the immediate vicinity.

	Florins.
A brewery, valued (for house and premises, with the licence and good-will)	95,000
140 joch (198 acres) land near the town, valued at 300 fl. per joch	42,009
(fl., c. m.)	137,000
	fl. kr.
House and supplementary taxes	462 43
Tithes	7 15
School money	3 55
Parish dues	87 27
Land tax on 140 joch land	181 49
Watching ditto (country police)	70 0
	813 9
Extra tax as landholder, not being a noble	183 49
Annual taxes (fl., c. m.)	996 58

The brewer pays besides, as *industry tax*, with the additions (being rated in the 2d class . . . . . 520 fl. per an.

The brewery produces in the season 60 eimer (93 barrels) per diem, the duty on which is paid in ready money, 103 fl. for 60 eimer, making the annual sum of . . . 25,000 florins.

The price of beer in Vienna (of the strength of porter) was, in Sept., 1836, when the price of barley averaged 12*s*. 3*d*. per quarter, 5 fl. per eimer, or 27*s*. 4*d*. per barrel of thirty-six gallons.

It will be necessary to observe, that the personal taxes to which the proprietors of the above-described houses and lands are liable, are not included in this statement. These are the *class* or income tax, and the *poll* or capitation tax. Neither is any allowance here made for the quartering of troops; which is not a small charge, even in those provinces where comparatively few regiments are stationed. In the city of Vienna itself no troops are quartered, the citizens having purchased their exemption by erecting a large barrack. Troops marching through are billetted on the houses

of the suburbs, which are five times as extensive as the city itself.

The expenditure of the nation is never published, even if it be fully ascertained. The court, although splendid, is by no means extravagant in expense, and the family estates are considerable. The courts of justice might easily defray their expenses from the fees taken from suitors. The army and the administration of the interior are the great drains upon the treasury. In the latter department, the *Schematismus*, annually published, contains the names of upward of 15,000 employés, whose functions embrace the direction and control of almost every action of the subject. The department of the public works is on a large scale; and its attention has of late years been specially directed to the establishment and conservation of the roads, canals, and means of communication, in general, throughout the empire. The extensive mountain tracts, embracing the highest and most difficult mountain passes in Europe, have all been rendered accessible, at an immense expense of labour and money. The talent and perseverance displayed in this branch of administration have been rewarded by unusually splendid results. Among upward of sixty mountain passes, varying from 5 to 70 miles in length, that over the Stelvio, between Tyrol and Lombardy, is the most elevated in Europe, and the road over it, considered as a work of art, exceeds everything of the kind that has been as yet attempted. Similar undertakings, on a less vast scale, have been completed in the Carpathians, in Croatia, Dalmatia, and inner Austria. The outlay required for the construction and annual repair of these extensive works (as the snow and winter torrents are continually damaging them) could only be met by a centralization of the revenues of so large a state. Local taxation or exertion could not suffice in these cases; as the districts requiring the greatest expenditure are usually the poorest. Balbi has enumerated the principal public works undertaken or assisted by the government in Lombardy and Venice, between 1814 and 1834. The sum expended on them amounts to sixty-eight millions of lire, or about £2,500,000, in which, however, the cost of the roads is not included.

The *National Debt* may be calculated as follows, from the published statements of the Sinking Fund Commissioners, assuming the original sum given by André, and which has been adopted by Malthus, to be correct. This author estimates,

	fl.	
The *old debt*, in 1816, at . . .	630,000,000	
Paid off or absorbed by the Sinking Fund down to 1837 . .	270,000,000	
		360,000,000
New debt contracted from 1816 to 1834	416,554,840	
Redeemed, paid off, and drawn by lottery down to 1837 . .	282,523,642	134,031,198
Liabilities of the nation in Oct., 1837 . .		fl. 494,031,198

Of this sum (about fifty millions of pounds sterling), the old debt bears interest in the depreciated paper currency; and the whole of that charge is redeemable by lottery, five millions of florins being annually drawn by lot, and either paid off or placed in silver value at the option of the holder. The new loans bear interest at five, four, and three per cent.; and three are lottery loans, which will expire in the years 1840, 1841, and 1860. Of the total given above, 50,000,000 fl. stands in the name of the Commissioners of the Sinking Fund; and into this fund the proceeds of the national domains, which are annually sold, are paid. The amount of the depreciated paper currency still in circulation must be added to the sum of the debt: in 1838, it was 16,000,000 (about £640,000). The sum in which the government is indebted to the bank for the portion of this currency, which that corporation redeemed by exchanging their notes for it, has not been officially published, but is stated by the writer of a letter on the bank affairs in the *Augsburg Gazette*, 27th March, 1838, to amount to 140,000,000 fl. in silver.

Laws, Civil and Criminal.—The present codes of civil and criminal law (*Bürgerliches Gesetzbuch; Gesetzbuch für Verbrecher*, &c.) were drawn up by a commission of lawyers at the command of the late Emperor Francis I., and published by his order after discussion in the council of state. They are much praised as a compilation of legal theories, but are open to the objections raised against all codes in practical respects; and in Austria the deficiency is not allowed to be remedied, as the decisions of the judges are not published, and each judgment passed under a paragraph of the codes is a fresh improvisation on the part of the judge. If it be by chance discovered that under the same circumstances a former judge or another court decided differently, the case is referred to the ministry of justice, which decides what the law is *in that particular case*, but its decision is not to be taken as a construction of the law for future cases. The judges are removable, and may be promoted at the pleasure of the crown; but, like all other employés, can only be dismissed with pensions, unless convicted of improper conduct by some court of justice. In all cases the trials take place in secret, and the proceedings are in writing; even the examination of witnesses is not public: the decision is according to the votes of the president and assessors of the court. Criminal trials are protracted to an enormous length; and accused persons, as in Germany, are often suffered to be in prison for years before their cases are brought on: when, if the trial be of a complicated nature, it may last from three to four years! The punishment of death can only be inflicted after confession. The lists of mortality furnish for the eleven provinces which they embrace, the following average of capital crimes and executions during the five years 1833–1837:

Murdered, 429. Executed, 33.

Whence it would appear that a vast number of criminals must annually escape detection. A statement, published by M. Koch, in the *Vienna Gazette*, gives the following details for Hungary;

Years.	Criminals.			Summary Executions.
	Condemned.	Pardoned.	Executed.	
1832	74	65	9	10
1833	58	55	23	13
1834	77	65	12	16
1835	67	62	5	6
4 years.	276	247	59	45

The same writer states, that of ninety executions which took place in the other provinces of the empire between 1824 and 1828, twenty-eight were summary executions without trial. This period, as well as the one regarding Hungary, does not embrace the years in which the cholera raged in the different provinces, during which period martial law was, to a great extent, established. The police board occupies, with respect to the tribunals of law, a similar position to that occupied by the emperor's cabinet in respect to the council of state. The preventive power intrusted to it being naturally one which no law either prescribes or controls, it is a formidable instrument. The political and local exercise of its authority is very strict in Austria, and includes not only the preservation of public order, but the permitting strangers to reside in any part of the empire, the allowing subjects themselves to change their places of abode or to travel, passports being requisite even in the country itself, and frequently only procured after long delay and much trouble. The sanatory police is on an extensive scale, and is, perhaps, as well managed as it can be in so extensive an empire by a public board. The police of the provinces is intrusted in the large towns to a board whose officers are appointed by the crown, in small towns to the magistracy; in the country the captain of the circle unites these functions with his judicial and administrative powers.

Prisons, &c.—The Austrian prisons have attained a melancholy celebrity of late years. They are divided into three classes: state prisons, for political offenders, the chief of which are the Spielberg at Brunn, in Moravia; Kufstein, in Tyrol; Munkaes, in Hungary, Lemberg, Milan, Venice, &c.; houses of correction (Zuchthaüser) in all the chief towns, in which criminals are kept to hard labour (those in irons are sent to the fortresses); and houses of detention, under the care of the police, in which persons who are arrested are kept before and during the judicial proceedings. A large prison, on an improved plan, has recently been erected in a healthy situation in Vienna; and it is usual to give every needy prisoner, on his discharge, a small sum of money, to keep him from the temptations of momentary indigence. In 1837, 234 individuals received this relief, the sum distributed amounting to 923 fl. In Prague the prison seems one of the best managed. At the close of 1837, the number of convicts is stated to have been 608 (446 males, 162 females); and the average proceeds of the labour of the prisoners, who follow their respective trades, was for six years 11,845 fl. (£1200) annually.

The Church, Clergy, &c.—The Austrian clergy are both numerous and powerful, although their wealth has been much diminished by the confiscations and secularizations of the Emperor Joseph II. They consist of eleven Roman Catholic archbishops, one Greek united abp., one Greek schismatic abp., one Armenian abp. The Roman Church has, farther, fifty-nine bishops, with chapters and consistories, and forty-three abbots of richly endowed monasteries in Austria, Styria, Illyria, Bohemia, and Moravia. Hungary has twenty-two abbots with endowments, 124 titular abbots, forty-one endowed and twenty-nine titular prebendaries, and three college foundations. Transylvania has three titular abbots, and upward of 150 monasteries and convents. In Galicia seventy monasteries are counted. The Greek United Church has one abp. and one bishop in Galicia, and five bishops in Hungary. The Arminian Catholic Church have an abp. at Lemberg. The Archbp.

of Carlowitz is head of the Greek Church, with ten bishops and sixty protopapas (deans). The Protestants, who, in the greater part of the empire, are only tolerated (not being allowed to build churches with steeples, to use bells, or keep parish registers independent of the Catholic parish clergy), are placed under ten superintendents for the Lutherans, and nine superintendents for Calvinists. In Hungary and Transylvania, the Protestants choose their superintendents, who are controlled by district inspectors. The greater part of the Magyar inhabitants of Hungary are Calvinists, and Protestants enjoy, in that kingdom and its dependant lands, equal rights with the Catholics. The Unitarians are tolerated, or, rather, recognised by law, in Transylvania; where they have a superintendent, and form 164 parishes. The Roman Catholic religion is the dominant one throughout the empire; and in case of dispute, the right to the tithes assumed to be vested in the parish priest. The church is, however, far from being possessed of the tithes to a large extent; its wealth consists in endowments of land, or revenues charged upon estates; and its hierarchy may be considered as richer even than that of Great Britain. The richest see is the primacy of Hungary; the archbishopric of Olmütz being next in importance. On the suppression of the convents under Joseph II., a portion of the confiscated lands and revenues was appropriated to form a fund for improving the salaries of the parish clergy; the minimum of whose incomes has been fixed at 300 fl. for a parish priest, and 150 for a chaplain or curate. This fund is nominally under the control of the bishop, as far as concerns his diocess; yet estates belonging to it are constantly advertised for public sale. The united Greek and Armenian churches are assimilated to the Roman Catholic Church, as far as their parishes extend. The schismatic Greeks possess a fund, vested in *beneficium nationis*, in Hungary, which is managed by the Metropolitan and three assistants. The Protestant confessions have no endowed churches or parishes out of Hungary and Transylvania; the clergy elsewhere being chosen and supported by their flocks. The right of presentation to livings is vested, in general, in the landed proprietors and various corporations, as in England. The parishes in the gift of the crown, as heir to the right of the suppressed convents, are numerous. The emperor nominates all the bishops, with the exception of the archbishop of Olmütz, and seeks the sanction of the pope through the medium of the imperial ambassador at Rome. The Hungarian bishops enter upon the exercise of their secular functions as magnates before the papal consent is received. All titular bishops, as well as all abbots and prelates in Hungary, are likewise nominated by the crown. The chapter of Olmütz enjoys the privilege granted by Wrattislaw II. of Bohemia, in 1080, of choosing their archbishop from among their own members.

The Austrian church property throughout all the provinces, except Hungary and Transylvania, is very highly taxed; and the state inherits a moiety of the personal property of every Catholic clergyman; it being, of course, supposed that he has no direct natural heirs. But the line of policy respecting the Church of Rome, of which the Emperor Joseph laid the foundation, has not of late been adhered to, new religious orders having been suffered to establish themselves; and even the Jesuits have been permitted openly to settle in several provincial towns within these few years. According to the most recent census, the numbers attached to the different sects are as follow:

Roman Catholics	26,990,000
Greeks	3,040,000
Protestants	2,850,000
Jews	480,000
Unitarians	50,000
Arminians	13,000
Mohammedans	500

These numbers are, however, for the present amount of the population, underrated; especially the estimate of the Protestants, for want of authenticated returns of the population of Hungary.

Classes of Inhabitants, and State of the Provinces.—The three classes of *nobles*, *citizens*, and *peasants* are strictly defined in all the provinces. The nobility is both numerous and rich in Austria, where estates are generally entailed; and the higher charges of the court, the army, and the church, are reserved for this class. The members of the male sex of the various noble families throughout the empire, were estimated, in 1835, at 250,000. Of these, 163,000 belonged to Hungary, 24,900 to Galicia, and 2260 to Bohemia. The latter country counted 14 princely families, 172 families of counts, 80 of barons, and 100 of knights. Their total incomes were estimated at 18,000,000 fl. (£1,800,000).* The privilege of manorial rights can only be enjoyed by a noble in Austria. These include the right of presentation to livings and schools on his estates, and the right to hold courts of justice in the first instance. Other privileges are those of peculiar tribunals, before which only he can be cited; the freedom from the conscription; and the right of sitting in the provincial estates of each province in which he is qualified. These immunities are also enjoyed by the newly-created nobility, among whom not a few profess the Jewish religion; but the court draws a marked distinction between old families and those recently ennobled. As the patent is given without difficulty to all who are willing to purchase it, the price thus paid by citizens who wish to become landholders, may be looked on as a tax laid upon the transfer of estates. Persons not of noble birth, who do not purchase a patent of this kind, pay a portion of the taxes double. The peasant is personally free throughout the empire; and an appeal being allowed from the manorial court of his lord to the Circle court, his condition is daily improving, and his rights and property obtain more respect. Yet the circumstance that, in the greater part of the empire, the rent of his cottage and field are paid in manual labour (*Robot*), leaves him in a state of deplorable dependance; and in some provinces, the possession of this claim on the labour of the lower classes disinclines the higher orders from forwarding the mental and moral improvement of the peasants. On the introduction of the present system of direct taxation by the Empress Maria Theresa and her son Joseph II., an arbitrary regulation of the dues claimed by the landlords was effected, and the total amount which a landlord could demand, whether paid in money, service, or kind, was ordained not to exceed 17 fl. 46½ kr. for every 100 fl. which the land produced. This measure was indispensable to enable the peasants to meet the heavy taxes, which, as we have shown below, average 12½ per cent. of the gross produce. At the same time, the peasant's *property* in the land he held, from whatever lord, was declared indisputable; and though the latter may seize upon his stock and moveables he cannot eject for arrears of rent, unless the land be held on lease or tenure; which is by no means common in Austria.

A very great difference is found, as may be supposed, in the state of civilization of the different provinces. Among the higher classes, in the great capitals, this difference is of course nearly imperceptible; the universities and the better institutions for instruction being open to the inhabitants of all provinces, and being arranged throughout on a uniform plan. Another cause of this similarity in the larger towns is the great proportion of Germans found among the trading classes, even in the Slavonic and Magyar (Hungarian) districts, and who are everywhere distinguished in that class for intelligence, sobriety, and industry. The mass of the people may, perhaps, be said to be most advanced in the Italian provinces, where agriculture is carried to the highest perfection, and both skill and activity contribute to forward industrial operations. The next in rank, in point of intelligence, are unquestionably the inhabitants of the German provinces; then come the Bohemians, Silesians, and Moravians, who occupy almost exclusively the manufacturing provinces. The Illyrians may be looked on as not inferior to their Styrian neighbours; but a thin population and a rugged soil, together with the fact that their language is not a medium for the circulation of knowledge, keep the Slavonians in both provinces back, and they cannot be ranked higher than the Poles or Moravian inhabitants of Hungary. The rude and almost nomadic life led by a large portion of the Magyars of Hungary, will be noticed in treating of that country. It is partly ascribable to the nature of the soil they inhabit; and partly to the faulty laws which throw impediments in the way of their improvement. The Dalmatians stand on the lowest footing of civilization in Europe. The want of a central point of national interest to which the inhabitants of all the provinces might look, and which might direct the current of popular feeling in each to the common advantage of all, is strikingly felt; and each province having its own representation by estates, powerless as these bodies are (with the exception of the Hungarian Diet), and many having a different form of government from the others, every one is inclined to look upon itself as having separate interests from the rest. The effects of this system have of late years grown especially perceptible in the repeated applications made by the Bohemians, Poles, and Hungarians, to have their respective languages exclusively used in public business, and in the provincial schools.

As every province forms a separate land, each has its peculiar language or dialect, and its distinguishing customs and habits. Of the Slavonic languages, the Polish possesses the richest literature; but the Bohemian has of late years been highly cultivated, and forms the written language of the Moravians and Slowaks of the N.W. counties of Hungary. The dialect of Carniola has been methodized, and is grammatically taught as the written language of Illyria and Croatia. The ephemeral existence of the Illyrian kingdom

* The nobility of Hungary counted 4 families of princes, 54 of counts, 76 of barons, and 260 of knights.

established by Napoleon sufficed to call forth the powers of a lyric poet of considerable merit, named Wodnik, who wrote in this dialect. The Slavonian nations have all the distinguishing characteristics of ardent feelings and sanguinity of temperament, which makes them more easily elated and sooner depressed than their neighbours the Germans. They are fond of music; and every district has its national airs, which are often of great antiquity, and usually plaintive. Among the Slavonians, the Poles are distinguished by a martial disposition and love of show. The national costume is now only kept up among the peasantry, whose winter dresses especially are tasteful, and even elegant. In the other Slavonic nations of the empire, the love of ornament is less remarkable, the national spirit having sunk in the long lapse of time during which they have been dependant. No Slavonic dialect is used in the courts of justice or in public instruction in the higher schools of the empire. The German peasants wear the dress commonly met with all over Germany, with varieties in the colour and head gear, in nearly every village. The Austrian women wear caps or bonnets made of gold lace and decorated with spangles. In Tyrol the German costume is most picturesque. The German language is that used in transacting public business in the German and Slavonian provinces, and in the universities on the north side of the Alps. The extensive range and high excellence of the productions of the German authors in the fields of literature and science, render this language peculiarly adapted to be the medium for the diffusion of knowledge; and this circumstance lends a moral ascendency to the Germans, whose numerical weight is not great in comparison with the other nations of the empire, which they will long continue to hold, if they do not lose sight of the foundations on which it is based.

The Magyars, or inhabitants of the Hungarian plains, of Tartar descent, are a high-spirited race, warmly attached to their national habits and rights. Their national costume is the most splendid in Europe, and every family wears its distinguishing colours. The rich *Dollmann* (Hussar jacket) and the tasteful *Attila* (a frock coat, trimmed with fur) are only worn on state occasions by the nobles; but the tight pantaloon and short boot is the usual dress of the peasant, who also wears a blue jacket and a low broadbrimmed hat. Though fond of music the Hungarians are no musicians: the national dances are often highly pantomimic; and the Magyar, who is seldom seen to smile, expresses the excitement of his feelings, whether in joy or sorrow, in dancing. The Magyar and Latin languages are those used in the courts of justice and in the public offices. The dress of the Walachian peasantry, on festive occasions, is highly ornamented and very becoming. The Italian costume is both rich and elegant; especially the head-dresses of the women, which are more tasteful than those worn on the north side of the Alps. In the conflict for superiority between the Germans and Italians, neither nation perhaps does sufficient justice to the good qualities of the other; but the northern Italian must be allowed the merit of displaying those of continence, sobriety, and industry in a high degree, though he be less the slave of form than his German neighbour. The Italian language is used in the government offices, in the courts of justice, and in public instruction, in the Italian provinces.

The peasantry in every province have a religious turn, which they not only evince by a regular attendance at church, and following the frequent processions, but by assembling in great numbers at the stated periods for the annual pilgrimages, which are mostly made to the churches of the Virgin Mary. The chief of these places of resort, Maria Zell in Styria, is annually visited by more than 100,000 devotees. The next in importance is perhaps the shrine at Calvaria in Galicia, to which pilgrims annually flock from Bohemia, Silesia, Poland, and Hungary. The pilgrimages are, however, said to be, like the field "preachings" formerly held in Scotland, anything but conducive to morality. The Sunday evening is everywhere devoted to festive enjoyment, and indulgence in the wine-cup in such provinces as produce this beverage. Beer and whiskey are the common drink of the northern provinces, the latter especially in Galicia and Hungary. Smoking is considered an indispensable luxury in all the provinces north of the Alps.

With respect to the comforts of life, the Hungarian, Italian, and German peasants are the most advantageously situated. The largest share of landed property falls to the Hungarian, and for the most part he receives the best remuneration. In Italy, where the peasant is hardly ever a landowner, unremitting industry, and a judicious division of labour, improve the condition of the mass of the people. Bohemia, Moravia, and Silesia rank on a level with the German provinces in the most improved districts. The Galician peasant is the lowest on the scale but one—the Dalmatian; the province of the latter forming a melancholy exception to the rapid improvement which the others are making.

Provision for the Poor.—A regular tax for the support of the poor is nowhere levied—each parish is by law bound to support its own poor; but as the standard of pauperism is, in all cases, very low, the charge is nowhere burdensome. The large towns have poor-houses, supported partly by revenues from foundations, partly by voluntary contributions; and on extraordinary occasions, the emperor or the government supply a sum from the public revenues to meet their exigencies. The total sum expended in Vienna in 1837 by the public institutions of charity (including the hospitals and asylums for the blind, deaf and dumb, and foundlings), amounted to 1,352,124 fl., with which 62,133 individuals were relieved. (*See* VIENNA.) We have likewise seen a list of the donations by the King of Hungary, the empress, and the Archduchess Sophia, in the year 1834, which amounted to 21,530 fl. Savings' banks have been introduced into the different provinces with great success. At the close of 1835 the Vienna savings' bank held,

11,508,755 fl.	at 4 per cent.	
1,999,564	at 3½	—
383,991	at 3	—
13,892,310 fl.,		

or about £1,400,000, standing in the names of 57,083 individuals. In 1836 the savings' bank at Prague held 5,200,460 fl. in the names of 17,704 individuals.

Among the institutions for ameliorating the state of the poor, the hospitals stand in the first rank. The exertions of the Emperor Joseph II., to improve the medical department of the army, had a very advantageous influence over the medical establishments throughout the empire. In the *Allgemeines Kranken Haus*, at Vienna, one of the finest hospitals in Europe, 8894 paupers were relieved and supported, in the year 1837; and similar establishments are found in every principal town of importance. The 29 hospitals of the "Brothers of Charity," throughout the various provinces, admitted (in the six years 1830–35) 111,086 patients; of whom, according to their own published reports, 101,669 were discharged cured, the deaths having only been in the proportion of 1 to 11⅓ patients. These hospitals are supported by voluntary contributions.

Literature and the Fine Arts.—Newspapers and periodical publications are published in German, Italian, Bohemian, Polish, and Hungarian. A periodical, in the Servian dialect, was attempted some time back in Croatia, but was suppressed by the police, and its types confiscated. In every provincial capital a semi-official newspaper appears, usually in German; but this is accompanied, in the greater part, by another in the language of the province. The following statement appeared some time back in the *Augsburg Gazette*, and was attributed to M. Balbi:

	Newsp. and Period.
The Austrian, Bohemian and Illyrian provinces have	22
Milan	25
Lombardy	10
Venice	7
Verona	5
Galicia and Hungary	7
	76

The subjoined statement of the circulation of the Vienna periodicals and journals is from the *Nuremberg Correspondent*, but it seems very much underrated:

Vienna Gazette	2,600
Austrian Observer	600
" Eagle	270
Theatrical Gazette	1,300
" Humorist	450
Vienna Fashionable Journal	600
Spectator	750

This extraordinary paucity of journals is accounted for by the fact that the Austrian government is as careless of praise, as it is intolerant of censure. But few foreign papers are admitted to general circulation; and those which are must offer no remarks upon the condition or policy of the empire. The severity of the censorship, which gives to underlings in office the control over the productions of men of genius, is calculated to degrade and stifle the intellectual energies of the country.

The fine arts are also in a languishing state, in part owing to the apathy which prevails both among the higher classes and artists, neither of whom are excited by public praise or blame. The pictures in the splendid Imperial Gallery at Vienna are not open to be copied by artists; and every composition which is publicly exhibited is subjected, like the books, to the censorship—a board which is unremitting in the enforcement of the political, moral, and religious restrictions which it prescribes to the flights of genius. A statement of Balbi, in the *Vienna Gazette*, shows the number of works annually exhibited at Milan to amount to about 600. In the exhibition of 1837, of 603 pieces exhib-

fited at that capital, there were 14 statues and 44 busts of marble, 442 paintings of all kinds, the rest being drawings in water-colours and crayons, engravings on stone and copper, miniatures, and medallions. In Vienna there is an exhibition every third year, in which about the same number of works of art, but with a smaller proportion of sculpture, are shown. Music is cultivated with more success, and enters largely into the education of all classes in Bohemia and in the German provinces. The Bohemians are particularly remarkable for their skill in instrumental music; and not only is it common to find eminent performers in small villages, but many of these excel on two or three different instruments.

Education.—We borrow the following statements on this important subject from Mr. Macgregor's valuable work, entitled *Austria and the Austrians*. "The foundation of elementary instruction in Austria was first laid in the early part of last century; and, soon after, about one in twenty-five of the inhabitants were taught to read. Joseph II. directed his energies to the instruction of youth; but the clergy, high and low, opposed him, and after his death succeeded in establishing generally their own plan of educating children. The government has, however, taken special care that the priests should not have the control over public instruction, and the law of 1821, consequent to that of 1819, in Prussia, directs that no village in the hereditary dominions shall be without an elementary school; that no male shall enter the marriage state who is not able to read, write, and understand casting up accounts; that no master of any trade shall, without paying a heavy penalty, employ workmen who are not able to read and write, and that small books of moral tendency shall be published and distributed, at the lowest possible price, to all the emperor's subjects.

"The provisions of this law appear to me to have been very generally put in force; for I have nowhere in Austria met with any one under thirty years of age who was not able to read and write; and I have found cheap publications, chiefly religious and moral tracts, almanacs, very much like 'Poor Richard's,' containing, with tables of the month, moon's age, sun's rising and setting, the fasts, feasts, holydays, markets, and fairs in the empire; and, opposite to the page of each month, appropriate advice relative to husbandry and rural economy, with moral sayings and suitable maxims.

"Besides these and several small elementary books and periodicals, the *Penny Magazine* is now very generally circulated in Austria. M. Fleischer, the intelligent and spirited bookseller of Leipzig, having managed to procure stereotypes of the wooden cuts of the London edition, republishes the work in German, and strikes off about 38,000 copies for Austria only. A *Heller* magazine, published also at Leipzig, is likewise very generally circulated. The spirit of elementary instruction, if not the most enlightened, inculcates, at every step, morality, the advantage and happiness of a virtuous life, the evils of vice, and the misery consequent on crime.

"I have found no difficulty in procuring statistical returns of the colleges and schools of the empire. From these it appears that, in the eight universities established in the archduchy of Austria, Bohemia, Galicia, Moravia, Tyrol, Styria, and the Italian provinces, viz., Vienna; Prague, in Bohemia; Lemberg, in Galicia; Olmutz in Moravia; Inspruck, in the Tyrol; Grätz, in Styria; and Pavia and Padua, in the Italian states; there are 54 philosophical foundations, with 334 professors, and attended by 7680 students; 55 theological (Catholic), 326 professors, 6120 students; 16 medicine, 150 professors, 4679 students; 1 (Vienna) veterinary, 6 professors, with assistants; and 8 jurisprudence, 57 professors, 3928 pupils.

"Taking the population of the Austrian dominions, exclusive of Hungary and Transylvania, at 22,500,000, I find that there are 25,121 national elementary schools, divided into first and second classes of primary schools, with 10,280 ecclesiastical, and 22,082 lay teachers. In these schools 2,313,450 children are instructed in reading, writing, and accounts; that is, rather, more than one in ten of the whole population. Besides these, there are numerous private schools and institutions. Cannabich gives, for 1835, the following statement: 'Exclusive of nine universities (including Pesth), there are 23 Catholic lyceums and academies; 1 Illyrian lyceum, 4 Lutheran lyceums and colleges, 7 reformed colleges, 1 Unitarian college, 20 Catholic theological, 1 Protestant theological, and 15 high philosophical foundations; 230 preparatory (vorberertenden) gymnasia (of which 6 are high gymnasia in Hungary), besides special common schools (volkschulen) in the classes of primary, secondary, and practical schools: also burgher schools, and the military and forest institutes; blind, and deaf and dumb institutes at Vienna, Prague, Linz, Waitzen, &c.; schools of hydrography and trades; the polytechnic institutes at Vienna and Prague; the medical and chirurgical academy at Vienna; to which has been added the optical museum of M. Reichenbach, 14 normal high schools, 57 special institutions for female education, and 4 communities of instruction; besides numerous scientific societies at Vienna, Pesth, Prague, Milan,' &c.

"The inhabitants of Lombardo-Venetia and Lower Austria are the most generally educated. Among them, I think, one in eight must be receiving instruction.

"The universities of Vienna and Padua rank first among those of the empire. The salaries of the professors are, at the former, and I believe at all the universities, paid by government, and the professors are not allowed to take fees on their own account, nor to deliver lectures, except in their respective colleges. The theological, surgical, and veterinary courses are free to the students; but a fee is exacted for attending lectures on philosophy, medicine, and jurisprudence. These fees are appropriated towards the maintenance of indigent students. The whole course of lectures are read in the German language, excepting some deviations in respect to theology and physic." (Vol. ii., p. 211–216.)

Education in Hungary is not in so flourishing a condition as in the German provinces of the monarchy; but even there it is in a much more advanced state than is generally supposed in this country. A statement, published in the *Vienna Gazette*, shows that, at an average of ten years, ending with 1834, 20,527 pupils have annually attended the universities and gymnasiums of that kingdom. The university of Pesth is by far the wealthiest institution of the kind in Europe. It has a host of professors; and is open to pupils of all religious persuasions. In 1835 it was attended by 1172 Catholics, 253 Protestants, 261 Jews, and 84 Greeks, in all 1770. Besides maintaining a great number of indigent scholars, and a preparatory ecclesiastical seminary, it aids or supports an archi-gymnasium of six classes, and about 3600 district grammar and elementary schoolmasters.

The great defect of Austrian education does not consist in the want of elementary instruction, for that is very widely diffused, but in the jealousy entertained by the government of everything like freedom of inquiry or discussion as to matters connected with the principles of politics, public law, political economy, and even philosophy. These important branches are not taught, at least so as to be made available or useful, and are but little studied in Austria. The board of education (Studienhofcommission) has the appointment of all professors at universities and colleges, and of all teachers at school; it likewise publishes the books used in instruction, and controls the minutest details relating to schools. It prescribes the course and distribution of the hours of study, from which not the slightest deviation is permitted; and the scholars of the few *private* schools are forced to attend the examinations of the *public* institutions, to ensure their being taught according to the prescribed system. The effects of this jealous plan of education on political and moral studies are no less perceptible, and but little less injurious than those of the censorship already alluded to.

Army.—The army is raised in all the provinces, with the exception of Hungary and Transylvania, by conscription, from which, however, the families of the nobility and gentry (Kleiner Adel) are exempted. The whole country is divided into districts for each regiment, which are thus apportioned:

	Infantry.	Rifles.	Cavalry.	Artillery.
Upper and Lower Austria, Tyrol, and Styria . .	7	4	6	2
Bohemia, Moravia, Silesia, Galicia	26	6	18	3
Illyria, Dalmatia, Croatia, and the Military Frontiers	23			
Lombardy and Venice	8	2	7	
The quota furnished by Hungary and Transylvania	14		12	
Total	78	12	43	5

At present the infantry consists of about 196,000 men, all regiments having two battalions of 1200 men each, and 12 companies. A third battalion is provided for every regiment, but is only called out on emergencies; it is called the Landwehr, and this augmentation in time of war raises the number of the infantry to 651,000 men. The cavalry peace establishment is 45,000 men; that of the artillery 17,800; and of engineers, including garrison and frontier artillery corps, sappers and miners, and a battalion of pontoniers, and one of *tschaikistes* (in the gun-boats on the Danube and the Save), 13,000; making a grand total of 271,800 men. Since the accession of the present emperor a number of improvements have been introduced into the military department. The short breeches and light gaiters of the infantry have disappeared, as well as the jack-boots which formerly encumbered the artillery, and have been replaced by trousers and shoes. The infantry are dressed in

white coats, of coarse but comfortable cloth, with light-blue trousers, the Hungarian regiments being distinguished by their national light pantaloons. The cavalry wear the national dresses peculiar to their several descriptions of arms. Hungary furnishes the hussars, and Galicia the lancer regiments; the Italian, Slavonic, and German cavalry regiments wear white uniforms with helmets. The men are usually taken from the provinces in which each regiment has its conscription depôt; but the officers are mixed throughout the army, and their promotion is seldom confined to one regiment. The finest men of each infantry regiment are selected to form the grenadier companies, usually in garrison at Vienna, Milan, Pesth, or Prague; these companies form a corps of 20 battalions, which (for their number) are perhaps the finest men in Europe. The troops are well clothed and fed; and though the annual drain of the strongest and healthiest of the population must be felt by the community at large, there is no reason for supposing that the conscription is regarded as a hardship by the poorer classes. In Hungary the case is different; the regiments of that country are raised by recruiting, and the men are usually seduced by the promise of being placed in the hussar regiments; but in general the Hungarian peasants are decidedly averse from the service, though they make excellent soldiers. It is permitted to those who can do so, to find a substitute; but the conscription too often includes persons of education who, being unable to purchase their exemption, are cut off from all hopes of advancement, as no promotion, except in the artillery, is made from the ranks. The colonel-in-chief of each regiment names and promotes the officers up to the rank of captain. The field officers are nominated by the emperor, and usually advance according to seniority.

The word of command is given, throughout the army, in German; and it is probably to assist the memory of the numbers who do not understand its meaning that the "flügelmann" is still retained. Punishments are, in general, severe, and flogging is of almost daily repetition, especially in the Hungarian regiments. The term of service is, for the men raised by conscription, fourteen years, but is expected shortly to be reduced to ten years. At the expiration of this term, however, the men may re-enlist at their option. The service in the artillery is usually for life. Austria's contingent to the confederate German army is 94,822 men, forming the first, second, and third divisions. Exclusive of various foraging allowances, the army is supposed to cost annually about 45,000,000 fl., or £4,500,000.

The fortification of the avenues by which the French armies in the last war penetrated to the capital has drawn much attention. Linz (*see* LINZ) has been rendered very strong, as the key to the valley of the Danube; and the passage from Italy through the Tyrol has been protected by the erection of a citadel and strong works at Brixen. The principal fortresses beside these in the Austrian empire are, Mantua, Pizzighitone, Legnano, Fuentes, Malaghera, Asopo, and Palmanuova, in Italy; Zara, Ragusa, and Cattaro, in Dalmatia; Peterwardein, Broodt, Comorn, Buda, Leopoldstadt, Gratz, Szigeth, and Temeswar, in Hungary; Carlstadt, in Croatia; Essegg, in Slavonia; Alt Gradisca, in the military frontier of Croatia; Theresienstadt and Josephstadt, in Bohemia; and Olmutz, in Moravia. The whole of Galicia lies open towards Russia without a single fortress. Other fortresses of minor importance are scattered through the different provinces: besides the castles of Brunn, Kuffstein, Milan, Trieste, Linz, Brixen, Buda, Munkacs, &c., Austria has likewise the right of garrisoning Commachio and Ferrara in the Papal States, and Placenza in the grand duchy of Parma. Mayence, in the grand duchy of Darmstadt, is half garrisoned with Austrian, and half with Prussian troops, as stipulated by the treaty of Vienna.

The Austrian navy is said to consist of eight ships of the line laid up in ordinary at Venice, eight frigates, four corvettes, six brigs, and seven schooners or galliots, besides guardships and revenue cruisers: only the smaller vessels, however, are at sea. The flag is red, with a white stripe. The marines consist of one battalion of infantry, a corps of marine artillery, and a corps of marine engineers. The arsenal is at Venice, where there is a marine college for cadets. The dockyard at Venice contains thirty-two covered stocks for building ships of the line, fifty-four for vessels of a smaller size, four large wet docks, five cannon foundries, with a covered rope-walk 910 ft. long, 70 ft. broad, and 32 ft. high. The uniform of the navy is dark blue, with light blue facings, and white breeches; that of the marines is light blue, with red facings. Naval matters are directed by a branch of the war-office at Vienna.

Form of Government.—The empire of Austria being a collection of different states, with different rights and privileges, the form of government necessarily differs in each; but in none is the emperor either absolute or despotical. With the exception of Hungary, Transylvania, and the Tyrol, the powers of the states or provincial parliaments, that meet annually in each of the other provinces, are indeed very limited. They have no deliberative voice in legislative or financial matters. The amount of the taxes for the year, which vary according to the exigencies of the state, is communicated to them, and the distribution of the taxes among the contributors takes place under their inspection. They have likewise the permission of addressing humble petitions, on the subject of grievances, to the throne, of which they but rarely avail themselves. The estates of Lower Austria are invariably convoked at Vienna in September, which is one month previously to the assembling of the provincial estates, which meet in October.

The Hungarian diet possesses very different privileges, and has been able to maintain them notwithstanding the vast influence of the crown. They have a full deliberative voice in legislation, and nothing can be decreed by the sovereign without their concurrence: hence the country is not subject to the heavy taxation, nor legally to the police and censorship ordinances which prevail in other parts of the empire. Passports are not usual in the kingdom, and the Hungarians do not consider their liberty to travel in foreign countries as depending on the will of the sovereign. With these valuable privileges they have, however, preserved a number of faulty laws and cumbrous observances. But the exertions of the more enlightened members of both houses have of late years succeeded in obtaining considerable alterations in these, without sacrificing any of their rights; and the country is rapidly improving through their laudable efforts.

It is not, however, to be denied, that the freedom of Hungary has hitherto been merely the freedom of the nobles and clergy. The great bulk of the people have long been, and still continue to be, substantially in the state of *adscripti glebæ*. Their condition has, however, been in some respects materially improved, and limits set to the lords' demands upon their services, through the interference of the government, and principally of Maria Theresa and Joseph II., in their behalf; but there can be no doubt that the power and privileges of the other classes, however advantageous in some respects, have hitherto been decidedly injurious to the peasantry, that is, to the bulk of the population. The fair presumption is, that but for these privileges the peasantry of Hungary would now have been as free, and have enjoyed the same privileges, as those of the German provinces of the empire.

In the provinces, the members of the provincial diets meet in one chamber, and are composed of prelates, nobles, knights, and burghers, the free peasants being only represented in Tyrol. In Hungary the prelates and magnates, with the *Obergespanns* (lord-lieutenants) of the counties, form the chamber of magnates (*Tabula excelsa Procerum*); the deputies of the cathedral chapters, of the counties, of the free royal towns, and of absent magnates, form the chamber of the states (*Tabula inclytorum Statuum et Ordinum*). Transylvania has a separate diet, but sends members to that of Hungary, as do also Croatia and Slavonia. In the Tyrol there is a chamber of peasants, and no new tax can be levied without the consent of the states.

Offices of Government and Administration.—The arrangement of the different branches of the administration in Austria attained its perfection under the late emperor, Francis I., and is admirably calculated to admit of the personal interference of the monarch in every department. 1. The ministry of state, which long consisted of three members, received a fourth in the person of a distinguished general, on the prospect of a disturbance of the peace of Europe after the French revolution of 1830. This board may be called the emperor's cabinet. The minister for foreign affairs, with the title of imperial chancellor, is its president, and is prime minister. 2. The council of state may be compared to a privy council, and is composed of three sections, embracing seven departments; viz., justice, army, police, exchequer or crown office, finances, board of health, and board of studies. A councillor is named for each department, and a refendary is attached to each in the person of a member of some one of the different administrative offices charged with the execution of the imperial decrees, that is, with the entire administration of the empire. The council of state exercises, in a great measure, the legislative functions; but the drawing up of laws is confided to a commission specially appointed for the purpose. As the legislative power in Hungary belongs to the diet, two councillors manage the affairs of that country and of Transylvania, in as far as they come under its cognizance. The eleven administrative offices embrace the functions of the different departments of the secretaries of state in England, together with those of courts of appeal and of the commander-in-chief. They consist of, 1. The united chancery for the German, Slavonic, and Italian provinces; 2. The Hungarian chancery; 3. The Transylvanian chancery; 4. The exchequer and finance board; 5. The mint; 6. The board of justice, or highest court of appeal for all provinces excepting

Hungary and Transylvania; 7. The board of police and censorship; 8. The war-office, of which the navy board is a branch; 9. The book-keeper-general's office, in which the accounts of every department, excepting those of the police and the ministry of foreign affairs, are inspected; 10. The board of education; 11. The legislative commission.

Under these different boards, which have all their seats at Vienna, the political, administrative, financial, military, police, clerical, and educational authorities of the provinces are placed, who communicate with the respective departments through the medium of the *Gubernium* of each province. Judicial appeals go direct from the provinces to the board of justice, with the exception of Hungary and Transylvania, in the last of which the gubernium is the highest authority under the emperor. Under the gubernium are the captains of circles, and the magistracy of the towns; with this difference, that the former unite the functions of administration and police, whereas the police in towns is entrusted to a special board, independent of the magistracy. In Hungary the "*Statthalterei*," whose president is the palatine, is the chief administrative body, and, like the gubernium of Transylvania, communicates with the sovereign direct through the medium of a special chancery at Vienna. The statthalterei is composed of twenty-two councillors, two of whom are prelates, and has its seat at Ofen (Buda). Under this board the Obergespans (lord-lieutenant) of each county, who is named by the emperor (the charge is often hereditary), and the Vicegespann, his deputy, who is chosen by the nobles, with all authorities excepting the courts of justice, stand in a subordinate degree. Hungary has a peculiar court of appeal in the *Septemviral Tapel*. Public business in every department is carried on in writing. The personal influence of the emperor may be powerfully exerted even in the extensive and well-organized system of public offices here described. Though the councillors of state have each a peculiar department, they must not consider themselves as exclusively bound to it only. According to the will of the emperor, or of any of the ministers, the duty of investigating and reporting on any subject may be given to any member of the board, or, in case of need, a member of an inferior office may be charged with the temporary functions of councillor. Innumerable commissions of inquiry and control are annually appointed; and every check that can be devised is adopted in order to supply the place of the most effectual of all, the free expression of public opinion through the press. Appeals and representations to the emperor in person may be made by every individual, of whatever rank, upon the most trifling as well as the gravest subjects; and these appeals frequently occasion a revision of the decisions of the public boards either through another councillor or a special commission. The immense load of business which thus devolves upon the emperor, obliges him to keep a private cabinet, which communicates at pleasure with every office or functionary in the empire, and consequently may be said to represent the omnipresence of the sovereign. From a decree issued through this cabinet, there is no appeal; such decree (Handbillet) supersedes all law.

As sovereign of many territories, which were formerly considered fiefs of the empire, the emperor of Austria is a member of the Germanic confederation, and his minister plenipotentiary is at present the president of its diet at Frankfort. The states which are included in the confederation are, the archduchy of Austria, the kingdom of Bohemia, with Moravia and Silesia, and the duchies of Ozwieczim and Zalor in Galicia, the county of Tyrol, and the duchies of Styria, Carinthia, Carniola, with the town and territory of Trieste. In the ordinary sittings of the diet, Austria has one vote; in the plenary assemblies, four votes: the emperor's contingent to the confederate army is 94,823 men.

Temper and Spirit of the Government.—Dalpozzo says of the Austrian Government, that "it has fundamental laws, usages, and precedents, from which it does not deviate. The right of private property is held sacred. The emperor makes general laws for his subjects, but no special or exceptionable ones for particular persons or cases. There is equality before the law, and no odious privilege of caste is now admitted. There is no abusive influence of either aristocracy or clergy. The judiciary power is held independent, and not interfered with by rescripts from the sovereign. No special commissions are appointed to try particular cases: no arbitrary penalties are inflicted. All those who were condemned for political offences in 1820-21 were regularly tried; several were condemned to death, but not one was executed. The proceedings in the civil courts are neither dilatory nor expensive.* The conveyance of property has been rendered, by a wise system of registration, as easy and safe as any commercial transaction. With the exception of political cases, the penal code is very mild. The punishment of death is awarded in very few instances. Few countries in Europe enjoy so much material prosperity as the Austrian monarchy.

The accession of the reigning emperor to the throne has been marked by a tendency on the part of the Austrian cabinet to an enlightened course of domestic and foreign policy, the steady prosecution of which must prove of incalculable advantage for the empire and for Europe. The deceased Emperor Francis belonged to that school of policy in which the Richelieus and the Mazarins were masters, and which acknowledged no means of preserving unity, but the extermination of one of the jarring elements of discord. Under his reign the empire would probably have separated into several independent states, had not the violent but indispensable reforms, carried through with such energy by the Emperor Joseph, anticipated the necessity of the people's rising to effect them, and learning their own power. Thus, while the Emperor Francis attributed the submission he met with in the greater part of the provinces to the firmness with which he persevered in his repressive measures, it was really brought about by the temporary satisfaction inspired by what had been granted by his predecessors. Had the severity with which Galicia was treated between 1833 and 1836 been shown to that province at an earlier period, there can be no doubt but that the revolt of 1830 would have extended to Austrian Poland. What result the harsh treatment of the Italian provinces would have led to, has been adroitly veiled by the amnesty of 1838—a measure of great importance for the future prosperity of Austria. The treaties of commerce, concluded at the same time with England and the Porte, are also measures of great interest to her well-being. Their importance lies in the avowed determination of the government to furnish Hungary with a débouché for her abundant produce, and consequently in the virtual abandonment of the jealous policy hitherto observed towards that province. The conciliatory effect of these measures will most likely occasion an increase of power to the Austrian government, which it is not improbable may, for the first time since the days of Charles V., give it a preponderating influence in the affairs of Europe. Their first effect will probably be a rise in the credit of the state, and of all kinds of property; and should they be followed up by an emancipation of the system of education from the restraints under which it languishes, and by some relaxation of the restrictions on the press, the inhabitants would be conciliated, their best interests promoted, and the government rendered more secure.

Importance of Austria to Europe.—The central and western European states have from time immemorial felt the importance of having a powerful ally as a barrier towards Asia on the east. The might of these Moguls, who in the 13th century overwhelmed the rising Muscovite state, broke on the well-organized resistance opposed by the united power of the Bohemian king and the Margrave of Austria. At a later period, when the victorious Turks threatened to carry their arms into the heart of Christendom, it was Austria that bore the brunt of the fight, and gained time for the advance of Sobieski and his army. Under the present conjuncture of circumstances in Europe, the importance of Austria in a political, no less than in a commercial point of view, is evident; and as that importance depends altogether upon her power and the judicious development of her resources, the western states are deeply interested in her prosperity. From the nature of the various states united under the imperial sceptre, it is clear that Austria divides the rule over the Slavonic nations of Europe with Russia; it must consequently be for her interest to attach to her sway so numerous a portion of her subjects, who have a strong band of sympathy with a growing and very powerful rival. A mild government and a sincere attention to the material as well as moral condition of her subjects, will prove the best means of linking together provinces differing so much from each other, and each of which is too powerful to be long retained by any other than gentle means.

The conduct of the cabinet of Vienna justifies the expectation that its leading members are aware of the part which they are called upon to play, and of the true sources of their own influence and of that of the nation in European politics. If unity at home be promoted, and the material and moral condition of the people be improved, the power of Austria will be such that she need fear nothing even if she had to contend single-handed with Russia or France. The variety, however, of her population, and the different, or supposed different interests, of her various provinces, are sufficient guarantees to the rest of Europe that the power of Austria will not be abused. The pacific policy which her cabinet has generally observed is dictated by the peculiar composition of the state, and cannot safely be departed from. While Austria may thus be looked upon as a most useful ally by the other states of Europe, and as their grand bulwark against the power and ambition of Russia, her

* But this is certainly not the case with criminal proceedings. See *ante* p. 235.

friendship will be courted in proportion to her increase of power. Her worst enemies are those, who, by fostering disunion at home, or keeping her people in ignorance of their true interests, weaken her influence, and prevent her from attaining a position to command the respect of her neighbours without exciting their apprehensions.

Rise and Increase of the Empire.—The House of Austria derives its origin and the foundations of its power from Rodolph, count of Hapsburg, in Switzerland. Rodolph, who was one of the ablest princes of his age, having extended his authority over the greater part of Switzerland, and distinguished himself by his ability and bravery, was raised, in 1273, to the imperial throne. His elevation was owing principally to the wish of the electors to have an emperor of undoubted ability, capable of putting down the anarchy that had long prevailed in the greater part of the states included within the limits of the empire, and who, at the same time, was not powerful enough to occasion any fear of his subverting the privileges of the different states. The family of the ancient dukes of Austria, of the House of Bamberg, having become extinct a short while previously to the elevation of Rodolph, their states were taken possession of by Ottocar, king of Bohemia, whose ascendency threatened the independence of the empire. But Rodolph, having secured the sanction of the diet, declared war against Ottocar, whose forces were totally defeated, and himself killed, in the decisive battle of Marchfeld, in 1278. This formidable competitor being removed, Rodolph had little difficulty in procuring from the diet the investiture of the duchy in favour of his eldest son, and it has ever since continued in the possession of his descendants, and formed one of the principal sources of their power.

Albert, the son of Rodolph, did not inherit the talents of his father. The Swiss revolted from his dominion in 1307, and after a lengthened contest achieved their independence. But notwithstanding this event, and the elevation of several princes of other families to the imperial throne, the power of the House of Austria rapidly increased, and in no very long time its dominions embraced some of the largest and most important countries of Europe. It has been principally indebted for its extraordinary aggrandizement to fortunate alliances. The marriage, in 1477, of Maximilian, son of the Emperor Frederic III., with the daughter and heiress of Charles the Bold, the last duke of Burgundy, brought to the House of Austria all the rich inheritance of the latter in the Low Countries, Franche Comté, and Artois. Another marriage opened to the House of Austria the succession to the Spanish monarchy, including its vast possessions in Italy and the New World. And Ferdinand I., having married, in 1521, Anne, sister of Louis, king of Hungary and Bohemia, succeeded, on the death of the latter at the battle of Mohacz in 1526, to these states. There is, therefore, as much of truth as of point in the lines,

> "Bella gerant alii, tu, felix Austria, nube,
> Nam quæ Mars aliis, dat tibi regna Venus."

Charles V., the most powerful monarch of the House of Austria, concluded, in 1521, a treaty with his brother Ferdinand, by which he assigned to him the hereditary possessions of the family in Germany. And there can be little doubt that this arrangement was for the advantage of both branches of the House—that of Austria, properly so called, and that of Spain.

The great power and ambition of the princes of the House of Austria, excited a well-founded alarm among the other European powers. For a lengthened period the whole politics of Europe, its alliances, and its wars, had little other object than the humbling of the power of Austria. This was the motive of the thirty years' war, terminated by the treaty of Westphalia, in 1648, which secured the independence of the different states of the Germanic empire, and the free exercise of the Protestant religion.

For a lengthened period, the Turks held the greater portion of Hungary; but, in 1699, they were finally expelled from that kingdom; and the arms of Prince Eugene gave the Austrians an ascendency over the Ottomans they have ever since preserved.

In 1740, the male line of the House of Hapsburg terminated by the death of the Emperor Charles VI. But his daughter, Maria Theresa, married to Francis of Lorrain, grand duke of Tuscany, succeeded to his dominions, and, eventually, to the imperial crown. Shortly after her accession, Frederic the Great, king of Prussia, seized upon the greater part of Silesia. The recovery of this province was the principal object of Austria and her allies in the seven years' war. But his Prussian majesty triumphed over all his enemies; and Silesia was finally ceded to Prussia, by the treaty of Hubertsburg, in 1763.

The reign of Joseph II., the son and successor of Maria Theresa, is important from the reforms he effected in most departments of the government, and the territories he added to the empire. It has been objected to the former that they were not introduced with sufficient caution, and that he would have accomplished more had he attempted less. No doubt, it must be admitted he did not make sufficient allowance for the inveteracy of ancient prejudices, and that his innovations were frequently neither appreciated nor approved by those for whose benefit they were intended; but there can be no doubt as to the rectitude of his intentions, and, notwithstanding the obstacles he experienced, his reforms, and the change he introduced into the mode of government, have been productive of the greatest advantage. Under his reign, Gallicia was acquired from Poland, and the Bukowine from Turkey.

It would be unnecessary, even if our limits admitted of it, to attempt any sketch of the fluctuations of Austrian power during the eventful period that has elapsed since the breaking out of the French revolution, in 1789. At certain stages of her great struggle with France, Austria seemed to be depressed almost to the rank of a second rate power. But the insatiable ambition of Napoleon effecting his downfall, Austria was left at the end of the contest as powerful as ever; the loss of the Low Countries being fully compensated by her acquisitions in Italy and elsewhere.

In 1804, Francis assumed the title of hereditary emperor of Austria; and on the 6th of August, 1806, he renounced the title of Emperor of Germany. This latter event had been preceded by the formation of the confederation of the Rhine, and the entire dissolution of the old Germanic constitution. The present emperor, Ferdinand I., born 19th April, 1793, succeeded his father, Francis I., 2d March, 1835.

AUTAUGA, county, Ala., situated near the centre of the state, and contains 1000 sq. m. Drained by the Autauga creek and other branches of Alabama river. It had, in 1840, 9969 neat cattle, 1889 sheep, 8938 swine; and produced 7155 bushels of wheat, 2326 of rye, 402,700 of Indian corn, 22,000 of potatoes, 1,076,801 pounds of cotton. It had three flouring-mills, forty-three grist-mills, twenty saw-mills, one academy, 50 students, twenty-two schools, 549 scholars, Pop.: whites, 6217; slaves, 8109; free coloured, 16; total, 14,342.

AUTUN, a city of France, dép. Saone et Loire, on the Arroux, 43 m. S.W. Dijon, lat 46° 56′ 48″ N., long. 4° 18′ E. Pop. 9000. It is picturesquely situated, partly on the declivity and partly on the top and at the bottom of a hill. It is neither handsome nor regular; most part of its edifices are old, and have a mean appearance; but there are several among them well worth notice. It has two cathedrals situated on the summit of the hill; but neither has been completed. The spire of one of them, 325 feet in height, is remarkable for its elegance and the lightness of its construction. The church of St. Martin, built by Queen Brunehault, and containing her tomb, furnishes specimens of different kinds of architecture. The *champ de Mars*, in the middle of the town, a spacious square elevated on a terrace, and planted with trees, affords an agreeable promenade. The square of the cathedral has a magnificent fountain. There are two bridges over the Arroux, one of which is said to be built on the foundations of the Roman bridge. Autun is the seat of a bishop, of tribunals of original jurisdiction, and of commerce; and has a college, a diocesan seminary, a cabinet of antiquities and natural history, a collection of pictures, two small libraries, a theatre, &c. It has also manufactures of cotton velvet, of a sort of stuff described as *tapis de pied, dites marchaux*, fitted for coverlets, horse cloths, &c., with hosiery, tanneries, &c. There is a coal mine at the hamlet of Chambois within about a league of the town.

This is one of the most ancient cities of France. It was originally called *Bibracte*, and is described by Cæsar as by far the greatest and wealthiest town (*longe maximæ ac copiosissimo*) of the Ædui. (*De Bello Gall.*, lib. i., § 23.) Having been made a Roman colony by Augustus, it took the name of *Augustodunum** from that emperor, and *dun*, a Celtic term for a hill. Subsequently it was called *Flavia Æduorum*. The Burgundians took it in 427; and it was afterward sacked and burned by the Saracens, and latterly by the English, in 1379. It espoused the party of the League, and suffered much during the religious wars. It still possesses many fine remains of antiquity. Of these the most celebrated is the triumphal arch, called the gate of Arroux, of large dimensions, and which, though built without cement, is in exceeding fine preservation; a smaller triumphal arch; the ruins of an amphitheatre, of a Roman burying ground, of the temple of Janus, built by Drusus, and a temple of Minerva, with many *bas reliefs*, medals, utensils, &c. The ancient city was much more considerable than the modern one. The walls may still be traced, and are so solidly built as to be almost like rock.

Tacitus mentions (*Annal.*, lib. iii., § 43) that the noble

* The identity of *Bibracte* and *Augustodunum* has been denied by Cellarius, the Abbé Longrue, and M. De Valois; but has been conclusively demonstrated by D'Anville, in his *Eclaircissemens sur l'Ancienne Gaule*, p. 287–332.

youth of Gaul resorted for instruction to Augustodunum. Eumenes, the rhetorician, who was born here about the year 261, states in his oration *Pro Restaurandis Scholis*, § 20, that representations or maps of the different countries of the then known world were delineated on the porticoes or places where the youth met, setting forth their names, situations, the rise and course of their rivers, the outline of their coasts, &c.; and it is worthy of remark, that some portion of this ancient delineation is said to have been recently discovered. (*Encyc. des Gens du Monde*, art. *Antiquités d'Autun.*)

The Prince de Talleyrand, who afterward played so many important parts in the political drama, was bishop of this town at the commencement of the revolution. The Abbé Roquette, whom Molière is said to have taken for a model, was also one of its bishops. This has given occasion for the following epigram:

> "Roquette dans son temps, Talleyrand dans le nôtre,
> Furent les évêques d'Autun;
> Tartuffe est le portrait de l'un;
> Ah! si Molière est connu l'autre!"

(*Hugo, France Pittoresque*, art. *Saone et Loire.*)

AUXERRE (an. *Autissiodurum*), a town of France, cap. dep. Yonne, on the left bank of that river, 95 m. S.E. Paris, lat. 47° 47′ 57″ N., long. 3° 34′ 21″ E. Pop. 10,989. It is agreeably situated on a hill, and its environs are charming; but with the exception of the houses along the quay and the river's side, it is generally ill-built, with various crooked streets, and has a gloomy appearance. Principal public buildings, cathedral, one of the finest Gothic edifices in France; the church of St. Peter; the abbey of St. Germain; the bishop's palace; and the hotel of the prefect. A finely-shaded promenade surrounds the town, and it is well supplied with water distributed from a public fountain. Auxerre was the seat of a bishopric which has been suppressed; it has tribunals of original jurisdiction and of commerce, a college (high school), a secondary ecclesiastical school, a model school, a society of agriculture, a botanical garden, a museum of antiquities, a public library with 24,000 vols., and 180 MSS., a handsome theatre, &c. It has manufactures of calicoes, woollen coverlets, hosiery and caps, hats, earthenware, violin strings, wine casks, &c. The wines produced in the environs are much esteemed, particularly those of *Migraine* and *Chainette;* and a considerable trade is carried on in them, and in casks, wood, staves, &c. The Yonne is navigable from a little above the town.

Auxerre is very ancient. It existed previously to the invasion of the Romans, by whom it was adorned with several monuments, of which remains have been found at different epochs. It was laid waste by the Huns, Saracens, and Normans, and at a later period by the English. In 1477 it submitted to Louis XI., and has ever since remained subject to the crown of France. (*Hugo, France Pittoresque*, art. *Yonne.*)

AUXI-LE-CHATEAU, a town of France, dep. Pas de Calais, cap. canton, on the Authie, 15 m. S.W. St. Pol. Pop. 2546. Its environs are very marshy.

AUXONNE, a town of France, dep. Côte d'Or, cap. cant. on the left bank of the Saone, 18 m. E.S.E. Dijon. Pop. 5150. It ranks in the fourth class of fortified towns, being defended by works constructed by Vauban. It is well built, and the ramparts serve as pleasant promenades. There is a fine bridge across the Saone, with a levy pierced by twenty-three arches to give a passage to the water in inundations. Auxonne is the seat of a tribunal of commerce; and has a college, a school of artillery, a small public library, &c., with manufactures of cloth, serges, and muslins, a brewery, a cannon foundry, &c.

AVA (*Ang-wa*, a fish pond, so called because one formerly stood there); the ancient and again the present cap. of the Birman empire, on the left bank of the Irrawadi, 160 m. S.W. Bhamo, and above 300 m. N. Rangoon, lat. 21° 51′ N., long. 95° 58′ 10″ E. Pop. under 30,000. (*Wilson.*) It consists of an outer and inner city, both fortified; the outer is 5½ m. in circuit, and is surrounded, except on the Irrawadi side, where there is scarcely any defence, by a brick wall 15 ft. high, and 10 ft. thick; outside of which, on the S., is a deep, rapid, and unfordable torrent, the *Myit-tha;* on the W. a jungle and swamp; and on the E. the *Myit-rigé*, a rapid stream, 160 yards broad. The inner city is placed at the N.E. angle of the former, and is surrounded by a better wall, 1 m. in circ., and has also some natural defences. The inner city is almost wholly occupied by the palace, council chamber, arsenal, and the dwellings of a few of the principal courtiers. Ava contains many temples, in one of which is a sitting image of Gaudma, 24 ft. in height, said to consist of a single block of marble; in another all oaths of consequence are administered, the breach of which is considered a heinous crime. The houses are generally mere huts thatched with grass: the markets are furnished with British, as well as Chinese and Lao manufactures; but for trade, wealth, and prosperity, this capital is very far beneath Bangkok, the cap. of Siam. (*Crawfurd's Embassy to Ava, &c.*, p. 313, &c.; *Wilson, Documents, &c.*, Appendix, p. 46.)

AVALLON (an. *Abello*), a town of France, dep. Yonne, cap. arrond. on the Cousin, 25 m. S.S.E. Auxerre. Pop. 5089. It is beautifully situated on a granite rock, and commands, especially from the promenade of the *Petit Cours*, a fine view of the rich and well-cultivated valley of the Cousin. It is a handsome town, with good houses, and broad and well-kept streets. The front of the parish church, the hospital, the theatre, and the concert hall, deserve notice. It has a court of original jurisdiction, a commercial tribunal, and a college, with fabrics of cloth, paper, mustard, &c. The casks and other articles of *tonellerie* are in high repute. The hills round the town produce excellent wine, of which it is the entrepôt; and it has also an extensive trade in corn, timber, staves, casks, &c.

Avallon is very old: it owes its foundation to a strong castle, every vestige of which has now disappeared, that once occupied the summit of the rock on which it is built. (*Hugo, France Pittoresque*, art. *Yonne.*)

AVEBURY, or ABURY, a parish and small village of England, co. Wilts, 5 m. W. Marlborough. Pop. 747. This parish contains the gigantic remains of what is usually considered to be a Celtic or druidical temple. This singular and stupendous ruin is situated in a flat tract of country, and consists of a large circular space of ground, having on the outside a bank or mound of earth, the inner slope of which measures about 80 feet in width: immediately within this bank is a broad and deep ditch; and along the inner edge of the latter stand the relics of a circle of vast upright stones, similar to those of Stonehenge, measuring from 15 to 17 feet in height, about 40 feet round, and estimated to weigh from forty to fifty-four tons each. The diameter of this circle is about 1400 feet: when complete, it contained 100 stones, forty of which were standing in 1722, when Dr. Stukeley examined it; but in 1802 only eighteen stones were left, and the number has since been still farther reduced. Within this outer circle, or great temple, as it is sometimes called, were two smaller temples, each formed of two concentric circles of stones, having one a single stone in the centre, and the other a group of three stones. Some of the stones in the two inner temples are of a prodigious size. They are all of a siliceous grit, and are of the same species as those that accompany the great chalk formation that here crosses the kingdom.

In connexion with the circular stones or temples already noticed, were two avenues, each above one m. in length, formed by double rows of vast upright stones. One of these led in a S.E. direction to Overton, where, according to Stukely, it terminated in a small elliptical temple of similar stones: the other, or W. avenue, terminated in a single stone. Stukeley supposes that the S.E. avenue had, when perfect, 200, and the W. 203 stones; but of the former, which had seventy-two stones standing in 1722, only sixteen are now left, and of the latter only 2.

The village of Avebury stands within the periphery of the great circle or temple, and is in part built of the stones with which it and the minor circles were composed; these having been blasted and broken to pieces, to serve for this and similar purposes. It is much to be wished that efficient measures were taken to secure what still remains of this extraordinary monument; otherwise it is but too probable it will, at no very distant period, be entirely destroyed.

Immediately S. from the great circle or temple at Avebury, dist. ¾ m., is the barrow, or artificial mound of earth, called Silbury hill. This huge barrow covers, according to the measurement adopted by Sir R. C. Hoare, 5 acres and 30 perches of ground, being 2027 feet in circumference at the base: its diameter at the top is 120 feet, the sloping height of its side 316 feet, and its perpendicular height 179 feet. It is impossible to say for what purpose this immense mass of earth was heaped together; but it seems not unreasonable to conclude that it may have been in some way connected with the stone circles at Avebury. (See *Dr. Stukeley's* volume on *Avebury*, published in 1743, and recently reprinted, *passim; Beauties of England and Wales*, art. *Wiltshire; Sir R. C. Hoare's Ancient Wiltshire, &c.*)

However desirable, it does not appear very probable that any satisfactory explanation will ever be given of the purposes for which the singular structures described above were erected. All traces of their origin seem to be buried in impenetrable obscurity. The favourite theory is, that the structure at Avesbury, as well as that of Stonehenge, were druidical temples, where the druids, or priests of the ancient Britons, celebrated their sacred rites. But, notwithstanding the confidence with which this theory has been put forward, and the learning and ingenuity displayed in its support, it appears to be entirely destitute, not merely of proof, but even of any considerable degree of probability. Cæsar, Lucan, Tacitus, and Pliny the principal authorities with respect to the druids, do not give the smallest counte-

sance to the notion of their having constructed or made use of any such temples. Cæsar (see *Bello Gallico*, lib. vi., s. 13) says, that they retired at a certain period of the year *loco consecrato;* for which Grævius has proposed to read *luco consecrato;* and this emendation is rendered probable by what is said by Lucan, Tacitus, and Pliny. The first says, in reference to the Druids,

"Nemora alta remotis
Incolitis lucis."—Lib. i., line 453.

Tacitus (*Annal.*, lib. xiv., s. 30), tells us that the Romans, having taken Mona, or Anglesey, apparently the grand seat of the Druids, cut down their groves sacred to savage superstitions—*excisique, luci, sævis superstitionibus sacri.* And Pliny (*Hist. Nat.*, lib. xvi., s. 44), states that the druids *roboreum eligunt lucos, nec ulla sacra sine ea fronde conficiunt* But no classic author makes the remotest allusion to the druids using such extraordinary temples as those previously described. Hence, if any dependence be placed on ancient authority, it would seem that the seats of druid superstition were in the recesses of the forest—in places as remote as possible from Stonehenge, or even Avebury.

AVEIRO, a sea-port town of Portugal, prov. Beira, 34 m. N.N.W. Coimbra, on the S. shore of the estuary of the Vouga, lat. 40° 38′ 24″ N., long. 8° 37′ 54″ W. Pop. 4134. It is the seat of a bishopric and of a custom-house; and has a good deal of trade in salt, manufactured in the little islands in the bay; in sardines, of which there is an extensive fishery; and in wine, oranges, &c. It has a college, a hospital, a work-house, and seven convents. The oysters on the adjoining coast are reckoned the best in Portugal. The entrance to the mouth of the river is pointed out by two stone pyramids, each 70 feet high, which, when brought into a line, show the course over the bar. The latter has about 15 feet at high-water springs, and 9½ at low-water do.: at neaps the depths are respectively 12 and 7½ feet. It is necessary, however, to observe, that the bar being of shifting sand, is liable to perpetual changes, and that it should never be attempted without the aid of a pilot. (*Tofino, Spanish Pilot, Eng. trans.*, p. 97, &c.)

AVELGHEM, a town of Belgium, prov. W. Flanders, on the Scheide, 9 m. E.S.E. Courtnay. Pop. 3600.

AVELLA (an. *Abella*), a town of Naples, prov. Terra di Lavoro, 5 m. N.E. Nola, in a charming situation, commanding a view of Naples. Pop. 5000. It is celebrated by Virgil for its honey or its apples, it is not certain which:

"Et quos *mellifera* despectant mœnia Abellæ."
Æn., vii., 740.

But some MSS. read *melifera*.

AVELLINO (an. *Abellinum*), a town of Naples, cap. prov. Principato Ultra, on the declivity of a hill, in a fertile valley near the Sabato, 29 m. E. Naples. Pop. 12,000. It is fortified, is the seat of a bishopric, of the civil and commercial courts for the prov., and has a royal college. It has a cathedral, three parish churches, a square adorned with an obelisk, a public granary, &c.; with manufactures of coarse cloth, paper, maccaroni, sausages whose superior excellence has long been admitted, and dyeing works. It is the entrepôt of the surrounding country, and has a pretty extensive trade. Chestnuts are gathered in large quantities in the environs, but hazel nuts are their most important product. The latter were greatly esteemed by the Romans, and were called by them *nuces Avellanæ*.

Avellino is said by Swinburne to be "a considerable city, extending a mile in length down the declivity of a hill, with ugly streets, but tolerable houses. The churches have nothing to recommend them, being crowded with monstrous ornaments in a barbarous style, which the Neapolitans seem to have borrowed from the Spaniards. The cathedral is a poor building, in a wretched situation, with little to attract the eye except some uncouth Latin distichs, and shapeless Gothic sculpture. Their only edifice of note is a public granary, of the composite order, adorned with antique statues, and a very elegant bronze one of Charles II., king of Spain, while a boy. The town abounds with provisions of every sort, and each street is supplied with wholesome water." (*Swinburne's Two Sicilies*, vol. i., p. 111, 4to ed.) It has, however, been a good deal improved of late years; but the above is still a pretty fair representation of its general appearance.

AVENCHE (an. *Aventicum*), a town of Switzerland, in a portion of the canton de Vaud enclosed in that of Fryburg, 5 m. from Port Alban, on the lake Neuchatel, and 1½ m. from the shore of lake Morat. This town, now hardly worth notice, was formerly one of the most important in Switzerland. According to some authorities, it was built, and a Roman colony placed in it, by Vespasian; but others, with more probability, conjecture that it was only repaired and beautified by Vespasian, after being laid waste by Vitellius. The ancient walls enclose a space of more than 5 m. in circumference. It has some fine remains of antiquity, such as mosaical pavements, an amphitheatre, columns of white marble, an aqueduct, &c.; and its importance is known from several Roman mile-stones found in parts of the Pays de Vaud being all numbered from Aventicum. Though now at a considerable distance from the lake, it was, during the period of its prosperity, upon its margin, the iron rings to which the boats were fastened being still visible. (*Coxe's Switzerland*, let. 51; *Malte-Brun*, art. *Switzerland.*)

AVENWELDE, a village of the Prussian states, prov. Westphalia, reg. Minden, about half way between Bielefeld and Wiedenbruck. Pop. 3000.

AVERNO (LAKE OF), (an. *Avernus*), a famous lake in the Neapolitan states, about 10 m. W. Naples, near the sea. The lake occupies what there is good reason to think is the crater of an extinct volcano, and is everywhere surrounded by high hills, except where there is an outlet, by which it formerly communicated with the Lucrine lake. It is from 1½ to 1¾ m. in circumference; the water clear, very deep, and well supplied with tench. During the early period of Roman history the hills round this lake were thickly covered with dense forests, which gave it a gloomy appearance, and by confining the mephitic vapours that rose from the volcanic soil, rendered the air extremely unhealthy. In consequence, the place was early regarded with superstitious awe. The poets represented Avernus as sacred to the infernal gods, and as being, in fact, the entrance by which Ulysses and Æneas descended to the lower regions!

"fama est Acheronta ad undas
Pandere iter cæcas stagnante voragine fauces,
Laxat et horrendos aperit telluris hiatus,
Interdumque novo perturbat lumine manes."
Sil. Italicus, xii.

It was said that no bird could fly over the lake without being destroyed by its poisonous exhalations, and hence its name Avernus (Ἄορνος, without birds). This is noticed by Virgil, in some well-known lines (*Æn.*, vi., 237).

But during the reign of Augustus, Agrippa dispelled the obscurity and sanctitity that had so long encircled the Avernus. He cut down its groves; and having joined it to the Lucrine bay, he brought ships into its solitudes, and used it as a harbour in which to exercise galleys! The Lucrine lake, or rather bay, was almost entirely filled up by the subterraneous eruption of Monte Nuovo, in 1538. On one side of the lake Averno are the remains of a large octagon temple, probably appropriated to the worship of Hecate; and opposite the temple, on the other side the lake, is the opening of the subterranean conduit usually called the grotto of the Sybil, but which was, in fact, a tunnel leading from the lake to the sea. The hills round the lake are now covered with gardens and vineyards, and retain none of that gloomy grandeur for which they were once so celebrated. They are still, however, at certain seasons unhealthy. (*Swinburne's Two Sicilies*, 4to ed., i., p. 35; *Cramer's Ancient Italy*, ii., p. 160.)

AVERSA, a town of Naples, prov. Terra di Lavoro, 9 m. N. Naples, and 11 m. E. from the Mediterranean. Pop. 15,000. It is situated in a beautiful plain covered with vines and orange trees; it is well built and well laid out; is the seat of a bishopric, said to be the richest in the kingdom; of a royal governor, and of a tribunal. It has nine churches and some convents; but it is principally distinguished by its foundling hospital and its lunatic asylum. The former is said by Balbi to be a nursery of artists and artisans for the entire kingdom. The latter is exceedingly well managed. The apartments are laid out and furnished so as to suit the state of the patients; and every method is resorted to, by amusement and exercise, to divert their attention. Those that are furious are of course separated from the others, and subjected, if need be, to the strait-jacket. This establishment has served as a model to others, at Reggio, Modena, and Palermo. A sort of almond-cake, called *torrone*, made here, is in great demand at Naples.

Aversa was built in 1030 by the Normans, but it was subsequently twice burned down. Andrew, of Hungary, husband to Joan I. queen of Naples, was murdered here in 1345.

AVESNES, a town of France, dep. du Nord, cap. arrond. and canton, on the greater Elpe, 10½ m. S. Maubeuge. Pop. 3030. It is a fortified place of the 4th class, its fortifications having been repaired by Vauban. It is the seat of a sub-prefect, and has a tribunal of original jurisdiction and of commerce, a commercial college, a hospital for old persons, and an agricultural society. It is ill built, and *triste*. The cathedral has a spire 300 ft. in height, which has five chimes of bells. It has manufactures of coarse serge, woollen hosiery, carpentry work, with tanneries, breweries, soap-works, &c. Avesnes suffered severely from the explosion of a powder magazine, when besieged by the Prussians in 1815.

AVEYRON, a dep. of France, in the southern part of the kingdom, being separated from the Mediterranean by the Herault, between 43° 41′ 30″ and 44° 55′ 25″ N. lat., and 1° 50′ 15″ and 3° 26′ E. long. Area, 867,873 hectares. Pop. 370,951. This is one of the most mountainous depts.

of France. With the exception of some volcanic plateaus detached from the Plomb de Cantal, and which advance as far as the Truyere, all the other mountains belong to the chain of the Cevennes, the summit ridge of which forms its S. Frontier. The mean elevation of the soil is very considerable, Rhodez being 2280 ft. above the level of the sea. The mountains are intersected by ravines, and have many subterranean caves. The soil of the plateaux and elevated grounds is generally very inferior; but that of the valleys is very fertile, and produces all sorts of corn. Principal rivers, Lot, Aveyron, whence the dep. takes its name, and Tarn. Agriculture is in a very backward state, in consequence partly of the unfruitful nature of the soil, partly of the long continuance of frosts and the frequent occurrence of hail storms, but principally of the want of capital and poverty of the inhabitants. Field labour is mostly performed by oxen. Produce of corn sufficient for the consumption. Sheep numerous, and their wool, which is generally fine, estimated at 650,000 kilogs. a year. A great number of cattle, horses, mules, and pigs are raised. In the district of Roquefort, where cheese is made from sheep's milk, and the district of Guyole, the dairy is an object of great attention. In some parts the farms are extensive, and the strictest gradation is preserved among the labourers attached, The latter eat little butcher's meat, and their food is very indifferent. Some wine is made, but the quality is inferior. According to the official tables, the soil of the dep. is mostly distributed as follows: Cultivable land 365,000, meadows 122,000, vineyards 34,000, forests 84,000, and heaths, rocks, wastes, &c., 209,000 hectares. The export of agricultural produce reaches an average of 6,000,000 fr. a year, of which the cheese of Roquefort and Guyole make 1,100,000 fr., sheep, 1,000,000 fr., and woollen stuffs 800,000 fr. The coal and iron mines of the Aveyron are among the most important in France. The export of coal amounts to about 150,000 metrical quintals, and that of alum to about 200,000 kilogs. (*See* Aubin, St.) Iron-works have been established within these few years, and they are now prosecuted with great spirit and success, and furnish employment to some thousands of workpeople. A good deal of copper is also produced. Manufacturing industry has made very considerable progress. About 20,000 workpeople are supposed to be employed in the manufacture of coarse woollen stuffs, hosiery, &c. In the arrondissement of St. Affrique about 700 hands are employed in the spinning and manufacture of cotton; and there are in the dep. about 800 employed in the tanning and dressing of leather and the glove trade. There are also factories of hats and paper, with dye-works, coopers'-works, &c. Aveyron sends five members to the Chamber of Deputies. No. of electors, 1450. Total public revenue in 1831, 5,821,817 fr. Principal towns, Rhodez, Milhau, St. Affrique, and Villefranche. The inhabitants are said to be much addicted to drinking and quarrelling; and, as they all carry a knife, called a *capuchadon*, their quarrels sometimes end fatally. The condition of the fair sex seems to be about as bad as possible. "La condition des femmes, dans une grand partie du département, et surtout parmi les habitans des campagnes, est pauvre et malheureuse; leurs parens les traitent souvent avec une sorte de barbarie, et les forcent dès le plus jeune âge à se consacrer sans mesure aux rudes travaux de la culture. Le hâle, la sueur, et la fatigue continuel altèrent leurs traits et leurs formes. Avant dixhuit ans des filles qui ailleurs auraient été gracieuses et jolies ont la peau tannée, les maines calleuses, et la taille voûtée. Le mariage, au lieu d'être pour elles une époque de bonheur et de la liberté, est souvent celle d'une servitude plus dure." (*Hugo, France Pittoresque*, art. *Aveyron; French Official Tables.*)

AVEZZANO, a town of Naples, prov. Abruzzo Ultra II., cap. district and canton, in a fine plain, within about a mile of the N.W. angle of the lake Tecino. Pop. 3166.* It is surrounded by walls, which, however, are in a ruinous condition. The houses are generally mean, but there are some good buildings, among which is a castle belonging to the Colonna family.

AVIGLIANA, a town of the Sardinian states, 15 m. W. Turin. Pop. 3000. It is finely situated on a hill, has a castle, fabrics of coarse cloth and filatures of silk.

Avigliana, a town of Naples, prov. Basilicata, cap. cant., 11 m. N.N.W. Potenza. Pop. 9000. It is built on the declivity of a hill, a part of which being undermined in 1824, by continued rains, gave way, and destroyed a part of the town. It has a fine collegiate church, sundry convents, and a royal college. The surrounding country produces the finest oxen in the kingdom.

AVIGNON (an. *Avenio*), a city of France, cap. dep. Vaucluse, on the left bank of the Rhone, 53 m. N.N.W. Marseilles, lat. 43° 57′ 8″ N., lon. 4° 48′ 30″ E. Pop. (ex. cant.) 27,733. It is the seat of an archbishopric, of a tribunal of original jurisdiction and of commerce, and has a royal college of the 2d class, a primary normal school, a theological seminary, a school of design, a public library containing 30,000 volumes and 500 MSS., a museum of pictures, a botanical garden, with societies of arts, agriculture, &c. Having been long the residence of the popes, Avignon was filled with churches, convents, and other religious houses, many of which have now fallen into decay. It is situated in a fine plain, and is surrounded by high walls, flanked with numerous towers: its promenades along the walls, and its quays along the river, are both said to be very fine. The city was formerly much more populous and thriving than at present, and half the space now included within the walls is occupied with gardens, &c. The streets are narrow and crooked; and the houses and buildings have generally a gloomy, melancholy appearance. Mr. Inglis says—"I never saw any town that I should not prefer to Avignon as a residence: its filthiness is disgusting, absolutely inconceivable to be found in a civilized country. And it is the less excusable as the town is well supplied with water." (*Switzerland, &c.*, p. 186.) Perhaps this may be rather overstated, but there can be no doubt that it is substantially true. The ancient palace, occupied by the popes, stands on the declivity of the rock called De Dons. It is a Gothic building, constructed at different periods, of vast extent, with high, thick walls, and now serves as a prison, military depôt, and barracks. The cathedral church of Notre Dame de Dons, is very ancient, and contains the tombs of several distinguished persons The church of the Cordeliers, of which only the spire now remains, contained the tomb of Laura, immortalized by Petrarch, and of the "brave Crillon," the friend of Henry IV., and one of the most chivalrous of French warriors. The Hôtel des Invalides, subsidiary to that of Paris, is an immense building, in which 1000 old soldiers are accommodated. The Hôtel Dieu is also on a large scale. The theatre, a large, handsome edifice, was erected in 1824. Avignon communicates with the opposite bank of the river by two bridges, one of wood and one of boats. Its manufactures are said to have improved of late years. They consist principally of silk stuffs and velvets. There are also some woollen and cotton fabrics, with a cannon foundry, a type foundry, dye-works, tanneries, &c. A good many works are printed in the town. Large quantities of madder are produced in the neighbouring country, and Avignon is the centre of the trade in that drug.

Avignon existed before the Roman invasion, and afterward became a Roman colony. In 1305 Clement V. transferred thither the residence of the popes, who continued to reside here till 1377, when they returned to Rome; but two schismatical popes, or popes elected by the French cardinals, resided at Avignon till 1408. Clement VI. having acquired the property of the town and district, it continued to belong to the holy see; and, though sometimes taken by the French, it was always restored, till 1791, when it was finally incorporated with France. (*Hugo, France Pittoresque*, art. *Vaucluse.*)

AVIGNONET, a town of France, dep. Haute Garonne, near the canal of Languedoc, 10 m. N.W. Castelnaudary. Pop. 2479. Here five inquisitors were put to death by the Albigeois in 1242. Raymond, count of Toulouse, suspected of secretly instigating the crime, was condemned by Innocent III. to be stripped naked and whipped!

AVILA, a town of Spain, cap. prov. Avila, on the Adaja, 64 m. W.N.W. Madrid. Pop. 4800. It is the seat of a bishopric, and has a university, eight parish churches, and numerous convents and hospitals. Formerly it was richer and more flourishing than at present; still, however, it has manufactures of cloth, cotton, hats, &c.

AVILES, a sea-port town of Spain, Asturias, at the embouchure of the river of the same name, lat. 43° 36′ N., long. 5° 52′ 45″ E. Pop. 6000. It has some manufactures of coarse cloth, and prepares boilers and other utensils made of the copper obtained from the neighbouring mines. It has very little trade; the water in the port being so shallow that it is hardly accessible even to coasters.

AVIS, a town of the Tyrol, near the Adige, 13 m. S.S.W. Roveredo. Pop. 3000. It has a castle, manufactures of silk and velvet, and a quarry of flints.

AVIZ, a town of Portugal, prov. Alentejo, 35 m. W.S.W. Portalegre. Pop. 3330. It is the chief place of the knights of the order de l'Avis, founded by Alphonso I. in 1146.

AVIZE, a town of France, dep. Marne, cap. canton, 6 m. S.S.E. Epernay. Pop. 1660. Its territory is celebrated for its vineyards, which produce large quantities of *Champagne mousseux* of the second quality. It has an extensive trade in wine.

AVOLA, or AULA, a sea-port town of Sicily, prov. Syracuse, 12 m. S.W. Syracuse. Pop. 8822. "This town is prettily and salubriously situated on a woody eminence, having a marine village on the beach, a tonnara, and a

* Balbi says about 6000; but the above is the result of a census taken in 1831. The pop. of the canton is 15,000. (*Del Re Descrizione delle Due Sicilie*, ii., p. 134.)

battery for defence; and from several respectable edifices, tolerable streets, and a good market-place, has an air of cleanliness and regularity. Besides the profits of the tonnara, this town has a considerable traffic in wine, corn, cheese, carubbas, almonds, oil, honey, and fruit, and some in sugar, made from the only cane plantation now left on the island. The adjacent country abounds profusely with game, and supplies pasturage to a great number of fine cattle, many of which are exported to Malta. S.S.E. of the village on the beach, is the place where the nets for catching the tunnies are moored, and where they generally have a vessel at anchor with a hut built on her as a beacon." (*Smyth's Sicily*, p. 170.)

AVOLD (ST.), a town of France, dep. Moselle, cap. cant., on the Rossel, 18 m. W. Sarquemines. Pop. 3365.

AVON, the name of several rivers in England, of which the most important are:

1. The *Upper Avon* has its source at Avon-Well, near Naseby, in Northamptonshire, about 300 ft. above the level of the sea. It flows generally in a S.W. direction, but with a very winding course, passing successively the towns of Warwick, Stratford-on-Avon, and Evesham, till it unites with the Severn at Tewkesbury. It has a large body of water, and is navigable by barges for about 40 m., or from the Severn to Stratford, where it is joined by the Stratford canal. Its entire course may be about 100 miles.

2. The *Lower Avon* has its sources contiguous to Malmesbury and Wooton-Basset, in Wiltshire, its two arms uniting near Great Somerford; it thence pursues a circular course, passing Chippenham, Bradford, Bath, and Bristol, falling into the Bristol channel about 8 m. below Bristol. Owing to the great rise and fall of the tide, the largest class of merchantmen come up the river to Bristol. The Kennet and Avon canal, from Newbury to Bath, connects the Thames with the Avon, establishing a water communication across the kingdom.

3. The *Hampshire Avon* rises near Devizes, on the N. side of Salisbury plain. At Salisbury it is joined by the Wily and the Bourne; and is navigable from Trafalgar-house to where it falls into the English channel at Christchurch.

There are some other rivers of this name in England, but none of them seem to be considerable enough to require any special notice. There are also three small rivers of this name in Scotland: one an affluent of the Spey, one of the Clyde, and another having its embouchure in the frith of Forth, near Borrowstoness.

AVON, p. t., Franklin co., Me., 49 m. N.W. Augusta, 635 W. It has two stores, three saw-mills, thirteen schools, 345 scholars. Pop. 827.

AVON, p. t., Hartford co., Ct., 10 m. W.N.W. Hartford, 336 W. Organized in 1830 from Farmington. Watered by Farmington river. The Farmington canal passes through it. It contains three churches, two Congregational and one Baptist, three stores, one fulling-mill, three grist-mills, two saw-mills, five schools, 164 scholars. Pop. 1001.

AVON, p. t., Livingston co., N.Y., 222 m. W. by N. Albany, 355 W. Bounded W. by Genesee river. Watered by the outlet of Conesus lake. It contains ten stores, one flouring-mill, two grist-mills, three saw-mills, one furnace, fifteen schools, 515 scholars. Pop. 2999. The principal village is situated half a mile E. of Genesee river, on a plain, elevated 100 ft. above the level of the river, with a fine view of the Genesee valley and the surrounding country. It contains three churches, one Methodist, one Episcopal, and one Baptist; three stores, three large hotels, ninety dwellings, and about 600 inhabitants. It is particularly celebrated for its mineral springs one mile S. of the village, two of which, called the *upper* and *lower*, are about 60 rods apart, issuing from the foot of a hill. The upper spring contains carbonate of lime 8 grains, sulphate of lime 84, sulphate of magnesia 10, sulphate of soda 16, muriate of soda 18·4; total, 136·4 grains. Sulphuretted hydrogen gas 12 cubic inches, carbonic acid 5·6 ditto. The lower spring contains carbonate of lime 29·33 grains, chloride of calcium 8·41, sulphate of lime 57·44, sulphate of magnesia 49·61, sulphate of soda 13·73; total, 158·52. Carbonic acid, 3·92 cubic inches, sulphuretted hydrogen gas 10·02, nitrogen 5·42, oxygen ·56. The temperature is uniformly 45° of Fahrenheit. The amount of water discharged from these springs is the same at all seasons. The lower spring discharges fifty-four gallons of water in a minute. There are three large boarding-houses at the springs, besides those at the village. These waters are specially efficacious in all complaints for which sulphureous waters are recommended. The scenery of the country around is particularly attractive, and this pleasant watering-place is much resorted to. There are other similar springs in the vicinity.

AVON, p. t., Lorain co., O., 17 m. W. Cleveland, 135 N.N.E. Columbus, 377 W. It is bounded N. by lake Erie. Watered by French creek, which affords water-power. It contains one store, five saw-mills, seven schools, 305 scholars. Pop. 1220.

AVON, t., Oakland co., Mich. Clinton river affords water power. It contains nine stores, three fulling-mills, five flouring-mills, three grist-mills, five saw-mills, eight schools, 517 scholars. Pop. 1630.

AVOYELLES, parish, La. Situated a little E. of the centre of the state, and contains 1080 sq. m. Bounded E. by Washita river. Watered by Red and Atchafalaya rivers. The principal production is cotton. A part of it is subject to be overflowed. It contained in 1840, 9801 neat cattle, 1870 sheep, 1510 swine; and produced 115,861 bushels of Indian corn, 39,218 of potatoes, and 7,015,922 pounds of cotton. It had fifty-four grist-mills, three saw-mills, fifty oil-mills, two academies, 45 students, three schools, 47 scholars. Pop., whites 3066, slaves 3472, free-coloured 78; total, 6616. Capital, Marksville.

AVRANCHES (an. *Ingena*), a town of France, dep. Manche, cap. arrond., on a hill near the Seez, 32 m. S.S.W. St. Lo, and 3 m. from the sea, lat. 48° 41′ 23″ N., long. 1° 21′ 32″ W. Pop. 7690. This is a very old town. Its cathedral, consecrated in 1121, was unroofed during the revolution, and is now in ruins. In it, in 1172, Henry II., king of England, did penance and received absolution for the murder of Beckett. (*Lyttleton's Hist. Henry II.*, v., p. 123.) Avranches has a tribunal of original jurisdiction, a college, a work-house, a theatre, and a public library, containing 10,000 volumes and 200 MSS., with manufactures of lace and blondes. Small vessels come up the river to the bridge opposite the town, but it has little trade.

AX, a town of France, dep. Arriege, cap. cant. on the river of that name, 20 m. S.E. Foix. Pop. 1991. The situation of Ax is very picturesque and romantic. It derives its entire distinction from its numerous hot mineral springs, the heat of the water of some of which approaches nearly to the boiling point. Their reputation is daily increasing, and with it the size and importance of the town, the latter being entirely dependant on the resort to the wells.

AXEL, a fortified town of the Netherlands, prov. Zealand, 21½ m. W.N.W. Antwerp.

AXMINSTER, a m. town of England, co. Devon, hund. Axminster, on the Axe, 147 m. W.S.W. London, 26 m. E. Exeter. The parish contains 6590 acres, and 2719 inhab., of whom the town has about 1700. It is irregularly built on the declivity of a small hill, has wide streets, and is clean and healthy. The church, a clumsy structure, is in part very ancient, and there is a free-school where fourteen children are educated gratis. The inhab. are principally engaged in the manufacture of carpets, in imitation of those of Persia and Turkey, which are but little if at all inferior to the genuine fabrics.

AXUM, an ancient and much-decayed town of Abyssynia, prov. Tigré, near one of the sources of the Mareb (*Astusaspes*), 110 m. S.W. Arkeeko, on the Red sea; lat. 14° 5′ N., long. 38° 27½′ E. Pop. 4000.? It is situated in a nook formed by two hills; and is said by Messrs. Combes and Tamisier, by whom it has been recently visited, to be the handsomest town of Tigré. The houses are of a cylindrical form, surmounted by a cone. In its centre is a Christian church, which seems to occupy the site of an ancient temple, described by Mr. Salt (*Valentia's Travels*, iii., 88); but the travellers referred to above, say that Salt's statements with respect to it are much exaggerated. According to them it is inferior even to *nos greniers ordinaires*; so that in this instance Bruce, who is accused by Salt of having undervalued the church, would seem to be the preferable authority. (*Voyage en Abyssinie*, i., 267.) Axum, however, would not be worth notice in a work of this sort, were it not for its ancient fame and its antiquities. That it is very ancient is abundantly certain; and its former greatness is evinced by the ruins which still remain. Of these the most conspicuous is an obelisk 60 ft. in height (Salt says, in *Lord Valentia's Travels*, 80 ft.; but he afterward rectified his mistake), formed of a single block of granite, crowned with a *patera*, and beautifully sculptured, though not with hieroglyphics. There are said to have been formerly above fifty obelisks in the city; but, except the one now noticed, the others are all prostrate.

It is known that a Greek kingdom was founded in Ethiopia, of which Axum was the capital, and gave its name to the country, some time after the Christian æra. The Greek writers of the later ages used, in fact, to call the Ethiopians Axumites; and the Periplus of the Erythræan sea affords authentic evidence of the existence of the independent kingdom of Axum, towards the end of the second century. Some light is thrown on this intricate subject by the discovery, at Axum, of an upright slab or stone, bearing an inscription, copied and translated by Mr. Salt. This remarkable monument records the result of a successful attack made by Aizanas, king of the Axumites, on some barbarous tribes. And it so happens that Aizanas was king of Abyssinia during the reign of the emperor Constantius, who addressed a letter to him anno 330. This, therefore, may fairly be concluded as the date of the inscription in ques-

tion; but there is no evidence to show the æra of the foundation of the Axumite kingdom, or how long it existed after the above date.

Adulis, situated at the bottom of Annesley bay, on the Red sea, was anciently the port of Axum, and a great mart for the commodities of Ethiopia, Egypt, Arabia, &c. It was the port whence Ethiopian slaves were shipped for all parts of the world. (*Ancient Universal History*, xviii., 329, 8vo ed.)

AY, or AÏ, a town of France, dep. Marne, cap. cant., on a hill near the Marne, 15 m. S. Rheims. Pop. 2810. This town is famous for its incomparable wine, the best, decidedly, of the *vins mousseux* de Champagne. It is said by Jullien to be *fin, spiritueux, pétillant, délicat, et pourvu d'un joli bouquet*. (*Topographie de Vignobles*, p. 31.) Dr. Henderson says, that "it is unquestionably an exquisite liquor, being lighter and sweeter than the Silliery, and accompanied by a delicate flavour and aroma, somewhat analogous to that of the pine-apple. That which merely creams on the surface (*demi-mousseux*) is preferred to the full-frothing (*grand-mousseux*) wine." (*Hist. of Wines*, p. 154.)

AYAMONTE, a fortified town of Spain, prov. Seville, on the E. side of the embouchure of the Gaudiana, 25 m. W. Huelva, lat. 37° 13′ N., long. 7° 19′ 15″ W. Pop. 6350. It stands on the declivity of a hill, and has two parish churches, a foundling hospital, an alms-house, and some convents. The inhabitants are principally engaged in fishing; but some ship-building is also carried on, and lace, soap, and earthenware are manufactured.

AYLESBURY, a borough, m. town, and par. of England, co. Buckingham, hund. Aylesbury, on an eminence in the celebrated vale of the same name, 38 m. N.W. London, 18½ S.E. Buckingham. The borough includes an area of 3900 acres, and a pop. of 5021. It is irregularly built, has a modern market-house, constructed after the model of the temple of the eight winds at Athens, and a handsome county-hall, in which the Lent assizes for the county are held; the county jail is also in the town, and here, too, the members for the county are nominated, and the return declared. The church is a large, ancient structure, with a tower visible many miles round. The charities of Aylesbury are numerous and valuable. Among others, there is a free-school, for the support of which a considerable amount of property has been bequeathed, that furnishes education for about 130 boys; there are also a number of other charities, with alms-houses, &c. Some lace is manufactured, and a number of the inhabitants of the town and its vicinity employ themselves in the breeding and fattening of ducks, of which large numbers are sent to the metropolis. Aylesbury has returned two m. to the H. of C. since 1554. Previously to 1804, the right of voting was in the inhab. of the borough paying scot and lot; but in consequence of the flagrant corruption of the electors, the privilege of voting for the members for the borough was then extended to the freeholders of the hund. of Aylesbury. Parl. constituency in 1836–37, 1522. The vale of Aylesbury is one of the richest tracts in the empire. It is principally appropriated to the fattening of cattle and dairying.

AYLESFORD, a village and par. of England, co. Kent, lathe Aylesford; the village being on the right bank of the Medway, which intersects the par., 30 m. S.E. London. The par. contains 3330 acres, and a pop. of 1301. The church, a handsome building, is situated on an eminence higher than the roofs of the houses in the village. There is here a bridge over the Medway, and an alms-house, endowed in 1605. Near the town was a Carmelite monastery, granted at the dissolution of the monasteries, by Henry VIII., to Sir Thomas Wyatt; from whom it has descended to the Finch family, now earls of Aylesford, who have modernised the building, and made it a comfortable residence. But the most remarkable monument in the vicinity of Aylesford is *Kitscoty House*, about 1 m. N.E. from the village. It consists of three large upright stones, each about 8 feet in height, with another lying on the top, 11 feet in length by 8 in breadth, and 2 thick; and there are some similar stones in the vicinity. Antiquaries differ widely in opinion as to the object of this singular structure; but the more common opinion seems to be that it was intended as a monument to Catigern, a British chief killed in a battle, circa A.D. 455, with the Saxons under Hengist and Horsa. (*Hasted's Kent*, 8vo ed., vol. iv.; *Turner's Anglo-Saxons*, book iii., cap. 50.)

AYR, a marit. co. of Scotland, on its W. coast, stretching for about 75 m. along the shores of the Irish sea and the frith of Clyde, having N. the co. of Renfrew, E. Lanark and Dumfries, S.E. Kirkcudbright, and S. Wigtown. It contains 608,800 acres, of which nearly a half is supposed to be arable. It is popularly divided into the three districts of Carrick, Kyle, and Cunningham. The first, which comprises the country to the S. of the river Doon, is, for the most part, moorish, wild, and mountainous. Kyle, the middle district, lying between the Doon on the S. and the Irvine on the N., possesses a large extent of low, well-cultivated land along the shore; but the E. part is hilly and mountainous. Cunningham, though the smallest of the districts, is the most populous, best cultivated, and richest. Climate moist and mild. Agriculture, down to the close of the American war, was, speaking generally, execrable; but it has been prodigiously improved in the interval, and especially during the last ten or dozen years. The whole co. is now intersected with good roads, and is well fenced and subdivided. Drainage, the most important of all improvements, has been prosecuted to a great extent; and the practice of *furrow draining* is carried on with extraordinary zeal and the most perfect success. Improved rotations have been everywhere introduced; and lands that formerly only produced poor crops of black oats now carry heavy crops of wheat and barley. The Ayrshire cow is particularly fitted for the dairy, which is extensively carried on, particularly in Cunningham, the original country of the Dunlop cheese. Farm-houses and offices, formerly mean and wretched, now, for the most part, extensive and commodious. Average rent of land in 1810, 10*s*. 1½*d*. an acre. In proof of the wonderful improvement that has taken place, we may mention that the rental of one estate in the parish of Maybole amounted in 1785 to £364 10*s*., in 1819 to £2157, and has since rather increased. Coal is found in several parts, and is extensively wrought and exported. Iron is made at Muirkirk. The woollen manufacture is carried on extensively at Kilmarnock; and cotton mills have been erected at Catrine and other places. Principal towns, Kilmarnock, Ayr, Maybole, and Irvine. Ayr, contains forty-six parishes. It had, in 1841, 30,947 inhab. houses, 30,501 families, and 164,522 inhab., the pop. having increased from 84,306 in 1801. It sends two m. to the H. of C.; for the co., and the boroughs of Kilmarnock, Ayr, and Irvine are associated with others in the election of representatives. Co. constituency in 1837, 4132. Valued rent, £191,605 Scotch. Annual value of real property in 1815, £409,983. (*New Statistical Account of Scotland; Robertson's Rural Recollections, &c.*)

AYR, a sea-port, royal borough, and m. town of Scotland, cap. Ayrshire, on the S. side of the river Ayr, at its confluence with the sea, 75 m. S.W. Edinburgh, and 34 m. S.S.W. Glasgow. The pop. of the burgh and parish amounted, in 1831, to 7606. But, though in a different parish, the Newton and Wallace Town are substantially parts of Ayr, being separated from it only by the river, over which are the bridges, celebrated by Burns; and these suburbs are, in fact, mostly included within the parl. burgh, the pop. of which, in 1831, was 11,626. Ayr is finely situated on the margin of a broad, level plain; and has recently been very much improved and enlarged. The county buildings, containing a county hall, with apartments for the justiciary court, &c., and town's buildings, containing a news-room, and rooms for dinners, balls, assemblies, &c., are both on a large scale: to the latter is attached a fine spire, 226 feet in height. The Wallace Tower, erected a few years ago, on the site of an old building of the same name, is 115 feet high. A statue of Sir William Wallace, by Thom, has been placed in a niche in its front; but the artist has not been so happy in this instance as in his statues of Tam O'Shanter and Souter Johnnie. There is an old and a new church, but neither is remarkable. The academy is a plain building, in a good situation; and no inconsiderable part of the late improvement of the town may be ascribed to the well-merited reputation of its teachers, which has attracted a great number of families. Ayr is a very ancient burgh, having been chartered in 1209; it is the seat of a synod and presbytery; of a justiciary and sheriff's court; has a good town's library, and a mechanic's institute; a theatre; several charitable institutions; two weekly newspapers; annual races, &c. With the exception of a large and flourishing carpet manufactory, the manufactures carried on in the town are few and inconsiderable. From 50,000 to 60,000 tons of coal are annually exported. The port, at the mouth of the river, is formed by two piers, which project a considerable way into the sea; but it labours under a deficiency of water, not having more than three feet water over the bar at ebb-tide, nor above 13 feet at high water springs; and is exposed to the W. gales, which throw in a very heavy sea. There belonged to the port, in 1837, 18 vessels of the burden of 2459 tons. Ayr is joined with Campbelton, Inverness, Irvine, and Oban, in the return of a member to the H. of C. Parl. constituency in 1837–38, 452; municipal do., 295. Market-days, Tuesday and Friday. The cottage in which Robert Burns was born, with Alloway Kirk, &c., are in the immediate vicinity of Ayr, on the road to Maybole. (See *Alloway Kirk; Boundary Reports*, art. *Ayr; New Statistical Account of Scotland.*)

AZANI, a city of Phrygia, on the Edrenos (*Rhyndacus*), now wholly in ruins. The small modern village of Tjaudere-Hissar, 22 m. W. by S. Kutaieh, appears to have been entirely built from its remains. Little is said about this city

in ancient authors; but its ruins, which have been carefully described by Major Keppel, show that it had been a place of great wealth and magnificence. The principal remains are two bridges, connected by a superb quay, with a temple and a theatre, the latter being 232 feet in diameter. Some of the columns of the temple are still standing: they are of the Ionic order; the shafts, formed of a single block of marble, being 28 feet in length. And this is really only a fair specimen of the numberless remains of antiquity in a country once swarming with cities, and in the highest state of wealth and improvement; but now all but depopulated, steeped in poverty, and a prey to every disorder that a barbarian government and a debasing superstition can inflict.

AZAY-LE-FERRON, a town of France, dép. Indre, 16 m. N. Le Blanc. Pop. 2115. Azay is also the name for several small towns in other parts of France.

AZERBIJAN (an. *Atropatena*), a prov. in the N.W. of Persia, between 36° and 38° 40′ N. lat., and 44° 20′ and 49° E. long., having N. the Aras or Araxes, E. a part of the Russian territories and the Caspian sea, S. the Kizil-Ozein, which separates it from the other Persian provs., and W. Turkish Armenia. It consists of a succession of high mountains, separated by extensive valleys and plains. Mount Sevellan, towards its E. frontier, the next highest mountain to Ararat in this part of Asia, rises to between 12,000 and 13,000 feet above the level of the sea.* The Sahend mountains, in the centre of the prov., attain to the height of 9000 feet. The Talish mountains run from N. to S. parallel to, and at no great distance from the Caspian. The great salt lake of Urmiah (see ARMENIA and URMIAH) is one of the distinguishing features of the prov. It has numerous rivers, of which the Araxes, Kizil-Ozein, and Iugatty, are the chief. The summers are hot; but the winters, owing to the height of the country, and the number of high mountains covered with snow for the greater part of the year, are severe and long-continued. In the valleys and plains the land is very fertile, and yields abundant crops. Mr. Kinneir says, "Azerbijan is reckoned among the most productive provs. of Persia, and the villages have a more pleasing appearance than even those of Irak. They are, for the most part, embosomed in orchards and gardens, which yield delicious fruits of almost every description; and were it not for the tyranny of their rulers, no people could anywhere enjoy to a greater degree the comforts of life. Provisions are cheap and abundant, and wine is also made in considerable quantities; but the bulk of the people are too poor to avail themselves of these blessings; and, in the hope of bettering their condition, contemplate with pleasure the approach of the Russians." (*Memoir*, p. 149.) The principal towns are Tabreez, Ardebyl, and Urmiah.

AZINGHUR, an inland town of Hindostan, presid. Bengal, prov. Allahabad, cap. distr.; 40 m. N.N.E. Benares; in 24° 6′ N. lat., 83° 10′ E. long. Cotton stuffs used to be largely manufactured here and in the vicinity. It was ceded by the Nabob of Oude in 1801.

AZMERIGUNGE, an inland town of India beyond the Brahmapoutra, pres. and prov. Bengal, distr. Sylhet; 55 m. N.E. Dacca; lat. 24° 33′ N., long. 91° 5′ E. It is a place of considerable inland traffic, and has an establishment for building native boats.

AZOFF (SEA OF), the *Palus Mæotis* of the ancients, an inland sea in the S.E. quarter of Europe. It communicates by the narrow strait of Yenicale (an. *Bospherus Cimmerius*) with the N.E. angle of the Black sea, and is everywhere else surrounded by Russian territories. Its name is derived from the town of Azoff (see next article), near its N.E. extremity. It is of a very irregular shape; its greatest length, from the long, narrow sand-bank facing the E. coast of the Crimea, to the mouths of the Don, being about 212 m.; and its greatest breadth about 110 m. From the strait of Benicalé to Taganrog is about 160 m. It is generally shallow, and encumbered with sand-banks, having, where deepest, not more than 7 fathoms water, and in some places much less. Along its western shore it is marshy; and its N.E. division, or that extensive arm denominated the gulf of the Don, is so very shallow that it cannot be navigated, even where deepest, by vessels drawing more than 10 or 12 feet water. During the prevalence of easterly winds, the waters at Taganrog, and other places in the gulf, recede sometimes to a considerable distance from the shore, rushing back with great violence when the wind changes to an opposite direction. Inasmuch, however, as its bottom consists mostly of mud, vessels take the ground without being injured; and it is, in consequence, less dangerous than might have been supposed. Owing to the vast quantity of fresh water brought down by the Don and other rivers, its waters are little more than brackish; and at times are potable more than 20 m. below Taganrog. It teems with fish; and the fisheries are important and valuable. It is partially or wholly covered with ice from November until February, or even March. The commerce of this sea principally centres at Taganrog, which see. (*Purdy's Sailing Directions for the Black Sea, &c.*, p. 212; *Hagemeister on the Commerce of the Black Sea*, p. 31, *&c.*, *Eng. Trans.*)

AZOFF, a town and fortress of European Russia, on an eminence on the left bank of one of the arms of the Don, near the N.E. extremity of the above sea. This town was founded at a very early period, by Carian colonists engaged in the trade of the Euxine; and was called by them *Tanais*, from the river (Don, then Tanais), of which it was the port. In the middle ages it was called Tana. It came into the possession of the Venetians after the taking of Constantinople by the Latins; and was held by them till 1410, when it was sacked, and its Christian inhabitants put to the sword, by the Tartars. The latter gave it the name of Azoff, which it still retains. Formerly it had an extensive trade, being the emporium of all the vast countries traversed by the Don. But owing to the gradual accumulation of sand in that channel of the river on which it is built, and the consequent difficulty of reaching it by any but the smallest class of vessels, its trade has been entirely transferred to Taganrog; its fortifications have also fallen into decay; and it now consists only of a cluster of miserable cabins, inhabited by little more than 1200 individuals. (*Formaleoni, Histoire des Colonies dans la Mer Noire*, i., cap. 7, and ii., cap. 22; *Marin Storia del Commercio de' Veneziani*, iv., 129, *&c.*)

AZORES (THE), or WESTERN ISLANDS, an archipelago in the Atlantic ocean, belonging to Portugal, from which it is about 800 m. distant, occupying a line of about 100 leagues from E.S.E. to W.N.W., between 36° 59′ and 39° 44′ N. lat., and 31° 7′ and 25° 10′ W. long. It is divided into three subordinate groups. The 1st, lying at the W.N.W. extremity of the archipelago, includes Flores and Corvo; the 2d, or central, Fayal, Pico, St. George, Graciosa, and Terceira; and the 3d at the E.S.E. extremity, St. Michael's, the largest of the whole, and St. Mary's. The name (*Ilhas dos Açores*) is said to be derived from the vast number of hawks (*falco milvus*), called by the natives *açor*, by which they were frequented at the epoch of their discovery. These islands seem to be of comparatively recent volcanic formation. Their general aspect is picturesque and bold. For the most part they present an irregular succession of isolated, conical, or acuminated hills, with table lands rising from 2000 to 5000 feet in height; the former separated by valleys, the latter stratified and intersected by tremendous ravines and deep chasms, formed by the action of rain on the soft volcanic remains composing the mountains; the whole are almost invariably bounded by magnificent mural precipices, rising abruptly from the sea, and frequently rendered inaccessible by soft crumbling lava, and masses of loose tufa, of which they are formed. The peak of Pico, about 7000 feet in height, is the highest elevation in the Azores. When seen from a distance it appears like an isolated cone in the middle of the ocean. This archipelago is subject to the most tremendous convulsions, towns and villages being sometimes swallowed up, while, at other times, rocks and islands have been forced up from below the waves. The last of these phenomena occurred in 1811, when an island was thrown up that has since disappeared. The soil is extremely fertile, and industry and intelligence are alone wanting to make it in the highest degree productive. The climate, though unsettled and humid, is, on the whole, excellent. The average annual range of the thermometer is from 50° to 75°. Rains are frequent, and often so violent as to effect considerable changes in the appearance of the country; but scarce a day passes in which the sun does not, at some period, shine forth. The decidedly fine days may be estimated at about 200, and the wet days at about 60. Sudden gusts and gales of wind are frequent; and this, combined with the fact that they have not to boast of a single good harbour, make the islands be shunned by the navigator. They produce luxuriant crops of all sorts of grain and pulse, wine, the finest oranges and lemons, bananas, sugar-canes, coffee-plants, tobacco, the valuable lichen roccella; and, with a little care, most vegetable products may be brought to the utmost perfection. Asses and bullocks are the usual beasts of burden. Horses are scarce and bad; sheep and goats numerous; and pigs and dogs swarm to an excess. Owing, however, to the idleness, occasioned in part by the productiveness of the soil and mildness of the climate, but in a far greater degree by the ignorance of the people, and the influence of vicious laws and regulations, industry is all but unknown. The lands are generally divided into large estates, held under strict entail; and the system under which they are leased out to the actual cultivator is as bad as possible. The latter, being exposed to every sort of exaction and tyranny, never thinks of attempt-

* The story of the frozen prophet on mount Sevellan, alluded to by Mr. Morier in his second journey, has been satisfactorily cleared up by a party of English gentlemen, who ascended the mountain in 1827. They found on its summit a tomb, with a skeleton, partly imbedded in the ice, and in pretty good preservation. (*Journal of Geog. Society*, iii., p. 27.)

ing any improvement. Hence the practice of agriculture is but little, and the science not at all understood. The rude system of their forefathers is continued without change or modification of any kind; and their implements are little superior to those of the American Indians. And yet, despite this want of industry, such is the extraordinary fertility of the soil, that, though in great part waste and uncultivated, it not only furnishes sufficient supplies of corn and other things for the native population, but also a considerable surplus for exportation. A good deal of coarse linen is manufactured, part of which is exported.

The principal exports are, in ordinary years, to England, about 130,000 boxes of oranges, 6000 pipes of wine and brandy, and some roccella; for which she sends in exchange woollen and cotton stuffs, hardware, wearing apparel, &c. To Brazil the exports are about 5000 pipes of wine, 12,000 yards coarse linen, and pulse of all sorts; for which she sends back rum, coffee, sugar, &c. To Hamburgh and the N. of Europe are exported 14,000 boxes of oranges and lemons, and 6000 pipes of wine and brandy, the returns being made in pitch, iron, glass, and cordage. To the United States are sent 4000 pipes of wine, 200 of brandy, and 12,000 boxes of oranges and lemons, the returns being fish, staves, timber, tar, oil, &c. To Portugal are sent large quantities of grain and pulse, salt pork and beef, coarse linen and cheese; for which she returns salt, lime, tea, with images, crucifixes, indulgences, dispensations, and relics; the last five articles being publicly sold in the shops at very high prices! (*Boid*, p. 38.)

The population of the archipelago was found by a recent census to amount to about 250,000, not a sixth part of what it might be, were the islands moderately well cultivated. They are divided into three departments, and are governed by a governor-general and two lieutenant-governors. The seat of government is at Angra in Terceira, but Ponte Delgada, in St. Michael's, is the principal town. The revenues amount, in all, to about 525,000 crowns a year, and the expenditure to nearly 200,000, leaving a balance of about 330,000 crowns to be remitted to Portugal. (*Boid*, p. 80.) The men are well proportioned, strong, and well made; and the women fairer than those of Portugal. All classes are grossly ignorant; and are, consequently, in the last degree superstitious and bigoted. The lower orders are temperate, and all ranks are passionately fond of music. The dress of the common people is rude, and they are intolerably filthy and dirty in their persons. The higher classes are pompous, overbearing, and in the most abject state of moral debasement. The ladies possess few acquirements, have no conversation, and lead a life of excessive indolence. The low state of intelligence and morals is principally ascribable to the ignorance and vices of the clergy, most of whom are disgracefully immoral and corrupt. Previously to 1832, there were numerous monasteries and convents, said to have been openly devoted to the practice of all sorts of debauchery. Luckily, however, these dens of profligacy were suppressed at the last-mentioned epoch; and it is to be hoped that this wise measure may be followed up by others of a similar character; and that such alterations may be made in the government and laws, as may develop the dormant energies and industry of the inhabitants.

The history of the Azores is obscure. They were unknown to the ancients; but the Arabian geographers of the middle ages seem to have had some knowledge of them, though it was not till towards the middle of the 15th century that a Flemish merchant, who had sailed from Lisbon, was driven by stress of weather on their coasts. The court of Portugal, being informed of the circumstance, sent the navigator Cabral, to prosecute the discovery, who fell in with St. Mary's in 1432. In 1457 they were all discovered. At this epoch they were entirely uninhabited and covered with forest and underwood. (*Dict. Géographique*, art. *Açores*; *Boid's Description of the Azores*, passim.)

AZPYTIA, a town of Spain, prov. Guipuscoa, 15 m. S.W. San Sebastian. Pop. 4800. It is surrounded by walls, and has some iron foundries. There are jasper quarries in its vicinity.

AZREK (BAHR-EL), or the Blue River. *See* Nile.

AZTALAN, p. t., Jefferson co., Wisconsin Ter., 20 m. E. by S. Madison, 850 W. It has one saw-mill, two schools, 42 scholars. Pop. 250.

B.

BAAL-BEC, or BALBEC (the *Heliopolis* of the Greeks), anciently a large and splendid city; lat.* 34° 1′ N., long. 36° 11′ E.; 40 m. N.W. Damascus, 41 m. S.E. Tripoli, 58 m. N.E. Sidon, and 130 W. by S. Palmyra. It is situated in a fertile, well-watered valley, the Cœle-Syria (hollow Syria) of the ancients, and the Batena of the moderns, between the ridges of Libanus and Anti-Libanus, at the foot of the lower ranges of the latter.

Baal-Bec has been declining for a lengthened period; but, of late years, its decay has been peculiarly rapid. In 1751 the pop. amounted to 5000; in 1785 it had diminished to 1200; in 1818 it did not exceed 500; and in 1835 it barely amounted to 200. In 1810 it had a seral (the residence of the emir) two handsome mosques, and one good bath: in 1816 one mosque had vanished, the other was in ruins; and in 1835 there remained no trace of either or of the seral. The remains of ancient architectural grandeur are, however, more extensive in Baal-Bec than in any other city of Syria, Palmyra excepted; and Burckhardt regards them as superior in execution even to those of the latter. Finely grouped together, on the W. side of the town, are three temples, the largest occupying a circuit of more than half a mile, and originally consisting of a portico, hexagonal court, and a quadrangle, besides the peristyles of the temple itself. Of this last, six gigantic and highly polished pillars, 71 ft. 6 in. in height, and 23 ft. in circumference, with their cornice and entablature, remain to attest the stupendous magnitude and beauty of the structure of which they made a part. The two courts were encompassed by chambers, open towards the front, supposed by Wood to have been either the dwellings of the priests or public schools; and the peristyle was surrounded, towards the W., by an esplanade 29½ ft. in width, and terminated by a sloping wall 32 ft. high. In this wall are three enormous stones, of which two are 60 and the other 63 ft. in length, their common breadth and thickness being 12 ft. These gigantic masses are more than 20 ft. from the ground; and the course immediately below them consists of blocks less enormous, certainly, but varying from 30 to 37 ft. in length, with a breadth of 12 and a thickness of 9 ft. The remainder of this cyclopian wall is formed of very large stones, but there are none so vast as the above. Immediately to the S. of the great temple is a smaller, but more perfect edifice, of which the peristyle, walls, and 20 columns remain. The door-way leading into the body of this temple is 25 ft. high by 20 ft. 10 in. broad, surmounted by a superb basso-relievo, representing an eagle hovering, as it were, over the worshipper when about to render homage to the presiding deity. Both ruins are among the finest specimens of the Corinthian order. Walls, ceilings, capitals, entablatures, every spot where the chisel could be introduced, is covered with the most exquisitely finished carving and sculpture. Mr. Elliott says that no description can do justice to the taste and beauty of the workmanship of these structures, "nor can any relic of antiquity that I have seen or read of be placed in competition with them." (ii. 273.) Solidity, too, has been most successfully combined with, and not sacrificed to, ornament. Though little cement has been used, the joints are so admirably formed that a penknife cannot be introduced into them. The more ponderous masonry has preserved its position by the mere force of gravity; the parts of the pillars are connected by iron cramps. When perfect, the great temple, with its courts, exhibited 130 pillars; the lesser 60; and, according to Wood and Dawkins, the dimensions of each were as follow:

Great Temple.

	Length. Feet.	Width. Feet.		Length. Feet.	Width. Feet.
Steps	50	188	Peristyle . .	230	160
Portico . . .	48	261	Esplanade . .	. .	29½
Hexag. Court .	190	266	Height of Temple from ground to pediment, 120.		
Quadrangle . .	404	420			

Smaller Temple.

Length.	Width.	Height.
225 ft.	118 ft.	102 ft.

The smaller temple is without courts.

A barbarous Saracenic wall is built across these ruins on the E.; 300 or 400 ft. from which is the third temple, a beautiful circular building, surrounded by Corinthian pillars; its extreme external diameter being 63 ft., and its interior 32 ft.; most probably it had been surmounted by a cupola. It is considered as a *chef-d'œuvre* of art; but unfortunately it is in a very dilapidated and tottering state. Like the larger temples, it is built of compact limestone, with but little, if any, cement. In the S.W. corner of the town, on the highest spot of ground within the walls is a solitary Doric column (Pococke says, Tuscan), 60 ft. high, including capital and pedestal. On the top is a basin 3 ft. deep, from which a hole, cut through the capital, communicates with a curved channel 9 in. wide and 6 deep, cut in the S. side of the shaft, from top to bottom. From this it has been inferred that the pillar was connected with the water-works of the city; some suppose it to have been a clepsydra or water-dial. The walls of the city, 3 or 4 m. in circuit, exhibit a strange mixture of materials; the

* Authorities differ considerably as to the situation of Baal-Bec. Pococke's map (*Travels*, 1745) makes the lat. 34° 9′ N., long. 36° 58′ E.; Rennell (*Comp. Geog.*, i., 76), reduces them to 34° 1′ 30″ N., 36° 11′ E. In Robinson's map (*Travels*, 1837) the lat. is 33° 56′ 30″ N., long. 36° 9′ E.

breaches made by time or war, in the older erections, having been repaired at different times from the ruins of the ancient temples and other buildings. In one place may be seen a large altar-piece reversed; in others, stones inscribed with Greek or Roman characters; but all in confusion, and many turned upside down. The gates are of the Saracenic period. Without the walls, 5 or 6 m. W., is a remarkable isolated Corinthian column, between 50 and 60 ft. high, with a square compartment on its N. side, as for an inscription, but no letters remain. N.E. of the town is a subterranean aqueduct, 16 ft. below the surface, with several curious chambers cut in the surrounding rock. The whole neighbourhood looks like an immense stone quarry; and on the S.E., at 50 or 60 paces from the walls, among other stones of immense size, is one worked on three sides, larger than any used in the wall of the great temple. It is 70 ft. in length with a breadth and thickness of 14 ft. Greek, Roman, and Saracenic ruins cover the country for 3 or 4 leagues round, all evidently connected with the former greatness and prosperity of this city.

No ancient author refers to the buildings at Baal-Bec! John of Antioch, a Christian writer of the 7th century, ascribes, in an incidental manner, the erection of a temple (perhaps the great one) to Antoninus Pius; and this is the only account, with any pretensions to authority, of the origin of these extraordinary remains! But Baal-Bec was a flourishing city ages before the Christian era, and the probability seems to be that the Baal-Ath, built by Solomon, in Lebanon (2 Chron., viii., 6), was identical with Baal-Bec. This is, indeed, the received opinion of all classes in Syria; and though the remains of Corinthian architecture cannot be referred to a remoter period than that of the Roman emperors, the cyclopian wall is evidently of a far more ancient date, and answers to the description of the "House of the Forest of Lebanon," built for the daughter of Pharaoh. (1 Kings, vii., 10.) Dr. Richardson has shown that the cutting of the stones is of Jewish workmanship. (*Travels*, ii., 310, and 504.)

That the Syrian deity BAAL (literally *Lord*) was a personification of the sun, as the vivifying principle of nature, is evident from Herodian (v. 5), the various passages of Scripture from Judges to Jeremiah, and, indeed, from the united testimony of antiquity. (*Calmet, Dictionnaire de la Bible*, art. BAAL.) BEC, or more properly BEIT, is a dwelling. *Baal-Bec* signifies, therefore, the house or city of the sun, and this designation the town retained, in the Greek form, *Heliopolis*, which is merely a translation of its Syrian name. It may be concluded that Ben-hadad subdued this city, with the adjacent country (2 Chron., xvi., 4); and that, on the overthrow of the Syrian kingdom of Damascus, it passed beneath the sway of the Assyrians (2 Kings, xvi., 9); but the silence of all the most ancient authors respecting so populous and wealthy a city is as profound as it is remarkable. It, of course, shared the fate of the rest of Syria, passing, successively, into the hands of the Persians, Greeks, and Romans. It was the station of a garrison in the time of Augustus; but, while under the Romans, seems to have been famed rather for its wealth and splendour than for its military importance. It made, however, a brave resistance to the Arab arms, A.D. 635, and was at length surrendered upon a capitulation, the terms of which sufficiently attest its great resources; 2000 oz. of gold, 4000 do. of silver, 2000 silken vests, and 1000 swords, besides those of the garrison, being the price demanded and paid to preserve it from plunder. In 748 it was sacked and dismantled in the wars of the Ommiyade and Abbasside caliphs, and from this blow it never revived. During the crusades it submitted, alternately, to whichever party happened, for the time, to be the stronger. In 1400 it was plundered by the Tartars under Tamerlane or Timur Bec, since which period it has been of no importance except to the antiquary and historian. In 1759 it was shaken by an earthquake; and, judging from its decline during the last century, the day is not far distant when, like many other Eastern cities, it will cease entirely to be inhabited.

Though nothing certain be known of the history of Baal-Bec, it is sufficiently obvious that its opulence and grandeur must have been mainly owing, partly to its situation in a fertile and well-watered country, but more to its being a commercial *entrepôt*. Any one who takes up a map of Syria will see, at a glance, that its position is one of the best that could have been selected for an intermediate station between Palmyra and the cities and ports along the Phœnician coast. Commodities passing from Palmyra to Tripoli, Berytus (Beyrout), Sidon, and Tyre, and conversely, would be most conveniently and expeditiously carried by way of Baal-Bec. No doubt, therefore, it was mainly indebted for that wealth, of which its ruins, like those of its great rival Palmyra, attest the magnitude, to the trade of which it was long a principal centre. And the desolation in which these two splendid cities are now involved is at least owing as much to the changes that have taken place in the channels of commerce, as to the barbarism and ignorance of their modern masters. (*Maundrell*, 181–187; *Pococke*, ii., 106–113; *Wood and Dawkin's Ruins of Balbec, passim*; *Volney*, ii., 195, 205; *Burckhardt's Travels*, 10, 17; *Richardson's Travels*, ii., 502–510; *Robinson*, ii., 93–106; *Addison*, ii., 49–73; *Elliot*, ii., 274.)

BAAR, a town of Switzerland, cant. Zug, 2 m. N. Zug. Pop. 2200. It is situated in a fertile plain, has a fine town-house, built in 1674, and a paper manufactory.

BAARLE, a town of the Netherlands, prov. Brabant, 12 m. S.E. Breda. Pop. 1600. It gave its name to Barlæus, the celebrated litterateur and Latin poet.

BABA (an. *Lectum*), a cape and sea-port town of Asiatic Turkey, Anatolia, 22 m. S. from the most southerly point of Tenedos, lat. 39° 30′ 5″ N., long. 26° 5′ E. Near the cape is the town, small and ill-built, with about 4000 inhabitants. It was formerly famous for a manufacture of knives and sword-blades; but, though not entirely abandoned, this manufacture has greatly fallen off. The port is practicable only for small vessels. Large quantities of valonia are produced in the neighbouring country. The trees, with the fields on which they grow, belong to a multitude of individuals; one man being the proprietor of 5 trees, another of 10, and so on. The right to export the valonia is a privilege annually confirmed by a firman; a less or greater sum being paid to the seraskier by whom it is obtained. (*Voyage du Duc de Raguse*, ii., p. 146.)

BABA-DAGH, a town of Turkey in Europe, prov. Silistria, near the N.W. angle of Lake Rassein, which communicates with the Black sea, 21 m. S. Danube. Pop. 10,000. It is well fortified; streets paved, but dirty; has 5 mosques, 2 public baths, and a college. The ground on which it stands is marshy; and the only water fit for drinking is conveyed to it, a distance of about 3 m., by an aqueduct. It carries on a considerable trade by means of the port of Kara Kerman, one of the outlets of Lake Rassein on the Black sea.

Baba-Dagh was built by the Turkish sultan Bajazet. It is a place of considerable importance in the wars between Russia and Turkey, and has sometimes been the winter-quarters of the grand vizier. (*Diction. Géographique.*)

BAB-EL-MANDEB (STRAITS OF), the strait uniting the Indian ocean with the Arabic gulf or Red sea. The distance across, from a projecting cape on the Arabic shore to the opposite coast of Arabia is about 20 m.; but in the intermediate space, though much nearer Asia than Africa, is the small island of Perim, and some other still smaller islands. Perim is in lat. 12° 35′ 30″ N., long. 43° 28′ E. The channel between Perim and the Arabic coast, though narrower than the other, and the current more rapid is the most frequented by Arabic vessels, probably because, being only from 7 to 14 fathoms deep, it allows of their casting anchor, which, owing to its great depth, is impracticable in the greater or western channel.

Bab-el-Mandeb means literally the gate of tears; a designation it may have derived either from the dangers incident to its navigation, or from those incident to the navigation of the seas on either side.

BABYLON (Βαβυλων or BABEL (בבל), a city of Asia, cap. Chaldea, and of the Assyrian empire, being probably the largest city of antiquity, and certainly one of the most famous. Nothing remains of the ancient buildings but immense and shapeless masses of ruins; their sites being partly occupied by the modern and meanly built town of Hillah, the cap. of a district, and the residence of a bey appointed by the pacha of Bagdad. This town lies on the W. bank of the Euphrates, and occupies nearly the centre of the S. part of the old enclosures; lat. 32° 28′ 30″ N., long. 44° 9′ 45″ E. Pop. 6000 or 7000 Arabs and Jews. It is surrounded by mud walls and a deep ditch, and has four gates.* It has a rude citadel, the only public building within the walls, except a single mosque, and 6 or 7 oratories. It may be gathered from the statement by Rich (*Mem.* II), of the sources whence the public revenue is derived, that some manufactures of silk exist, and that there are also dyeing-houses, tanneries, and lime-kilns; but the mass of the inhabitants are evidently agriculturists (*fellahs*). The Euphrates, at Hillah, in its medium state, is 450 ft. wide, 7½ ft. deep, and its mean velocity is about 2½ m. an hour. The whole surrounding country is intersected with canals. The undoubted antiquity of many of these works is not a little surprising, considering the nature of the soil, which is wholly alluvial, and so soft that the turning the course of the river by Cyrus (*Herod., Clio.*, 191; *Xen. Cyrop.*, vii., 5) does not appear to Rich an exploit of any great difficulty. (*Mem.* 17.) The Euphrates annually overflows its banks, inundating the country for many miles round, and even rendering the district between the Euphrates and Tigris navigable in many places for flat-bottomed boats. This annual flood

* When Mr. Rich was here, 1811, the pacha of Bagdad had ordered a new wall, of Babylonian bricks, to be constructed (*Mem.* 9): but this appears not to have been done as late as 1827. (See *Mignan's Travels*, p. 181.)

fills the canals, and facilitates agriculture in a surprising degree. The air is salubrious, and the soil extremely fertile, producing dates, rice, and grain of every kind, in astonishing profusion; but in consequence of the illegal and irregular exactions of the pachas, and the insecurity to which all kinds of property is exposed, the inhabitants exert no sort of industry; the numerous canals are left dry and neglected, except when filled spontaneously by the river; and the small quantity of land that is cultivated is not half tilled. (*Niebuhr, Voy. en Ar.*, ii., 234–237; *Rauwolf's Travels*, p. 174, *&c.*; *Rennell's Geog. Her.*, i., 459, *&c.*; *Rich's Mem. on Ru. Bab.*, p. 1–17; *Mignan's Trav. in Chaldea*, p. 114–122.)

Such is the present state of a city, once the greatest, most magnificent, and powerful in the world; "the glory of kingdoms, the beauty of the Chaldee's excellency." (Isa., viii., 20.) We need say little of the identity of the site occupied by the ancient and modern towns; this has been completely established by Major Rennell. It is sufficient to observe, that the traditions preserved by Eastern writers, the universal belief of the present inhabitants, the descriptions of the ancient historians, and, above all, the discoveries by modern travellers of stupendous ruins answering to those descriptions, leave no room or ground for any reasonable doubt upon the subject. (*Rennell*, i., 459–511.) The magnitude assigned by ancient writers to this celebrated city is so immense as to stagger belief. It was a perfect square, and, according to Herodotus, 480 stadia in cir. (*Clio*, § 178.) Strabo (p. 738) gives the circ. at 385 stadia; Diodorus Siculus at 360, on the credit of Ctesias; but at 365, on that of Clitarchus, who was on the spot with Alexander (ii., 1). Quintus Curtius gives it at 368 stadia (v., 1), and Pliny (vi., 26) at 60 Roman m. The inextricable obscurity in which the itinerary stadium of the Greeks is involved (see *Rennell*, i., 17–44) renders it exceedingly uncertain whether these differences are to be regarded as real, or as arising from the adoption of different standards. Assuming, however, that the same stadium is meant in each case, taking it at its least possible value, 491 ft.; and taking also the measure of Diodorus, the least of the whole, the area of ancient Babylon, within the walls, will be found to be upward of 72 sq. m., or nearly 3½ times that of London with all its suburbs. If, at the same value of the stadium, the measure of Herodotus, or that of Pliny (which agrees with it*), be taken, the area will amount to more than 124½ sq. m., or 6 times that of London; and, finally, if the common stadium of Herodotus, 600 Grecian or 604½ English ft. (*Euterpe*, § 149), be adopted, as well as his measurement, the area will swell to 188½ sq. m., or 9 times that of London.

Various attempts have been made, by comparing its area with the area and population of modern cities, to estimate the population of Babylon. But, on the lowest calculation, it would be found, supposing it to have borne any considerable resemblance to a European city, to have had a population of the enormous magnitude of 5,000,000, or about treble that of London—a supposition to which all but insuperable obstacles are opposed. For, notwithstanding the amazing fertility of the surrounding country; the fewer wants of its inhabitants, compared with those of northern latitudes; and the facilities afforded by the numerous canals which intersected the adjoining provinces, and by the Euphrates and Tigris, to the importation of bulky and distant products; still there were circumstances connected with its situation and government sufficient to countervail these advantages, and to render it all but impossible that so vast a population could be supported within its walls. If any one take up a map of Asiatic Turkey, he will instantly perceive that the extent of country round Babylon available for agricultural purposes must have been quite inadequate to supply the necessary demands of the supposed population. The Babylonian plain, fertile as it is, is soon lost in the interminable deserts of Sinjar and Arabia: the marshes and lakes of Lower Mesopotamia and Chaldea make a large deduction even from its fertility; while, as if wholly to neutralize the natural advantages of the city, the Babylonian monarchs threw a variety of obstacles in the way of commercial enterprise. (*Herod.*, *Clio*, 185.) But we need not pursue this discussion, the fact being universally admitted that Babylon possessed but few points of resemblance to a modern European town. The buildings and population bore no proportion to its extent, and, in the words of Rich, "it would convey the idea rather of an enclosed district than that of a regular city." (P. 43.) Pasture and arable land was contained within the walls, sufficient, says Q. Curtius (v. 1) to supply the wants of all the inhabitants. This, no doubt, is a gross exaggeration; but if, as must have been the case, a large portion consisted of productive ground, its produce might have added considerably to the provisions it was possible to place in store. Xenophon affirms, that when the city was taken by Cyrus, it was stored for twenty years—πλέον ἢ εἴκοσιν ἔτῶν (*Cyrop.*, vii., 5); and though this may reasonably be considered as much beyond the mark, yet, at a subsequent period, it actually did sustain a siege by Darius Hystaspes of one year and seven months, and was then, as in the former case, subdued, not by famine, but by surprise. (*Herod.*, *Thalia*, 150.) That only a small part of its immense area was occupied by buildings, is, therefore, evident. How much, is another question, and one that it is impossible to decide. Perhaps, on the whole, we may estimate the population of Babylon at from 1,000,000 to 1,200,000. This supposition derives support from the fact that Seleucia, with a population of 600,000, is stated to have been about half the size of Babylon in the days of her greatest glory. (*Strabo*, xvi., 739; *Pliny*, vi., 26.)

But though a population at all commensurate to the magnitude of the city, calculated on a scale of European density, be thus improbable, it does not by any means follow, seeing the way in which the area was partially filled up, that the magnitude itself is to be discredited. The authority on which we must mainly rely is undoubtedly that of Herodotus. Not only is he the earliest profane writer upon this subject; but he alone, of all the ancient historians, had the advantage of having visited Babylon in person, and while it was still in a state of tolerable preservation. His account of this interesting city has been, with trivial exceptions, amply corroborated by the testimony of all succeeding writers, as well as by the investigations of modern travellers; and though it would be unfair to test his statements by the severe standards applied to topographical descriptions of the present day—where critical accuracy in such inquiries is rigidly demanded—it is clear that his general veracity is unimpeachable, while the circumstance of his having been an eyewitness of what he describes, heightens our belief in the details he has exhibited.

It is rather remarkable that Herodotus says nothing of the foundation of the city or its founder, merely remarking, that after the destruction of Nineveh, it became the seat of the Assyrian empire. (*Clio*, 179.) But even in his time it was of considerable antiquity, and biblical critics have unanimously referred its origin to the presumptuous attempt of the early postdiluvians to "build them a city, and a tower whose top may reach to heaven." (Gen., xi., 4.) Josephus (I. *Antiq.*, iv., 3) expressly says that Nimrod, the grandson of Ham, was the originator of this attempt; and to this day the inhabitants of these parts are as fond of attributing every great work to this "mighty hunter before the Lord," as those of Egypt are of referring similar works to Pharaoh. (*Rich*, 41.) Asshur, the founder of Nineveh (Gen., x., 11; *Diod. Sic.*, ii., 1), having subdued the Babylonian with other surrounding powers, laid the foundations of the Assyrian empire. A domestic tragedy, resembling in many points that of David and Bathsheba, having made him the husband of Semiramis, the strong mind and many accomplishments of his wife, induced him, on his death, to leave her regent for his son, though it would appear that she governed in her own name till her death (*Diod. Sic.*, ii., 20); and to her was owing most of the grandeur of Babylon.

According to Herodotus, the city was built on both sides the Euphrates, the connexion between its two divisions being kept up by means of a bridge formed of wooden planks laid on stone piers. The streets are described as having been parallel, and the houses from three to four stories in height. The city was surrounded by a deep and broad ditch, and by a wall of extraordinary dimensions, flanked with towers, and pierced by 100 gates of brass. The wall was built of bricks, formed from the earth taken out of the ditch, and cemented by a composition formed of heated bitumen and reeds; the former being brought from Is (Hit), on the Euphrates, about 128 m. above Babylon. The temple of Jupiter Belus (most probably the tower of Babel) occupied a central position in one of the divisions of the city. Herodotus describes it as a square tower of the depth and height of one stadium, upon which, as a foundation, seven other towers rose in regular succession, the last tower having a large chapel, a magnificent couch, and a table of solid gold. The building was ascended from without by means of a winding-stair. The space in which it was built was enclosed in walls, eight stadia in circumference, and, consequently, occupying above 33 acres. The gates to the temple, which were of brass, and of enormous magnitude, were seen by Herodotus. In the other division of the city stood the royal palace, which seems to have been a sort of internal fortification, and was, no doubt, of vast dimensions. (*Clio*, 181.)

It is exceedingly difficult, or rather, perhaps, impossible, owing to their extremely dilapidated state, to say to which of the ancient buildings the existing ruins are to be ascribed. The principal of these are the Kasr, or palace; the Mujellibe, or overturned; and the Birs Nemroud, or tower of Nimrod. These are all of great magnitude, and are at very considerable distances from each other. The most considerable, the Birs Nemroud, is a mound of

* The Roman mile was 8 Roman stadia. (*Rennell*, i., 18.)

an oblong figure, 728 yards in circumference. On its W. side it rises to an elevation of 198 ft., and on its summit is a solid pile of brick, 37 ft. high. It consists entirely of brick-work, and Niebuhr, Rich, and Mignan, agree in supposing it to be the remnant of the sacred edifice, and identical with the tower of Babel. (*Niebuhr*, ii., 236; *Rich*, 38, 49, 54, &c., 2*d Mem. pass.*; *Mignan*, 202.)

The particulars given above of the ancient state of this famous city are all derived from Herodotus, by whom, as already stated, it was visited after its conquest by Cyrus, and before it had sustained any material injury. But if credit be given to later and less trustworthy authorities, Babylon had to boast of still more extraordinary monuments than any previously mentioned. Among these may be specified a tunnel under the Euphrates; subterranean banqueting rooms of brass; and the famous hanging gardens, containing near four acres of land, elevated 300 ft. above the level of the city, and bearing timber trees that would have done no discredit to the Median forests. (*Diod. Sic.*, ii., 7, 9, 10; *Strabo*, xvi., 738; *Curt.*, v., 1.)

We confess, however, that we are extremely skeptical as to the existence of any one of these structures. How can it be supposed that so careful and curious an observer as Herodotus, who saw, and has minutely described, the city, should not have made the faintest allusion to such extraordinary structures, had they really existed. The tunnel under the Euphrates was an object more worthy of notice, and more likely to attract attention, than the bridge, and yet, while Herodotus describes the latter, he says not a word about the former! And to say nothing of the extreme improbability that any such stupendous structures as those of the hanging gardens should have been erected by a people apparently ignorant of the arch, it is not conceivable, had they been constructed, that Herodotus should have omitted to mention them. His silence seems to show clearly that the statements as to these extraordinary fabrics are really as fabulous as they appear to be incredible. Diodorus Siculus and Curtius are writers of little authority, and have, on all occasions, evinced the greatest readiness to give credit to and repeat the most absurd and unfounded statements; and in this instance Strabo seems to have shown quite as little of sound criticism or discernment.

The great works of Babylon were all constructed of brick, except the bridge, the stones for which must have been brought from a distance, since none could be found in the alluvial soil of the country. The bricks are of two kinds, sun-dried and kiln-dried: they are much larger than the bricks now in use, and generally marked with figures or letters. Straw or reeds are mixed with the courses, and bitumen, procured from Is or Hit, is the usual cement, though mortar and slime are also frequently used. Such is the extent of these vast ruins, that nearly all the cities in their neighbourhood are built from the materials found there, and the storehouse seems to be regarded as one which is inexhaustible.

From the death of Semiramis, Babylon continued a kind of second capital to Assyria, till the revolt of Arbaces and Beleses against Sardanapalus, thirty generations later. It was subsequently sometimes the capital of the whole country, and sometimes that of the separate kingdom of Babylonia; but always advancing in grandeur and prosperity till the days of Nebuchadnezzar, under whom it may be considered as having reached its zenith. (*Joseph.*, *Antiq.*, x., xi., 1.) In the midst of its glory, however, the voice of the Jewish prophet was raised against it. The Median conquest is threatened full 120 years before its occurrence; and "this glory of kingdoms" is doomed to the fate of Sodom and Gomorrah; to be swept with the besom of destruction; to become a possession for the bittern and pools of water; a lair for the wild beasts of the desert, doleful creatures, owls, and satyrs (Isa., xiii., xiv., *et pass.*); predictions, the accomplishment of which has been as literal as complete. In the reign of Labynetus, or Belshazzar, son of Nebuchadnezzar* and Nitocris, Cyrus, the "anointed of the Lord" (Isa., xlv., 1), led his army against the city. Trusting to their fortifications, the Babylonians derided his attempt; but cutting a canal, he diverted the course of the Euphrates, leaving its channel through the town sufficiently dry for the passage of his army. The same thing had been done on a former occasion, by Nitocris, to build the bridge; but in this instance an additional work seems to have been performed, in the erection of locks or dams, to preserve the river in its natural course till the very moment of attack, and thus prevent suspicion of his design; for had the Babylonians been aware of it, says Herodotus, they might easily have enclosed the Persians, as in a trap, and effected their total destruction. Taking advantage, however, of a night of revelry, Cyrus drew off the waters, entered the town by surprise, and captured it almost without resistance. (*Xen.*, *Cyr.*, vii., 5; *Herod.*, *Clio*, 191; Dan., v.) The sacred historian gives a vivid account of the manner in which the last Babylonian king spent the night before his death, and of the awful warning which preceded his overthrow. Babylon remained subject to the Persian monarchs till the reign of Darius Hystaspes, when it revolted, but was again subdued by stratagem. Darius took away the gates, and otherwise injured the city, so that its declension may be fairly dated from his time. Xerxes is said to have defaced the temple of Belus on his return from Greece; but such were the resources and conveniences of the city, that it remained the winter residence of the Persian monarchs for several generations. It made no resistance to Alexander, who intended making it the capital of his gigantic empire. He contemplated, also, the restoration of the temple; but having employed 10,000 men for two months, in removing the rubbish, the work was stopped by his death. Seleucus Nicator, who, after that event, became monarch of Babylonia, founded the city of Seleucia on the banks of the Tigris, and made it his capital. From this time, the decline of Babylon was as rapid as well could be; but the mighty city which required ages to rear, required also ages in which to perish. It was still important, though in ruins, at the commencement of the Christian æra. (*Herodotus*, *Thalia*, 159; *Strabo*, xvi., 738; *Arrian*, xvi.; *Pliny*, vi., 26.) Its subsequent history is unknown. It is said to have been turned into a hunting-park by the Parthian kings, who overthrew the Seleucidian dynasty; and it is probable that the materials of its vast buildings served to construct the newer cities in its neighbourhood. It had shrunk to a mere name in the early days of Arab greatness (*Ebn Haukel*, 70); and in the 495th Hegira, A.D. 1101, was founded the present town of Hillah. (*Abul Feda Irak*, art. *Babel.*) The rest of this once famous district is now, and has been for ages, a desolate void; its buildings masses of shapeless ruins, channelled by the weather, and literally the desolation which the prophet predicted: "And Babylon shall become heaps, a dwelling-place for dragons, an astonishment, a hissing, without an inhabitant." (Jer., li., 37; *Rich.** *passim*; *Mignan*, 118-236; *Heeds*, 99-105; *Kinneir*, 268-282.)

BABYLON, p. v., Huntington t., Suffolk co., N.Y., 185 m. S.E. Albany, 265 W. It is a pleasant village, on the S. shore of Long Island, near Great South bay, chiefly built on one street, and contains one Presbyterian church, four stores and four mills on Sampawam's creek, forty dwellings, and about 250 inhabs. It is much resorted to for fishing and fowling. It is connected by a turnpike and stage with the city of New-York.

BACCARAT, a town of France, dep. Meurthe, cap. cant., on the Meurthe, 16 m. S.E. Luneville. Pop. 3057. This town is remarkable for its being the seat of the principal manufacture of flint glass, or crystal, in France. It was established so far back as 1764; but it did not attain to any very considerable eminence till after the peace of 1815, when a manufacture carried on at Voniche in Belgium was transferred thither. The workmen and their families, to the number of 600, are lodged in the establishment, but the women employed in polishing the crystal, live at Baon-l'Etape, two leagues distant. The value of the raw material employed in the manufacture is estimated at 400,000 fr. a year, and the salary of the workmen at 450,000 fr. The annual product in rough or uncut crystal is estimated at 1,400,000 or 1,500,000 fr. Exclusive of the work-people already referred to, about 350 are employed in subsidiary departments, in preparing minium or red-lead, extracting potash, preparing tools, &c. The machinery employed in the manufacture is all driven by water. (*Huge*, *France Pittoresque*, ii., p. 248.)

BACHARACH, a decayed town of the Prussian states, prov. Rhine, at the foot of a steep mountain, on the left bank of the Rhine, 25 m. S.S.E. Coblentz. It is surrounded by old walls strengthened by eleven towers. Bacharach is a translation or corruption of *Bacchi ara*, or altar of Bacchus; the name given to a rock in the river, usually covered with water, but appearing in very dry seasons, or in those most favourable to the growth of the vine. Hence the Romans are said to have sacrificed on the rock to Bacchus; and its appearance is still hailed as an omen of an excellent vintage. The town is mean and dirty, and the inhabitants very poor.

"In fact," says Mr. Barrow, "the principal part of the food of the people, through the whole of the long ravine from Boppart to Bacharach, and as far as Bingen, must be brought to them from a distance, as, from the scarcity of land, wine and fruit are the only articles capable of being cultivated; and how the land which we here see can possibly pay the labour of cultivation is quite a mystery. There is scarcely a patch of half an acre in any one continued

* Nebuchadnezzar is called also Labynetus by Herodotus. (*Clio*, 74.)

* The references to Rich's *First Memoir* are to the edition of 1815, except when otherwise expressed; those to Rassell's *Topography* are made to "Babylon and Persepolis," published in 1839. Some interesting corroborative matter will be found in Sir R. K. Porter's *Travels in Georgia and Persia*, ii., 260-387; and Buckingham's *Travels in Assyria*, 438-475.

space; mostly not half a rood. Every little sheltered spot, however small, that possesses the least soil—every little crevice between the naked rocks—is choked up with vines; in many places the vine is planted in a basket, with adventitious soil, and sunk in the rocky fragments by the side of the hill. The care and the labour bestowed, though not toilsome, is constant; and the distance is frequently several miles which the poor cultivator has to go from his habitation to his vineyard; we should rather say *hers*, for they appear to be chiefly women, who bear but little resemblance to those fair and sylph-like damsels with which painters are in the habit of peopling their vineyards, when assembled to gather the purple grape. A jacket and petticoat, a dirty handkerchief tied round the head, the legs and feet naked, the features dark, dull, and unmeaning, furnish the true picture of a female labourer of a Rhenish vineyard; and this was so generally the prevailing feature of the picture, in all places where the chief produce was wine, that we may almost with certainty come to the conclusion, that the culture of the vine is an indication of the poverty of those who perform the manual labour, however profitable it may be to the large proprietor."

BACKERGUNGE, a distr. of Hindostan, prov. Bengal, div. Dacca, including part of the Sunderbunds, and the mouths of both the Ganges and Brahmapoutra; having N. Dacca Jelalpoor distr., E. Tipperah and the bay of Bengal, S.W. Jessore; area 2780 sq. m.; pop. (1822) 686,640; land revenue (1829–30) £78,180. It is mostly covered with jungle, abounding with alligators and the largest class of tigers; but in parts it is very fertile in rice, &c. It has been noted for the frequency of crime, especially of river piracy or dacoity, the country presenting great facilities for the shelter of the culprits. It is subject to inundations that are occasionally very destructive. (*Hamilton's Hindostan, Rep. and Append. Revenue, and Map.*)

BACKNANG, a town of Wirtemberg, circ. Necker, 16 m. N.E. Stuttgardt, in a valley on the Murr. Pop. 3400. It has fabrics of cloth, and tanneries, and a considerable trade in horses.

BACQUERILLE, a town of France, dep. Seine Inférieure, cap. cant., 11 m. S. by W. Dieppe. Pop. 2810.

BACS, a town of Hungary, cap. co. of the same name, on the marsh of Mosstonga, 32 m. W.N.W. Peterwardein. Pop. 2770. It was formerly much more considerable than at present, and has still some fortifications. It is the seat of the chapter of the Greek bishop of Bacs, who resides at Neusatz; and has a considerable transit trade.

BADAJOZ (an. *Pax Augusta*), a city of Spain, cap. Estremadura, near the frontier of Portugal, in an extensive plain in the angle between, and at the point of confluence of, the small river Rivillas with the Gaudiana; 198 m. S.W. Madrid, 135 m. E. Lisbon; lat. 38° 52′ N., long. 6° 11′ W. Pop. 12,088. The castle, situated on a rock overhanging the confluence of the two rivers, commands them and the town, which is farther defended by various very strong fortifications. The Gaudiana is here crossed by a good bridge of twenty-eight arches, erected in 1596, and protected by a strong *tête du pont*. Streets narrow and crooked, but they are well paved and clean, and the houses good. It has five gates, and a fine promenade along the river. There is a deficiency of springs, and the supply of water is derived from reservoirs, cisterns, &c. It is the seat of a bishopric, and the residence of the captain-general of the prov. The cathedral has some good paintings, especially those by Morales, a native of the place; and there are several convents and hospitals. It has manufactories of soap and coarse cloth, with tanneries and dye-works, and is the seat of a pretty active trade (mostly contraband) with Portugal.

Badajoz is very ancient, having been a considerable place under the Romans. It has always been regarded as a military post of the greatest importance. During the late war with France, it was taken by the French under Marshal Soult on the 10th of Jan. 1811; the garrison, amounting to 15,000 men, becoming prisoners of war. In the course of the same year it was twice unsuccessfully besieged by the Anglo-Portuguese army. In the following year the siege was undertaken by the army under the Duke of Wellington; and, after some of the outworks had been carried, it was taken by storm, after a desperate resistance, on the 6th of April. On this occasion the allied army lost about 5000 men, killed and wounded. The glory of this brilliant achievement was unhappily tarnished by the excesses committed by the victorious soldiery, despite every effort to prevent them, on the defenceless inhabitants of the town. (*Miñano; Napier*, iii., 433.)

BADALONA, a town of Spain, Catalonia, within a short distance of the sea, with a castle; 6 m. N.E. Barcelona. Pop. 4875. The climate is excellent, and the environs are fertile and beautiful.

BADAUMY, a strong hill fortress of Hindostan, prov. Bejapoor, presid. Bombay, 55 m. N.E. Darwar; lat. 15° 55′ N., long. 75° 49′ E. Pop. about 2500. It consists of fortified hills, with a walled town at the bottom, containing an inner fort. It has always been reckoned one of the strongest hill-fortresses in India, and successfully resisted a whole Mahratta army. It was taken by storm in 1818, by a division of the army under Sir T. Munro. A remarkable chaotic distribution of rocks prevails throughout the country around Badaumy.

BADEN (THE GRAND DUCHY OF), in Germany, is bounded on the S. by the lake of Constance, with its two arms, the lakes *Ueberlingen* and *Zell*, as far as Stein, between which town and Eglisan, however, the territories of the Swiss cantons, Schaffhausen and Zurich, intervene three times between the Rhine and the frontier of Baden. On the W. the Rhine forms the boundary towards Switzerland, France, and Rhenish Bavaria, with the exception of a part of the territory of Basel, which lies upon the right bank of the river. Towards the N. the territory of the grand duchy of Hesse and the kingdom of Bavaria, and towards the E. the kingdom of Wirtemberg and principality of Hohenzollern Sigmaringen form its boundaries. It lies between lat. 47° 32′ and 49° 47′ N. The surface is exceedingly varied, the length of the grand duchy being about 150 m. from N. to S.; its breadth, in Lower Rhine circle, from the Rhine to the Bavarian frontier, being about 60 m.; in the Middle Rhine circle, from the Rhine to the frontier of Wirtemberg, about 20 m.; and in the Lake circle, from the same river to the Wirtemberg frontier, extending to nearly 115 m.; thus forming a long irregular figure, very narrow in the centre, but stretching out to some breadth at the N. and S. ends. The eastern half of this tract of country is entirely occupied by a mountainous tract, extending from S. to N., under the denominations of the Black forest, Odenwald, &c.; while the western half, extending from the fall of these mountains to the Rhine, is partly an undulating, but, along the banks of that river, mostly a level country.

Mountains.—The Black forest stretches from the banks of the Rhine, where that river forms the Swiss boundary, in a northern direction through the grand duchy as far as the Neckar, and towards the E. far into the kingdom of Wirtemberg, falling gradually in the latter direction with prolonged offsets, but suddenly and steeply towards the valley of the Rhine. Its main stock is composed of gneiss and granite, which form, as in the Vosges, dome-like masses, with steep sides, rising in the Felberg 4650 ft.; in the Belchen, 4397 ft. (this name is analogous to the Ballons of the Vosges); and in the Herzogen Horn to 4300 ft. above the level of the sea. On the granite red sandstone is superimposed, and forms extensive plateaux, capable of cultivation to a great height; so that not only extensive forests cover these mountains, but pastures, and even small villages, are found in them at an elevation of 3500 and 4000 ft. Deep valleys, with picturesquely-precipitous sides, intersect the sandstone layer, and pour rapid streams, for the most part navigable for rafts, into the valley of the Rhine. In some hills, as the Knieblgs, for instance, the sandstone appears to form compact isolated masses. 2. The bed of the Neckar, which divides the Black forest (Schwarzwald) range from the Odenwald, is also of sandstone, which alternates in the northern parts of the grand duchy with blue limestone and marl. The principal mass of the Odenwald is likewise, according to Keferstein (from whose work we take these details), composed of sandstone, little interrupted by the rise of the granite. The highest summit, the Katzenbüchel, 2180 ft., lies in Baden; but the greater part of the chain belongs to the grand duchy of Hesse. Like the Black forest, these heights fall steeply towards the Rhine, and along the foot of the range the *Bergstrasse*, from Heidelberg to Frankfort, a road celebrated for picturesque mountain scenery, uniting with the rich luxuriance of vegetation of the valley, has been carried. 3. The Kaiserstuhl, in the circle of the Upper Rhine, is formed of a clump of heights of volcanic origin, separated from the Black forest by the Dreisam and the Elz. On the rock, called the Toddenkopf (death's head), a tradition tells us that Rodolph of Hapsburg held a court of justice, whence the name of Kaiserstuhl (emperor's chair) is derived. The highest point is 1763 Paris feet in elevation. 4. A range of steep hills, stretching from the Rhine, near Schaffhausen, along the W. and N. shores of the lake of Constance, is named the Randen. The dominant formation of these hills is limestone; the highest point is 2527 ft. in height. They run into the Black forest on the W. and N., and on the N.E. into the hilly district of Nellenburg and Hegau. The last-named elevations are composed of Jura limestone, in which the basalt and other isolated volcanic rocks of Hohendwyl, Hohenstoffein, Hohenhöwen, &c. occur. 5. Finally, the Heiligenberg, a rough and sterile tract, rises N.E. of the lake of Constance, and slopes down towards its banks; on its summit, 2200 ft. high, Prince Fürstenberg has a hunting seat, from which there is a fine view of the lake and the Swiss mountains.

Rivers.—The principal river of the grand duchy is the

Rhine, which receives all its streams except the Danube. After losing itself in the lake of Constance, at a distance of 100 m. from its source, it reappears as a rapid stream near Stein, where its breadth is 250 ft., and works its way through limestone rocks to Schaffhausen, a little below which place it falls over a precipice from 50 to 60 ft. in height. Near Laufenburg the bed narrows to a width of only 50 ft., forming a rapid scarcely inferior in grandeur of effect to the celebrated fall at Schaffhausen. At Rheinfelden the rocky ravines in its bed form a violent eddy, and all these obstacles preclude the possibility of rendering the stream navigable above Basel, from which city onward it takes a northerly and tranquil course. Its breadth at Basel is 750 ft.; but its depth is by no means proportionate to this extent of surface, the stream being in many spots no more than 3 ft. deep, while its greatest average depth between Basel and Strasburg does not exceed 10 to 12 ft. At Mannheim the bed of the river is 1000 ft. in breadth; but its average depth between Strasburg and Mayence varies between 5 ft. and 24 ft. The fall of the Rhine between Stein and Basel is stated by Hennitsch to be 703 Paris feet, and between Basel and Mannheim 494 ft. The navigation on the Rhine is the most important of all the inland water carriage of Germany. Between Basel and Strasburg boats of 25 to 30 tons are used, and between the latter city and Mainz barges of 120 tons burden. Steam-boats now go up to Basel, notwithstanding the islands and banks formed by the shifting of the river's bed, and the uncertainty of its depth, which varies after every flood. The Rhine is traversed by two bridges of boats at Kehl and at Mannheim, besides several flying bridges.

The greater number of the streams falling into the Rhine on its right bank descend from the Black forest with so rapid a fall that but few of them are navigable even for forest rafts. The most considerable are the Wiebach, which, during part of its course, forms the frontier of the canton of Schaffhausen; the Wiesen, which falls into the Rhine below Basel, the Elz, the Kinzig, which joins the Rhine near Kehl, and the Murg. The two last-named streams, on which the greatest quantity of timber and firewood is floated down, have a fall of nearly 3000 ft., in a course not exceeding 60 English miles. The largest accession which the Rhine receives during its course through the grand duchy, is the Neckar, which has its source in Wirtemberg in the Black forest, and, after traversing that kingdom, enters Baden at Heimsheim. It is navigable for boats from Cannstadt near Stuttgart, below which place it is joined by the Rems, the Kocher, and the Jax on its right, and the Enz on its left bank; it falls into the Rhine near Mannheim.

2. The Maine forms the frontier towards Bavaria but for a short distance, and receives the Tauber at Wertheim. Its depth is not great, but is regular, and its gentle fall, which is assisted by the numerous windings of its bed, renders its current well adapted to navigation.

3. The Danube, whose sources are in the grand duchy, leaves the territory before it assumes any greater importance than that of a mountain stream. Its most westerly source is that of the Brege, between the Rosuuk and Briglein, in the Black forest, a few miles N.W. Furtwangen. It is joined a little above Donaueschingen by the Britzach, and into their united streams, which, from that point, bear the name of Danube, the waters fall, which, issuing from the springs in the Castle-yard of this town, claim the honour of being the original sources of the great river. After traversing a small district of Wirtemberg, the Danube once more enters the territory of Baden, and finally leaves it at Gutenstein on the frontiers of Sigmaringen.

The natural facilities for internal navigation in the grand duchy bend for the most part towards the W. and N., and merge into one grand channel, the Rhine. With the exception of some cuts to regulate the course of this river between Kehl and Mannheim, the execution of which is regulated by a treaty with Bavaria, according to which those on the left bank are managed by Baden, and those on the right bank by the Bavarians, no navigable canals exist in the grand duchy.

The lake of Constance is an important feature in the natural facilities for water communication. Part of its northern bank, from Immenstadt to Mersburg, together with the whole shore of its northern branch, the *Weberlingen See*, and the north shore of the *Zeller See*, with the city of Constance on its southern shore, belong to Baden. A considerable trade with Switzerland is carried on across it, and the introduction of steam-boats, which keep up a daily communication between Constance, Lindau, and Rohrschach, in Switzerland, has made it a convenient passage for travellers. The whole lake with its branches, contains, according to Hennitsch, an area of 9½ German square miles, and its deepest part, between Constance and Lindau, is 85½ Paris feet. Its level above the sea is 1255 feet, but at the period of the melting of the snow its waters rise as much as 10 feet. A sudden swell, which takes place at other times, and which is termed the Ruhss, is not easily accounted for. The lake is not unfrequently frozen over in winter, and in 1830 horsemen and carriages passed over it. The Ilmen See, near Pfuffendorf, in the Lake circle, and the Möking See, are rather fish-ponds than lakes; and the various meres in the Black Forest, which are found at considerable elevations, the largest of which are the Feldsee at 3491 feet, the Titisee 2598 feet, the Mummelsee 3130 feet, the Nonnenmattweiher 2845 feet, and the Eichner See 1494 Paris feet above the sea, are neither interesting for their extent, nor for picturesque scenery. The last-mentioned lake dries up occasionally, so that corn is sown in its bed; and in the Nonnenmatt a floating island of turf rises and falls with the water which supports it.

Climate.—Berghaus gives the following details concerning the climate of the valley of the Rhine, in the grand duchy, one of the warmest in Germany.

Town.	Lat. N.	Height above the sea in Paris feet.	Mean temp. of the year.	Winter.	Spring.	Summer.	Autumn.
	° ′		° ′ ″	° ′	° ′	° ′	° ′
Freiburg	48·04	862	+ 9 7 6R	+ 0 4R	+ 9 9R	+ 18 4R	+ 10 4R
Strasburg	48·35	450	9 8	1 4	9 9	17 8	9 8
Carlsruhe	49·01	340	10 2	1 6	10 4	18 3	9 8
Mannheim	49·30	258	10 3	1 6	10 4	19 5	9 7
Mean	48·75	500	10 0	1 2	10 1	18 5	9 9

For the mountain districts the same author gives the following mean temperatures:

The Black Forest.

Between the sources of the Enz and the Murg	. . . .	6° 30′ R.
Ditto ditto	Murg and the Dreisam	5 30
Ditto ditto	Dreisam and the Kinzig	6
Ditto ditto	Danube and the Lake of Constance .	9

The mean temperature for the whole grand duchy is estimated at 8° 30′ R., being 30′ warmer than the climate of the plateau of Bavaria, S. of the Danube, but 1° colder than the mean temperature of Hanover, although that kingdom lies 4° lat. farther to the N.

Observations, as to the fall of rain, give a mean at Freiburg of 28 in. per annum. In Carlsruhe the mean variations of the weather are, 22 clear, 86 sunshine, 161 mixed, 42 partial cloudy, 54 cloudy days in the year. Rain falls 146, snow 26, and fogs occur on 12 days. The mean direction of the winds is, in Carlsruhe S. 88° W. or nearly W., in Mannheim N. 65° W. Thunderstorms in Carlsruhe occur on 26, at Mannheim on 21 days in the year.

Productions.—Before the accession of the grand duchy to the Germanic Customs' League, the attention of the inhabitants of the valleys of the Rhine and Neckar was almost exclusively devoted to agriculture, for which the soil and climate of those districts is admirably adapted. Corn is grown with great success; the average return given *for the whole state* by Berghaus, being, for barley 8 to 9 fold, wheat 9 fold, maize 340 to 350 fold, potatoes 28 to 30 fold. The slopes of the hills are everywhere covered with vineyards, in which excellent wine is grown, although only the N. shore of the lake of Constance and part of the vale of the Rhine have a S. declivity; and here the vicinity of the Alps, the Jura, and the Black Forest, diminish the warmth. Between the vines, the walnut, chesnut, peach, apricot, plum, and cherry trees produce abundantly the choicest fruit; and the valleys above mentioned resemble one beautiful garden. Tobacco, hemp, of a very fine description, and flax, are extensively cultivated; and the forests send annually a large quantity of excellent fir and oak timber down the Rhine. Mining is also carried on with partial success. Silver is found at St. Anton, in the valley of the Kinzig; copper at Kork and Neustadt; iron is produced at Kandern, near Waldshut, near Hansen, and in other parts of the Black Forest; manganese is dug near Villingèn; salt in two chief beds at Rappensu in the circle of Lower Rhine, and at Durrheim, in the lake circle. Coals in the neighbourhood of Offenburg; besides alum, vitriol, and sulphur, form the principal mineral productions. Upward of 60 mineral springs are counted in the grand duchy. The thermal springs of Baden are those which are the best known and the most used for medicinal purposes.

The grand duchy is divided into four circles, and contained, according to the census of 1834, 241,520 families, or 1,231,319 inhabitants.* Berghaus estimates the population in the year 1838 at 1,263,100.

	Area in Ger. sq. m.	Population in 1838.	Per sq. m.	Chief Towns.	Population.
Lake Circle . .	61·5	154,500	2,600	Constance	6,250
Upper Rhine Circle	71·25	393,100	4,700	Freiburg	12,200
Middle Rhine Circle	77·75	421,000	5,480	Rastadt	5,600
Lower Rhine Circle	64·5	319,500	4,990	Mannheim	20,000
				Carlsruhe	22,300
Totals	275·0	1,263,100	4,584		

* Viz., 600,334 males, and 631,085 females.

BADEN, GRAND DUCHY OF.

The movement of the Population in the year 1833–34 was as follows:

	Births.			Marriages.	Deaths.	An. increase from 1833 to 1834.
	Legit.	Illegit.	Total.			
Lake Circle .	5,720	1,216	6,936	1,289	6,512	1,544
Upper Rhine .	8,821	2,192	11,013	2,382	8,771	6,915
Middle Rhine .	14,017	3,430	17,447	3,449	15,888	7,122
Lower Rhine .	10,907	1,722	12,629	2,751	10,814	7,841
Totals	40,465	7,580	48,045	9,871	41,985	23,422

Thus the proportion to 1000 inhabitants is, of births 38, of deaths 34, of marriages 8; and the illegitimate births are to the legitimate as 1 to 5·4. The annual increase in the 22 years from 1811 to 1833 averages only 10,600, and for the years 1831, 1832, and 1833, was only 2538.

The proportion of male to female births was, in the year 1834, as 1·06 to 1; of births of legitimate children to marriages as 4·1 to 1. Hennitsch, in his detailed statistical description of Baden, gives the following tables, showing the religious distinctions of the inhabitants in 1833.

	Catholics.	Protestants.	Menonites.	Jews.
Lake Circle .	165,909	6,189	106	1,266
Upper Rhine	229,569	80,982	159	3,174
Middle Rhine	252,345	146,356	308	5,817
Lower Rhine	162,407	136,002	847	9,166
Totals	810,330	377,530	1,419	19,423

Occupations of the People.—Agriculture.—The cultivated land is divided, according to Berghaus, as follows:

Arab. Land. Eng. Acres.	Cul. Meadows, in Acres.	Commons, &c., part. cult.	Forests.	Vineyards.
1,212,901	360,791	301,325	1,153,300	60,561

The produce is stated to amount to

Total Produce. of Cerr. Quarters.	Potatoes. Quarters.	Wine. In Gals.	Hemp. Quintals.	Tobacco. Quintals.	Hops. Quintals.
1,728,965	680,000	13,458,235	48,000	90,000	10,000

Of the Cerealia, wheat is grown, but in a small proportion, not exceeding 1-30th of the whole. Spelt is the grain of which bread is principally made. Maize is extensively cultivated, but chiefly as green food for cattle, being sown thick, and allowed to run up to a great height. Artificial grasses and turnips are in universal use in the vale of the Rhine, in which agriculture, on the whole, is carried on upon the best scale, and far exceeding the cultivation of any other part of Germany. The meadows are irrigated in the Italian style, which the numerous mountain rills assist, while the cornfields are interspersed with countless fruit-trees, and even the beds are surrounded with plants of hemp, sown singly, which attain a remarkable height and thickness. The best descriptions of wine are those of the Ortenau and of the valleys of the Maine and Neckar. The *Klingenberger* and *Wertheimer* growths are those most admired. The produce of timber and firewood is estimated at 978,000 cubic fathoms, of which a large portion is sent down the Rhine to the ship-builders of Holland, and is known by the name of *Holländerholz*. Masts of 150 feet in length, and oaks of the choicest growth, are yearly felled in great numbers for exportation to the mouth of the Rhine.

The number of head of cattle in the grand duchy is stated to be, 73,183 horses; 480,404 horned cattle; 188,706 sheep; 22,275 goats; 302,800 pigs.

Of the sheep 16,856 are designated as Spanish merinoes, and 110,057 as improved breeds. The number of beehives is stated at 14,030. An agricultural association at Carlsruhe has branches in several other towns, and prizes are annually distributed to encourage improvements.

Mining and Manufactures.—Gold-washing was formerly a principal object of industry along the Rhine, from Basel to Mannheim; it is now confined to the district between Philipsburg and Wittenweier. The mines of Teufelsgrund yielded in 1835–6, 794½ mks. of silver. In the year 1836–7 the same mine produced 1052 mks. of silver. The mines of St. Anthony in the valley of the Kinzig produced, under the management of the same company to which those of Teufelsgrund belong, in 1836–7, 429 mks. of silver, and 900 cwt. of cobalt ore. The salt springs are the next most productive mineral branches, the two principal ones yielding 300,000 cwts. annually. Since the accession of Baden to the Prussian Customs' League the number of factories has very much increased. In 1829 the grand duchy numbered 161 fabrics, with 2756 workmen, and a capital registered for taxation of 1,777,055 fls. At the end of 1837 the number of fabrics was 294, with 9281 workmen, and a capital of 2,488,352 fls. The additional manufacturing undertakings are cotton spinning and weaving establishments, riband, and beet-root sugar fabrics, of which last description eight have been opened within a few years. From the following survey of the employments of the people given by M. Hennitsch, it will be evident that this increased activity, although it may have received a peculiar direction by means of the protecting duties, which amount almost to prohibitions of some articles of colonial produce, was yet, in most respects, the natural result of the peculiar circumstances under which the population have been placed. The forest and mountain tracts, which occupy half the country, scarcely supply food for their scanty inhabitants, whose manufactures of clocks, wooden toys, straw hats, lace, and embroidery, have been sent, from a long date, into all parts of Europe. Crome states the number of wooden clocks annually exported to amount to 187,000, besides musical snuff-boxes, barrel-organs, and other articles for which the forests furnish the materials.

According to Hennitsch, the number of families registered for taxation as manufacturers and tradesmen amounted in 1839 to 95,624.

12,037 families with capital between 400 and 1000 fl.
4,216 do. do. above 1500 fl.
70,139 do. without capital.
9,232 do. exempt, as being taxed in another manner, or as paupers.
95,624 families of capitalists, &c.
23,269 do. workmen and labourers.

The trading classes were farther divided as follows:

87,131 families; tradesmen; capital 10,680,500 fl.
161 do. manufactures; do. 1,777,075 fl.
8,332 do. dealers do. 9,759,900 fl.
95,624 families.

The number of agricultural families at the same period is stated to be 101,792.

The density of the population in the different parts of the grand duchy is shown by the following table:

Circles.	Level and Lowlands.			Hilly Districts.			Mountainous.		
	Eng. sq. miles.	Population.	Pop. in a sq. m.	Eng. sq. miles.	Population.	Pop. in a sq. m.	Eng. sq. miles.	Population.	Pop. in a sq. m.
Lake . . .	63	10,000	158	306	105,000	130	467	60,000	128
Upper Rhine .	160	90,000	562	342	110,000	314	976	130,000	133
Middle Rhine .	368	180,000	471	445	110,000	247	890	122,000	151
Lower Rhine .	297	130,000	438	721	155,000	215	339	30,000	88
	911	410,000	450	2354	450,000	204	2568	342,000	132

Thus the lowlands of this state rank among the most populous districts of Europe, and the transition to manufacturing employments is in every respect a natural one.

Moral Condition of the People.—The restraints upon the obtaining a settlement in a distant parish, which in all German states depends upon the *possession* of a livelihood rather than of the power to gain it, with the impediments thrown in the way of marriage, tend, it is said, to weaken the stimulus to exertion, and to promote immorality. These must be regarded as the true causes why the lower classes in this state do not stand upon an equal footing with their Swiss neighbours, notwithstanding the freedom of the political institutions and the high rank which the upper classes of the grand duchy assume among the enlightened nations of Europe. The constitution of Baden is the one which allows the most political influence to the representatives of the nation of all the German governments, and the law establishing the liberty of the press has only been suspended by the decrees of the Frankfort diet of the year 1832.

The legislative functions are exercised in Baden by the sovereign and two chambers. In the upper chamber, besides the members of the royal family, the heads of mediatized princely houses, the bishop of Freiburg as head of the Catholic church, and the chief of the Lutheran consistory, the representatives of the universities of Heidelberg and Freiburg, eight representatives of the lesser nobility, and eight members named at pleasure by the grand duke—the heads of families possessing entailed estates, of the value of 300,000 florins (capital) may claim the hereditary peerage.

The second chamber consists of 22 deputies of towns, and 41 deputies from as many districts of the country. The members of the upper chamber must have completed their 25th, those of the lower chamber their 30th year. The latter must prove the possession of an income of 1500 fl. per an. without any limitation as to the source whence it is derived: they are chosen for 8 years. The chambers meet every second year, and their sittings are public. The parliamentary history of Baden since 1830, when the legislative bodies commenced their career of activity, is that of the present improved and flourishing state of the institutions

and finances of the grand duchy. In the session of 1831 the budget was fully controlled for the first time, and the responsibility of the minister established. The annually increasing revenue has occasioned some alleviation of the public burdens, and in 1836, when a reduction of taxes was made, the benefit was allowed to accrue principally to the poorer classes, although the principle of equal taxation of all classes is that upon which the financial system is founded.

Financial System.—The direct taxes are levied as follows: The *land tax* upon the estimated value of all lands, calculated according to sales of landed property in each district at two periods; viz., between the years 1780–90 and 1800–9, half the average price of the district in the one period being added to half the price in the second, and all lands being classed, according to their quality, in several classes. The *rent* and *revenue* tax is levied upon all dues payable by landholders to their lords, whether as rent or service dues. The capital tax is calculated at 25 years' purchase for tithes, and 18 years' purchase for other dues; and the cost of collection is deducted. The house tax is rated according to a scale of the value of each tenement, between the years 1800 and 1809. The registered amount of the value of all these descriptions of property, in the estimate for the budget of 1837 and 1838, was 601,530,080 fl. (£50.120,000); and the tax levied was 19 kreutzers on 100 florins, or 8 per cent. on a revenue of 4-per cent. from the capital. The *industry tax* is levied in a particular manner. The personal labour of every tradesman and manufacturer is estimated by a capital sum, varying according to the description of employment. All trades are embraced in ten classes, and the capital so found is increased by a proportional additional sum for every apprentice or labourer employed. The capital sum registered for this tax in 1837 amounted to 100,864,925 fl. (£8,405,000), and the rate was 23 krs. per 100 florins, or nearly ⅘ths per cent. Another series of fifteen classes embraces the capital employed in tools, stock in trade, &c. The personal industry tax is the one which was modified in 1836, when 300 florins were struck off from the registered capital of each individual; by means of which a large proportion of the poor were relieved from this burden. All persons in the service of the state pay a tax upon the salaries they receive, according to a scale of nine classes. In the first, the income being below 1000 florins, is rated at 1½ per cent.; but in the last class, which includes the apanages of the members of the royal family, and revenues exceeding 80,000 fl. per ann. (£6000), it amounts to 16⅔ per cent.

Of the indirect taxes the most important are the excise on beer, wine, and spirits; the slaughtering tax, the stamp duty, and the salt monopoly. The last-named branch of service supplies the inhabitants at 5 fl. 50 kr. per cwt. (10*s.*), while the price at which the salines furnish salt for exportation is 3 fl. 30 kr., or 6*s*. The estimate of the budget for 1837 to 1838 was 13,026,559 fl. a year, of which the direct taxes yield 2,651,168 fl., the excise 1,495,593 fl., the share received from the Prussian Customs' League 1,495,593.

The military force of the grand duchy amounts nominally to 10,000 men, which form part of the 2d division of the 8th corps of the confederate army. The troops are raised by annual conscription; but, after the exercising months are over, the greater part are disbanded, and the whole department is managed with the strictest economy. The cost, including pensions, does not exceed 1,500,000 florins annually. In the session of 1838 the second chamber passed a motion for reducing the number of the cavalry.

In the department of justice, the fees taken from suitors and the fines more than cover the annual expenses. The number of trials in the four principal courts of Mannheim, Freiburg, Rastadt, and Mursburg, were,

	Civil.	Bankruptcies.	Criminal.			Appeals.
In 1832,	3011	741	1690 acc.,	642 acq.,	1038 con.,	248
1833,	2904	—	1029 do.,	673 do.,	956 do.,	305

The sentences were as follows:

	1832.	1833.
Imprisonment with hard labour	229	206
Hard labour in irons	104	129
Solitary confinement	1	3
Fines, &c.	692	611
Death	12	7
Executed	1	6

The police reports for 1822 give the number of arrests and informations laid at 23,269; but of these 3377 were for irregularity of passports, and 1024 for neglect of the regulations concerning travellers, with 5348 cases of an equally light description. The prisons contained, in 1832, 586 prisoners, of whom 469 were men, and 117 women. An association was formed in 1831 to improve them. The highest judicial tribunal is the Supreme Royal Court at Mannheim, which is the final court of appeal. Under this stand the four courts in the respective chief towns of the circles. In civil cases the trials are public, and the pleadings oral, as in France and England; but the greater part of the criminal proceedings are carried on with closed doors, although the form of pleading and the examination of witnesses is the same. This deviation from the principle of publicity was demanded by the Frankfort diet.

The institutions for education are numerous and good. They consist of,

	No. of Schools.	Teachers.	Scholars.
Elementary schools	1,856	2,301	185,000
Middle class schools	24	111	1,821
Polytechnic schools	1	39	208
Universities	2		1,036

The university of Heidelberg is one of the oldest established in Germany; it was founded in 1386; that of Freiburg in 1454. The faculty of divinity in the former is Lutheran, in the latter Catholic. The school attendance is obligatory on every individual, and the attendance at the Sunday schools continues for two years after dismissal from the elementary school. Every parish has its proportional number of schools. For the formation of schoolmasters two normal schools are founded; for Protestants at Carlsruhe, for Catholics at Ettlingen.

Religion.—Although the reigning family in Baden professes the Protestant religion, yet more than half the inhabitants are, as we have stated, Catholics. According to a treaty entered into with the pope, the bishopric of Constance was suppressed, and by the bull of 11th April, 1834, the bishop of Freiburg was nominated as metropolitan of six German states, viz., Baden, Wirtemberg, the grand duchy, and the electorates of Hesse, Nassau, and Frankfort. The sovereign confirms the prelates, who are chosen by the pope, and the revenues allotted to the church are to be secured on landed property. All bulls, and other religious proclamations, must be sanctioned by the government, and receive its *placet*, previous to publication. The Protestant church is managed by a consistorial court, whose chief has equal rank with the bishop of Freiburg. Its members assemble in a convocation to regulate clerical affairs, the last sitting of which was held in 1834. The foundations of the different religious creeds for religious and charitable purposes are stated by Hennitsch as follows:

		No. of Foundations.	Annual Revenue.
Catholic	Religious	1,721	998,525 fl.
	Secular	613	436,718
Protestant		608	674,616
Jewish			14,900

In addition to these rich donations, all classes of civil and religious functionaries have subscription funds for providing for orphans and widows; and savings' banks are general, to encourage providence among the lower classes. Beyond these institutions, no formal provision is made for the poor, whose moderate habits keep them from being burdensome. In the larger towns, as Mannheim, for instance, subsidiary relief is generally given in the shape of food, clothing, or fuel, from voluntary subscriptions raised by the inhabitants. The regulations are very strict as regards settlement in the communes, and permission to marry; and the number of tradesmen is everywhere limited by the magistracy, who also control the price of provisions. The weights and measures used in the grand duchy are—the florin or gulden at par, 12 fl. = £1; 1 fl. = 60 kreutzers; the foot = $\frac{50}{31}$ Engl. ft.; the morgen = $\frac{360}{163}$ acres; the maap = $\frac{150}{157}$ imp. gallons; the pound = $\frac{1}{10}$ lbs. avoirdupois.

The reigning family descends from Berthold, Landgrave of Zähringen, one of the most powerful and meritorious families of the 11th century, whose son acquired the district of Baden. Margrave Augustus George united all the possessions of the two houses of Baden and Durlach, and received, by the treaties at Luneville and Presburg, as additions, the bishopric of Constance; the Austrian Breisgau; part of the palatinate of the bishoprics of Spire, Strasburg, and Basel; the county of Hanau Lichtenberg; the Ortenau; the island of Meinau in the lake of Constance; seven free imperial cities; a part of the estates of the Teutonic order, and nine abbeys; together with the sovereignty over seven mediatized nobles of the empire, with a territory of 67 sq. Germ. miles, and 222,000 inhabitants. The reigning Grand-duke Leopold succeeded his half-brother, 30th March, 1830, and is married to his cousin Sophia, the daughter of the abdicated King Gustavus IV. of Sweden.

BADEN, a town and celebrated bathing-place of Lower Austria, on the E. bank of an affluent of the Danube, at the entrance of a fine valley, 13 m. S.S.W. Vienna. Resident pop., with the neighbouring townships of Guttenbrunn and Weikersdorf, about 4000: but increased during the summer months by 3000 visiters, among whom are usually the emperor and other members of the imperial family.

The presence of mineral springs here was known to the ancients, by whom they were called *Aquæ Cotiæ*, from the neighbouring mountains; and in 1769, when the modern baths were constructed, the ruins of a Roman vapour-bath and other buildings were discovered. There are at present sixteen baths, each capable of at once accommodating from 50 to 100 persons; for here, it is to be observed, both sexes bathe *en masse!* All parties are attired in loose flowing robes, and promenade in the baths, arm in arm, as if at a *soirée;* and as much interest is used with the master of the ceremonies to obtain the honour of being *parboiled* with high-born exclusives, as to obtain an invitation to the most *recherché* assemblies. (*Spencer's Germany and the Germans*, ii., 194.)

The waters, according to the analysis of Volta, contain sulphate and muriate of soda, sulphate and carbonate of lime and magnesia, sulphate of alumina, and considerable quantities of carbonic and hydrosulphuric acid gases: their temperature varies from 88° to 98° Fah. Next to the baths, the most remarkable buildings are, St. Stephen's church, the palace of the Archduke Anthony, the town-house, theatre, *chiosk*, &c. There are many well-built private houses; several hospitals and other charitable institutions; and a handsome park and public promenade: the neighbourhood abounds with natural beauties, and contains various ancient remains. (*National Encyclopædia*, p. 159–163.)

Baden, a town of the g. d. Baden, famous for its hot baths, usually called Baden Baden, to distinguish it from the watering-place of the same name near Vienna, romantically situated in the Middle Rhine Circle, 24 m. S.S.W. Carlsruhe. Resident pop. 4700. It was formerly the constant residence of the margraves of Baden, and the grand duke still usually passes the summer in a villa here. The mineral springs were well known to, and appreciated by, the Romans, who planted a colony in it, and gave it the name of *Civitas Aurelia Aquensis*. The springs, thirteen in number, burst out of the rocks at the foot of the castle terrace. The temperature is not affected by the seasons: the hottest are 54° Reaumur, the coldest 37°. A handsome building, in form of a temple, is erected over the *Ursprung*, as the principal spring is called. Dr. Granville, speaking of this spring, says, "The water is perfectly clear, has a faint animal smell, a taste somewhat saltish, and when drunk as it issues from the spring, approaching to that of weak broth." According to a recent analysis, its specific gravity is 1·030. A pint of the water, containing 7392 grains, contains 23·3 solid matter, the principal ingredient of which is culinary or common salt (16 grs.); the next in importance are the sulphate, muriate, and carbonate of lime (6½ grs.); the remainder consists of a small portion of magnesia and of traces of iron, with about half a cubic inch of carbonic acid gas in addition. There is here no public building appropriated exclusively to the purpose of bathing. The water is conveyed by pipes to the different hotels, in which there are numerous baths, some of these being very luxuriantly fitted up. Mr. Murray says that this is the most beautifully situated of the German baths, even surpassing, in this respect, the Nassau Brunnen. The surrounding country, without the sublimity and grandeur of Switzerland, is distinguished by a pleasing and romantic wildness, and is, as it were, a prelude to the Alps. July and August are the season when the baths are most frequented; but visiters come and go from May to October. In 1833 they were visited by 13,900 individuals. English visiters have of late years been very numerous; and, but for the prevalence of fogs in winter, it is a desirable residence. A number of handsome buildings, among which, besides the temple over the *Ursprung*, the *Conversations-haus*, with its plantations, is conspicuous. The dungeons under the *Neu Schloss*, or palace, are supposed to have been the seat and prisons of some secret and dreadful tribunal; but nothing certain is known of their history.

Baden, a town of Switzerland, cant. Argau, on the left bank of the Limmat, 14½ m. N.E. Aarau. Pop. 1800. It is surrounded by walls; is the seat of a tribunal of original jurisdiction; has a good town-house, a handsome Catholic church, two convents, a hospital, and a house of correction. The river is crossed by a wooden bridge. Baden is celebrated for its hot baths, known to the Romans by the name of *Thermæ Helveticæ:* they are at a short distance from the town, on both sides the river: the water in the hottest baths has a temperature of 37° Reaumur: they are much frequented by the inhabitants of Basil, Zurich, &c. The environs are very beautiful; and a number of fine cottages for the use of strangers are scattered over the neighbouring heights. The deputies of the Swiss cantons have often held their diets at Baden. The treaty between France and the Empire in 1714 was signed here.

BADIA, a town of Austrian Italy, prov. Polesina, on the Adige, 16 m. W. by N. Rovigo. Pop. 3500. It has a fine bridge over the Adige, and two convents for monks; with a manufacture of earthenware, and some trade in corn, silk, firewood, flax, &c.

BADOLATO, a town of Naples, prov. Calabria Ultra, 24 m. S. Catanzaro, situated on a hill near the sea. Pop. 3000.

BADONVILLER, a town of France, dep. Meurthe, on the Blette, 20 m. E.S.E. Luneville. Pop. 2213. It has a manufactory of awls, which produces about 1,000,000 a year, with fabrics of cotton and earthenware.

BAECA, a town of Spain, prov. Jaen, 20 m. N.E. Jaen. Pop. 10,800. It is situated on a hill, in a fertile and extensive plain; has good streets and squares, one of the latter being adorned with a superb fountain. Among the principal public buildings are the Gothic cathedral, the colleges of the Jesuits and of the oratory, the chapel of the ancient university, and the prison. It has a collegiate church, several parish churches, and convents for both sexes, three hospitals, an economical society, and some tanneries. Baeça is supposed to occupy the site of the ancient *Beatia;* and it was the residence of several Moorish kings, having been wrested from the latter in 1238. At this epoch its population is said to have amounted to 150,000; but this is probably an exaggeration. The bishopric, of which it was once the seat, was transferred to Jaen in 1248; and its university has also been suppressed. (*Miñano.*)

BAENA, a town of Spain, prov. Cordova, 23 m. S.E. Cordova, on the Marbella. Pop. (town and district) 13,860. It has four parish churches and five convents. There are, in its environs, very productive salt-mines.

BAFFA (an. *Paphos*), a sea-port town on the S.W. coast of the island of Cyprus, lat. 34° 47′ 20″ N., long. 36° 26′ 20″ E. This inconsiderable town, not containing more than 1000 inhab., occupies the site of the famous Paphos of antiquity, which, after being destroyed several times, was rebuilt by Augustus, and was thence called *Augusta*. During the occupation of Cyprus by the Venetians, Baffa was a city of considerable wealth and importance. It is now nearly deserted, and is filled with the ruins of churches and palaces that are everywhere crumbling to the ground. The bay is large; but the port, commanded by a castle on the beach, is shallow and unsafe. Caves, or, rather, dwelling-places, have been cut in several of the rocks in the neighbourhood, some of which are inhabited. The country round Baffa is fruitful, and produces considerable supplies of corn, cotton, and silk.

Old Paphos is supposed to have stood about 6 m. S.E. of Paphos or Baffa, at a little distance from the sea. It was the favourite residence of Venus, *Diva potens Cypri*, the place where the sea-born goddess first took up her abode, and was famous from a very remote epoch for its temples appropriated to her worship, and for the rites and processions performed by her votaries. Hence the epithets Paphian and Cyprian applied to Venus:

> "O Venus, regina Gnidi Paphique,
> Sperne dilectam Cypron"—

It is worthy of remark that, according to Tacitus, the goddess was not represented at Paphos under the human figure, but under that of a cone. (*Hist.*, lib. 2, § 3.) There were also temples and altars where sacrifices were offered to the goddess in New Paphos. The office of high-priest of the Paphian Venus was both lucrative and honourable. In proof of this it may be mentioned, that when Cato was sent to Cyprus, he represented to Ptolemy that if he submitted without fighting, he should not want either for money or honours, for the Roman people would make him grand-priest of the Paphian Venus. (*Larcher, Mémoire sur Venus*, p. 42.)

BAFFIN'S or BYLOT'S BAY, a large inland sea, between Greenland and the N.E. coast of America, between 68° and 78° N. lat., and 52° and 80° W. long. It extends, from S.E. to N.W., about 950 m.; its width varying from 350 to something less than 100 m. at its N. end. Its surface may, therefore, be estimated at about 266,000 sq. m., an area exceeding by more than a half that of the Baltic. In fact, however, it is much larger even than this; its natural boundaries being evidently cape Farewell, the S. point of Greenland, and cape Chudleigh, on the coast of Labrador, both nearly on the 60th parallel, and respectively in 45° and 65° W. long. Taking these for its dimensions, its surface will amount to 456,000 sq. m.; but it is usual to take for its limits those first assigned, the additional S. part being denominated Davis's Strait. (*Arrowsmith's Atlas*, pl. 40; *Baffin's Voy.; Purchas's Pilgrims*, iii., 844–848; *Ross's First Voy.*, 34–161; *Parry's First Voy.*, 6–28.)

Modern discovery has shown that the N.E. and N. coasts of America, as far as 120° W., are broken into innumerable islands, and that Baffin's bay is connected with other great internal gulfs; such as that of Boothia (*Ross's Second Voy.*, 93–116), and the larger basin of Hudson's bay (*Parry's Second Voy.*, 267–347), and also with the Polar sea. (*Parry's First Voy.*, 29–52.) The term *Mediterranean* cannot be, therefore, properly applied to this great expanse of wa-

ter, since, large as it is, it is only one among a number of enormous gulfs in the singularly tortuous channel connecting the N. Atlantic and Arctic oceans.

The water of this bay attains a great depth, the maximum being 1050 fathoms, and this was found at no great distance from the land in lat. 78° 23′ N., long. 73° 7½′ W. The bottom must, however, be extremely mountainous, since 15 m. farther N. it was reached in 120 fathoms. The bottom in both cases was mud; and though, from the greater depth, of course, neither insect nor organic matter was procured, yet a small star-fish was found sticking to the line below the point marking 800 fathoms, an extraordinary depth for life in this lat., if the creature were brought up from the point indicated. (*Ross's First Voy.*, 191, 192.) In different parts, Parry found no bottom in 260 fath. and 310 fath., while in others his lead reached the ground in 200 fath., 185 fath., and 120 fath. He also, in a high lat. (74½°), found the depth to be 1050 fath., but he imagined that 100 or 200 fath. should be allowed on this for drift and swell. (*First Voy.*, 7, 8, 23, 30.) The temperature of the water is, in summer, from 2° to 3° lower than that of the air in the shade; and this temperature decreases with the depth. It would seem, however, that the bottom mud is pretty uniformly at 29° or 29½°. (*Parry's First Voy.*, 27; *Ross's First Voy.*, *Appen.*, 133.) The mouth of this bay or sea being towards the S.E., that is, towards the approach of the tidal wave; tides are, of course, experienced in its waters, but they do not appear to rise to any great height, especially towards the N. Six feet or eight feet seems about the average. (*Ross's First Voy.*, 41, *et pass.*; *Parry's First Voy.*, 27, *et pass.*) The melting of the vast masses of snow and ice produces very sensible differences in the appearance and composition of these waters: under such influence, they become turbid and of a dirty brown colour; their gravity diminishing, at the same time, very materially, so that the observed extremes in July, 1819, were 1.0261 and 10·183. (*Parry's First Voy.*, 7, 28.) Strong currents, setting towards the S., are experienced in Davis's straits; and it was this fact which led to the belief that Baffin's bay was *not* bounded by land upon the N., as marked by its intelligent discoverer; but would yield a direct passage, in the summer, to the Arctic sea (*Ross Official Instr.*, *First Voy.*, 3); but these currents were found not only to diminish in intensity with increase of lat., but even to run N. in the upper part of the bay (*Parry's First Voy.*, 31), while the continuity of land round the bay-head was fully demonstrated by Ross, who, in 1818, followed very nearly the identical track which Baffin had sailed over 200 years before. (*First Voy.*, 153, *et pass.*) Baffin's bay is full of indentations upon both its coasts, but only one continuous channel has been discovered; this is the *Sir J. Lancaster's sound* of Baffin, to the continuation of which to the Polar sea, Parry gave the name of Barrow's strait. (*First Voy.*, 52.) It runs W. from lat. 74° 30′ 3″ N., long. 78° 1′ W. It is now in the highest degree improbable that any other outlet should exist from this bay in any direction. There are but few islands in these waters. Disco, on the E. coast, in lat. 70° N., long. 58° W. (mean), is a Danish whaling station; and Hare or Waygatt isle, a little N. of the former, has acquired some celebrity as the place where one of the most modern experiments was made to determine the ellipticity of the earth. The acceleration of the pendulum between London and this place was 65·2386 vibrations in a mean solar day, showing a diminution of gravity from pole to equator, equal to ·0055139, and a compression of the polar axis equal to $\frac{10}{3138}$. (*Parry's First Voy.*, *Appen.*, 166.) The land in the neighbourhood is mountainous, and in the last degree barren; wood is totally absent, and the few plants that are found are of the low-growing, hardy kind, fitted to endure the intense cold of these regions. (*Ross's First Voy.*, *Appen.*, 141–144; *Parry's First Voy.*, *pass.*) The composition of the rocks is very various, but with an immense preponderance of old formations (granite and gneiss); limestone is found, but not abundantly; and trap *appears* to form a very characteristic feature of these shores. Basalt occurs; and rock of every kind is brought down on the floating ice. (*M'Culloch's Paper*; *Ross's First Voy.*, *Appen.*, 69–82; *Parry's First Voy*, 26, *et pass.*) The birds and animals are those of the Arctic regions generally (*Edward's Paper*; *Ross's First Voy.*, 41–64); and in the water, the whale and seal are particularly numerous. Parry, by showing the possibility of crossing through the ice, which always occupies the centre of the bay, performed an important service to the whalers, whose fisheries had before been confined to the coast of Greenland, where the whales are fewer in number and inferior in quality to those met with on the American shore. (*First Voy.*, 16–23, 29.)

The discovery of a N.W. passage to India has been a favourite project for more than three centuries. In this attempt, Sebastian Cabot led the way in 1497, when he approached this sea as nearly as the 58th parallel of lat. He was followed by Martin Frobisher, who, between 1576 and 1578, made three voyages for the same purpose, entered between the shores of Greenland and America, and gave his name to the strait between Resolution and Cumberland islands. John Davis, between 1585 and 1587, made three voyages, and proceeded as high as 68° N. lat.; his name is very properly preserved in that portion of the sea which he traversed; but the term strait (DAVIS'S STRAIT) is not very appropriately applied to it, the narrowest part of the sea being 160 m. across. Lastly, in 1616, Robert Bylot, or Bilett, commanded an expedition fitted out by private adventurers, for similar discoveries. Baffin was pilot of this ship; and the result was the exploration of the bay to its very head, and the ascertaining of all its points, sounds, and bearings, with a precision that has not been improved, except in the correction of some errors of longitude. Bylot and Baffin not having been followed by other navigators for more than 200 years, suspicions began to be entertained as to the authenticity of their statements; and Baffin's Bay (N. of 68°), if not actually struck out of the charts, was laid down in the greater number as doubtful. There never, however, was any probable ground for this discredit; and late discoveries have shown how unjust it was, and have placed the names of Baffin and Bylot in the first class of enterprising and trustworthy navigators. (*Hakluyt's Collect. Voy.*, iii., 6–9, 29–96, 98–119; *Purchas's Pilgrims*, iii., 831–848, &c.; *Ross and Parry*, *passim*.)

BAFRA, a town of Asiatic Turkey, pach. Sivas, on the right bank of the Kizil Ermak, 13 m. above where it falls into the Black sea; lat. 41° 39′ 52″ N., long. 36° 11′ 45″ E. Pop. 2000?- It has a fine bridge and two mosques. The environs are fruitful of rice and flax, and its bazars are said to be well supplied.

BAGDAD, an important prov. or pachalik of Turkey in Asia, of a triangular form, stretching N.W. from the bottom of the Persian gulf, in about 30° to 38° N. lat., and lying between the 40th and 48th degree of E. long., having W. and S. the Euphrates and the Arabian desert; E. Kuzistan, mount Zagros, and the Persian prov. of Azerbijan; N.W. the pachalik of Diarbekr; and N., Armenia and the territories of the Kurdish chief of Julamerick. This immense tract extends over an area of above 100,000 sq. m., and comprises the whole of the ancient *Babylonia* and *Chaldea*, and the greater part of *Assyria Proper* and *Susiana*. Except where it is bounded on the W. by the Euphrates, the prov. is traversed in its whole extent by this great river and its rival the Tigris, and by the greater and lesser Zab, the Diala and other affluents of the latter. It is naturally divided into three portions; viz., 1st, the country between the Arabian desert and the Euphrates; 2d, that between the latter and the Tigris, the *Mesopotamia* of the ancients; and, 3d, the country to the E. of the Tigris. That portion of Mesopotamia S. of the city of Bagdad is now called *Irak-Arabi*, and that to the N. of Bagdad, *Algezirah*, or the island. The soil and appearance differs widely in different parts. At present its most fertile portion is that situated between mount Zagros and the Tigris, N. to Mosul. The tract lying between the two great rivers, one of the richest, best cultivated, and most populous regions of the ancient world is now, in most parts, an absolute desert through the misgovernment to which it has been subjected. "The mighty cities of Nineveh, Babylon, Seleucia, and Ctesiphon have crumbled into dust: the humble tent of the Arab now occupies the spot formerly adorned with the palaces of kings; and his flocks procure but a scanty pittance of food amid the fallen fragments of ancient magnificence. The banks of the Euphrates and Tigris, once so prolific, are, for the most part, covered with impenetrable brushwood; and the interior of the prov., which was traversed and fertilized by innumerable canals, is destitute of either inhabitants or vegetation." (*Kinneir's Persian Emp.*, p. 237.) The country W. of the Euphrates is but of limited extent, and at a short distance from the river becomes an arid waste. The climate in the S. parts in June, July, and August, is exceedingly hot during the day, but the nights are always cool, and fires are absolutely necessary in winter. The prevailing wind is from the N.W. The *Simoom* (*see* ARABIA) is more common at Bagdad than in other parts of the prov.; but, in general, it is fatal only to strangers, the Arabs being, in most instances, aware of its approach. It would be easy, were the government not proverbial for imbecility and ignorance, to restore some portion of the ancient prosperity of Mesopotamia. Few countries are blest with a finer soil, or are capable of being cultivated with less labour. The Euphrates and Tigris, which are seldom more than 50 m. apart, approach in the latitude of Bagdad to within 25 m. of each other, and afford an inexhaustible supply of the finest water. They rise twice a year (*see* EUPHRATES), and as the water is then nearly on a level with the surface of the plain, the irrigation, so indispensable to countries like this, is effected with the utmost facility. But the insecurity of property renders these advantages of no avail. Under the stupid despotism of the Turks, the cultivators, liable at

all times to have their fields laid waste and their habitations pillaged by the myrmidons of those in power, avoid, as much as possible, all sorts of labour. Here, as in all similarly situated countries, the natives restrict their tillage to the immediate vicinity of towns and villages; and it is only in rare instances, and under peculiar circumstances, that cultivation is prosecuted on a larger scale, and with anything like adequate vigour. The products of this naturally fertile region are alike various and valuable. Excellent crops are raised of wheat, barley, rice, maize, and other grains; tobacco, hemp, and flax, cotton, &c., are cultivated; dates are an object of much attention, are reckoned of a peculiarly good quality, and are almost as much prized here as in Arabia. The mountains in the E. and N. parts of the prov. are covered with vast forests, consisting principally of oaks, which furnish the best gall-nuts brought from the E. The horses of this prov. have been long renowned. They are small, being seldom more than 14 hands high, docile, never known to be vicious, and capable of undergoing a vast deal of fatigue. The camel, however, is at once the most common and most useful of the domesticated animals. Mules and asses are both met with in considerable numbers; buffaloes are kept for the sake of their milk, and oxen for agricultural purposes. Among wild animals are lions, panthers, hyenas, jackalls, wolves, and wild boars. All sorts of poultry, except the turkey; ostriches are found in the deserts, and black partridges are common on the banks of rivers. There are no means by which to form any accurate estimate of the pop. of this pachalick; but it probably exceeds 1,200,000—a number hardly, perhaps, equal to the pop. of either Nineveh or Babylon! The pop. consists of Turks, Arabs, Kurds, Turkmans, Armenians, and Jews. The prov. is only partially subject to the Porte. The chiefs or sheiks of the Arabs and Kurds, who are masters of the whole country beyond the precincts of the towns, are frequently at open war with each other. They are bound to furnish the pacha with a certain number of troops and a certain amount of tribute; but these contingents are always very irregularly paid; and, in many instances, the chiefs acknowledge only a nominal dependance on the Porte. Were this country subject to a vigorous and moderately intelligent government, it would soon become one of the most flourishing in the world. But no improvement need be looked for so long as it continues subject to its present rulers. (*Kinneir's Persian Empire*, p. 236–312.)

Bagdad, a famous city of Asiatic Turkey, long the cap. of the Caliphate, and now of the above prov., on the Tigris, about 196 m. in a direct line from the junction of the latter with the Euphrates. Lat. 33° 19′ 40″ N., long. 44° 24′ 45″ E. Pop. variously estimated, but may probably amount to about 70,000, principally Arabs and Turks. It stands on both banks of the river, which is here about 620 feet across, but the larger portion is on the E. side; the communication between its two divisions is maintained by means of a bridge of boats. It is of an oblong shape, is surrounded by a high wall of brick and mud, about 5 m. in circ., flanked at regular distances with towers, some of which, of an immense size, were built by the earlier caliphs. There are 6 gates, 3 on each side the river. The castle at the N. corner of the city commands the passage of the Tigris, but is a place of no strength. The town is meanly built; streets so narrow that where two horsemen meet they can hardly pass each other. The bazars, though extensive and well supplied, are far from handsome. Few of the ancient buildings remain; but these few are far superior in elegance and solidity to the more modern structures. Of the former, the most worthy of notice are the gate of the Talisman; a lofty minaret built in 785; the tomb of Zobeida, the most beloved of the wives of Haroun-al-Raschid. The famous *Madressa Mostanserei*, or college, founded in 1233 by the caliph Mostanser, and long the best attended and most celebrated seminary in the E., still exists; but *quantum mutatis!* it is converted into a khan or caravansera, and its old kitchen into the custom-house! (*Niebuhr.*) Nothing remains of the far-famed palace of the caliphs; *etiam ruinæ periere;* and the spot where it stood is not even ascertained. The only handsome modern edifice is the tomb and sanctuary of a famous Sooni doctor, the patron saint of the town, who flourished anno Hégira 560.

Bagdad was recently a place of great trade, and the resort of merchants from almost every quarter of the E. It supplied Asia Minor, Syria, and part of Europe with Indian commodities, which were imported at Bassora, brought in boats up the Tigris, and then transported by caravans to Tocat, Constantinople, Aleppo, Damascus, and the W. parts of Persia. The chief imports from India are gold brocade, cloths, sugar, pepper, tin, sandal-wood, iron, china-ware, spices, cutlery, arms, and broadcloth; in return for which they send bullion, copper, gall-nuts, tamarisk, leather, and otto of roses. From Aleppo are imported European silk stuffs, broadcloth, steel, cochineal, gold thread, and several other European articles, brought in Greek vessels to Scanderoon. The imports from Persia are shawls, carpets, silk, cotton, white cloth, leather, and saffron; and those from Constantinople are bullion, furs, gold and silver thread, jewels, brocade, velvets, and otto of roses. The principal manufacture is that of red and yellow leather, which is much esteemed; but silk and cotton stuffs are also produced. Of late years, however, the trade of the city has a good deal declined, in consequence principally of the inability of the government to repress the attacks and exactions of the Arabs.

The climate, notwithstanding its great heat, is admitted to be very healthy; but the natives are, without exception, the ugliest people in the Turkish empire, and are universally subject to a cutaneous disorder similar to that which prevails in Aleppo (which see). In this city, though the former cap. of the scientific world, reading and writing are rare accomplishments; and when Niebuhr was here, there was not a dealer in books in the town, nor any means of procuring a single volume!

Bagdad was founded by Al Mansour, second caliph of the Abassides, A.D. 763, and is said to have been principally formed out of the ruins of the ancient city of Ctesiphon. It was greatly enlarged and adorned by the grandson of its founder, the famous Haroun-al-Raschid. It continued to flourish, and to be the principal seat of learning and the arts, till 1259, when it was taken and sacked by Holakoo, grandson of Gengis Khan. It has since undergone various changes, and has successively fallen into the hands of the Persians and Turks. The latter, however, have held it since 1638, when it surrendered, on capitulation, after a brave resistance. The terms of the capitulation were, that the lives and property of the inhabitants should be saved; but the bloodthirsty conqueror, Amurath IV., regardless of this convention, barbarously massacred a large proportion of the inhabitants. It was ineffectually besieged by Nadir Shah. (*Kinneir's Persia*, p. 246–252; *Niebuhr, Voyage en Arabie*, ii., p. 239–267.)

BAGNA-CAVALLO, a town of the Papal States, leg. Ferrara, on the Sino, 12 m. W. Ravenna. Pop. 10,000. It has establishments for the spinning of silk; and large quantities of hemp are cultivated in its environs, which are also productive of corn, &c.

BAGNA LOUKA, or BANGALUKA, a town of European Turkey, in Bosnia, on the Verbas, cap. sanjiak, 30 m. S. Gradiska; lat. 44° 58′ N., long. 17° 3′ E. Pop. 7000. It stands in a fertile valley, is defended by a castle, and was for some time the cap. of a pachalik. It has numerous mosques, two public baths, a powder manufactory, which furnishes the best in the country, and various bazars. The inhabitants are partly Turks and partly Greeks and Jews. (*Diction. Géograph.*)

BAGNARA, a town and castle of the Papal States, leg. Ravenna, on the Santerno, 7 m. N.N.W Faenza. Pop. 2000.

Bagnara, a sea-port town of Naples, prov. Calabria Ultra, cant. Scylla, 16 m. N.E. Reggio. Pop. 5000. It has a considerable trade in excellent muscat wine, produced in the vicinity, and in wood and tar. Bagnara suffered severely from an earthquake in 1783. It is supposed by some geographers to be the Portus Orestis of the ancients.

BAGNAREA, a town of the Papal States, leg. Viterbo, 16 m. N. Viterbo. Pop. 3500. It is situated on a hill, and is the seat of a bishopric.

BAGNE'RES-DE-LUCHON, a town of France, dep. Haute Garonne, 24 m. S.S.W. St. Gaudens. Pop. 2385. It is situated in the beautiful valley of the Luchon, at the foot of the Pyrenees, within about 5 m. of the Spanish frontier. It is celebrated for its mineral waters, which, as well as those of Bagnères-en-Bigorre, were known to the Romans. The town is said to be "*triste et chétive;*" but it is increasing and improving, and now possesses almost all the establishments peculiar to a well-frequented watering-place. The Hôtel des Thermes is the principal edifice. In winter the climate is very severe, and the town is deserted not merely by visiters, but even by a portion of its inhabitants. There are 9 mineral springs, all of which issue from a rock at the foot of the adjacent mountains; their temperature varies from 26° to 52° of Reaumur; they have a fetid smell, and are said to be very efficacious in a variety of complaints. More invalids resort to Bagnères-de-Luchon than to either Bagnères-en-Bigorre or Bourges. The season lasts from May till October, and upward of 1500 strangers may be accommodated. The avenues of trees leading to the baths are as fine as can be imagined. In the neighbourhood of the town, among the Pyrenees, is the wild, solitary lake of Seculego. (*Hugo. France Pittoresque*, art. *Haute Garonne; Inglis's Switzerland*, p. 290.)

BAGN'ERES-EN-BIGORRE, a town of France, dep. Haute Pyrenees, cap. arrond., on the left bank of the Adour, in a delightful situation at the entrance to the valley of Campan, and the foot of a finely wooded hill, 13 m. S.S.E. Tarbes. Pop. 8108. Bagnères is the Bath or Cheltenham of France, and is indebted for its celebrity and importance

to its hot mineral springs, which were known and resorted to by the Romans. The waters have no peculiar taste, but are aperient and tonic. During spring and autumn the town is crowded with invalids and pleasure-hunters from most parts of France, and by many foreigners, particularly Russians and English. As many as 8000 strangers have been assembled here at the same time; uniting, as has been stated, "*ce qui fait le charme, l'honneur de la société, mais aussi ce qui en fait l'opprobre.*" The town has not been built on any regular plan, but has increased according to the influx of company. In consequence, though it has some good streets, with very excellent houses, and good inns and hotels, it has not a single good square, nor any public building worth notice, except the New Bath Hotel, in the Greek style, and of bluish marble. Streets well paved, clean, and well watered. The promenade, called *Coustous*, in the centre of the town, is ornamented with a fountain; there are several delightful drives and promenades in the vicinity; and it also affords the finest excursions for the botanist, mineralogist, and the lovers of the picturesque and the sublime. There are 18 or 20 baths: "Each is under the direction of a medical inspector, who must be consulted before any one is permitted to employ the waters. He is paid by government, and, therefore, the consultation costs nothing; and the expense of the bath is not more than a franc." (*Inglis's Switzerland, &c.*, p. 264.) The principal bath, or that called *du Salut*, is situated in a ravine about ½ league from the town. Bagnères has a court of original jurisdiction, a college, a hospital, with a theatre, concert-hall, and numerous places of entertainment. It has also fabrics of banios (a kind of woollen stuff), linen, étamines, crape, and paper. On the road to Tarbes is a monument in black and white marble in honour of Count Segur. (*Hugo, France Pittoresque*, art. *Hautes Pyrénées.*)

According to Mr. Inglis, Bagnères is not a very cheap place. "At the public establishments one chamber costs 5 fr.; breakfast of tea or coffee, 2 fr.; dinner, 4 fr. To those who live in private lodgings market prices are also high. Butchers' meat is seldom below 8*d.* per lb.; a fowl costs 1*s.* 3*d.*; milk and butter are both dear; and although *vin ordinaire* may be had at 4*d.* per bottle, tolerable wine costs at least double that sum." (p. 265.)

BAGNOLES, a village of France, dep. Orne, in a solitary valley, 13 m. E. by S. Domfront. This village, celebrated for its mineral springs, was built in the 17th century, the springs having been discovered in the preceding century. During the last twenty years it has been embellished with some new and elegant buildings, and in its environs are extensive plantations that afford fine promenades. In 1822 an establishment for the use of the military was founded here, capable of accommodating about 200 invalids. The temperature of the water about 26° centigrade. This is the only mineral spring in the ci-devant prov. of Normandy. (*Hugo*, art. *Orne.*)

BAGNOLI, a town of Naples, prov. Sannio, 9 m. S.W. Trivento, on the declivity of a hill. Pop. 3000. It has five churches, an abbey, and a hospital.

BAGNOLO, a town of Austrian Italy, 8 m. S. Brescia, on the high road from Brescia to Cremona. Pop. 2600.

Bagnolo, a town of Naples, prov. Principato Ultra, on the declivity of Monte Calvello, 9 m. S.W. St. Angelo de Lombardi. Pop. 5000. It has a fine collegiate church, and several convents.

BAGNOLS, a town of France, dep. Gard, cap. cant., near the Ceze, on a rock 25 m. N.N.E. Nismes. Pop. 4847. It is generally ill built, but has a good square, adorned with a public fountain. It has a college, a hospital, with filatures of silk, dye-works, hat-makers, tanners, &c.

BAGOLINO, a town of Austrian Italy, prov. Briscia, on the Caffaro, 24 m. N.N.E. Brescia. Pop. 3000. It has several forges for the manufacture of iron and steel.

BAGULCOT, a subdiv. of the distr. Darwar, Hindostan, prov. Bejapoor, presid. Bombay, including the pergunnahs Bagulcot and Badaumy; shape irregular; length 54 m.; breadth 44 m.; area about 1230 sq. m. Pop. about 100,000. It is bounded N.E. by the Krishna river, but is badly watered, as well from the want of running streams and large wells, as the general deficiency of rain, which in some years does not exceed 26 inches, a quantity surpassed in one month of the S.W. monsoon near the coast. Garden culture is consequently very limited, and most of the villages are on the banks of the larger rivers. In 1820 these pergunnahs contained 319 inhab. townships, including the towns of Bagulcot, Badaumy, Keroor, Seroor, and Perwatee. Under the Mahrattas, who obtained them in 1755, they were the theatre of violence and rapine; but after their transfer to the British gov. in 1818, a rapid and complete change took place, and they soon became singularly noted for the absence of crime. (*Hamilton*, i., p. 101.)

Bagulcot, a town of Hindostan, cap. of the above district, and of a pergunnah. Pop. in 1820, 7500. It is the residence of the principal merchants and bankers.

BAGUR, an inl. division of Hindostan, anciently described as a separate, though minor prov., but more recently attached to the prov. Malwa and Gujrat, between which it lies, in about 24° N. lat., and 74° E. long. It consists of a hilly country, the several ranges of which run N. and S., decreasing in height from Malwa to Gujrat, and mostly covered with thick low jungle forests of teak, black-wood, &c. It is indifferently watered, and the climate for a considerable part of the year is reckoned unhealthy. From the first cause the ground is comparatively unproductive; the digging of wells, &c., is also attended with great labour and expense, but reservoirs are sometimes constructed by throwing an embankment across the stream of a narrow valley. The pop. consists chiefly of Bheels and Meenas, under various petty chiefs: many vestiges of antiquity lie scattered over its surface; but at present this division contains no inhabited places of any importance, except the towns of Doongurpooz, Bauswarra, and Sangwara. (*Hamilton's E. I. Gaz.*, 102.)

BAHAMA CHANNEL, or GULF OF FLORIDA, consists of a sea or strait between the coast of Florida and the Bahama islands. It is 135 m. long and 46 wide. A strong current of from 2 to 5 miles an hour, formed by the return of the gulf stream, passes through this strait and among the islands. Northern winds, contending with this stream, often render the navigation dangerous, and many shipwrecks occur here.

BAHAMAS (THE) consist of several hundred islands, of various magnitudes, extending in a S.E. and N.W. direction, between Hayti and Florida, nearly 600 m. from Turk's island, in 21° 23′, to the Mantanilla reef, in 27° 50′ N. lat., and from 71° 5′ to 79° 5′ W. long. They are mostly of coral-line formation, low, flat, and but scantily covered with soil, and the greater number of them uninhabited. They belong to Great Britain. St. Salvador, one of these islands, was the first land discovered by Columbus, on the 12th of Oct., 1492. Like the neighbouring islands, it was densely peopled by Indians, who were harmless and inoffensive. The most important of the group, however, from its harbour and situation with respect to the Florida Channel, is New Providence; and, as this is the residence of the governor, the seat of the legislature, and the headquarters of the troops, and as it differs from the other islands in no essential degree, we shall confine ourselves to an outline of its geographical features and general appearance, deeming it unnecessary to dwell upon any of the others. It lies in lat. 25° 29′ N., and in long. 76° 34′ W., and extends about 21 m. from E. to W., and 7 from N. to S. It is nearly covered with large trees and brushwood, and much intersected with marshes and lagunes. A range of slightly-elevated hills runs along a part of the island at a very short distance from the sea; and upon the face of this ridge stands Nassau, the capital, and the seat of government. Another range of hills runs parallel to the former, at the distance of about 2½ m.; the whole of the intervening space forms an extensive marsh. The total number of sq. m. in the Bahamas, including all the islands from New Providence to Key Sal and Anguilla, is, according to Porter's Tables, 5424. The pop., in 1832, was 4674 whites, 4069 coloured and free blacks, and 9765 slaves. In 1837 the total pop. was 19,943. The inhabitants are divided into the two classes of residents and *wreckers*. The latter are mostly employed in rescuing vessels, with their crews and cargoes, shipwrecks being very frequent in these intricate, shallow, and dangerous seas. They sail in small, flat-bottomed sloops, admirably fitted for the waters they navigate. They are excellent sailors; are familiar with all the keys, shoals, and breakers; and encounter danger with alacrity and courage. Their great places of rendezvous are the Florida gulf, the Hole in the Wall, and the Hog-sties. Their vessels are very numerous. They are licensed by the governor, and receive a salvage on all property rescued from the waves. The climate varies very considerably, both in temperature and salubrity, according to the geographical position and local peculiarities of the islands. At New Providence the weather, during the cold season, which extends from Nov. to May, is extremely pleasant; the thermometer in the shade being generally from 60° to 70°, the mid-day heat tempered by a constant breeze; and the evenings cool and agreeable. From May to Nov. the heat increases or decreases, as the sun advances or retires from the tropic of Cancer, and during this period the range of the thermometer is from 75° to 85°, seldom rising above 90°. The increase of temperature is generally accompanied by southerly winds or calms, which are described as being very oppressive. A considerable quantity of rain falls during the year, but we possess no exact measurement of it. The spring rains commence about May, and continue for a few weeks: those of autumn commence in Sept., and generally terminate in Nov. or Dec. During the autumnal months fogs are very frequent in the mornings and evenings; but from Dec. to May the weather is generally fine, clear, and dry. It is impossible to ascertain the exact

amount of acres cultivated, as, owing to the rocky nature of the islands, spots are generally selected to plant in, without any attention to the regularity observed in more favoured soils; but the number of persons set down in the official tables as employed in agriculture are 3590. The chief articles of produce are, Indian and Guinea corn, potatoes, yams, beans, pease, pine-apples, cotton, ochres, casada, pumpkins, arrow-root, onions (of which a great quantity are raised), oranges, limes, and lemons. There may be about 12,000 acres of pasturage, which give support to 1490 horses, 2765 horned stock, 7890 sheep and goats, and 3350 swine. A great quantity of dye and other woods is exported; but the principal export is salt, of which no less than 442,031 bushels, valued at £16,291, were exported in 1834. The gross amount of exports in 1834 was £92,802; of imports, £142,021; the principal of which were slops, flour, cornmeal, and oats, cotton wool, cotton manufactures, dyewoods (for exportation), linen manufactures, wood and lumber, woollen manufactures, and hardware. The number of tons of shipping employed inwards was 34,150 in 1834, and the number of men 2251. Outwards there were 31,607, in which were 2090 men. The number of vessels built in 1834 were 17; in all, 716 tons burden. The total number of the militia is 367. At the several schools, chiefly supported by the colonial government, except one by the home government, and another by the associates of the late Dr. Bray, there are 1117 pupils, and the Wesleyans instruct about 630 more of all colours and sexes. The government consists of a governor, a council of 12, and a house of assembly of 30 members. The courts of law are, the Supreme Court, which holds its sessions in terms of three weeks, with the powers of the common law at Westminster, and its practice modelled on that of the King's Bench. The revenue of these islands for 1837 was £25,165, and the expenditure £27,193. The historical sketch of the Bahamas will not detain us long. New Providence was settled in 1629 by the English, who kept possession of it till 1641, when they were expelled by the Spaniards, who murdered the governor, and committed many acts of barbarous cruelty. It was recolonized in 1666 by the English a second time; but they were again expelled by the French and Spaniards in 1703, and from that period it became a rendezvous for pirates, till formally ceded to the English in 1783, in whose possession, with the other islands, it has since remained. The proportion of the £20,000,000 of compensation granted by Britain awarded to the inhabitants, was £128,340 7*s*. 5½*d*., while the relative value of the slaves was £290,573 15*s*. 3½*d*.

The principal islands forming the Bahama group are, New Providence and Keys; Andross island, Green and Grassy Keys, Grand Bahama, and the Berry islands; Great and Little Abaco and Keys, Harbour island, Eleuthera, Royal island and Keys; St. Salvador and Little island; Watling's island and Rum Key; Great and Little Exuma and Keys; Ragged island and Keys; Long island; Crooked island, Fortune island, and Acklin's island; Great and Little Heneagua, Mayaguana, French, and Attwood's Keys; the Caicoss Turk's island, Key Sal, and Anguilla.

BAHAR or BEHAR, an inland prov. of Hindostan, presid. Bengal, one of the largest and most important under the British dominion. It lies chiefly between 22° and 27° N. lat., and 83° and 87° E. long.; having N. Nepaul; W. Oude, Allahabad, and part of Gundwana; S. the latter prov.; and E. Bengal: area about 53,744 square m. Pop. (1822) 3,117,709.

The Ganges runs a course of 200 m. through this prov., W. to E., dividing it into two nearly equal parts. The other chief rivers are the Sone, Gunduck, Dummodah, Caramnassa, and Dewah, all tributaries of the former: there are numberless smaller streams, and the prov. generally is well watered, especially its N. portion; in the S. irrigation is artificially effected by means of wells, dams, trenches, &c. It may be described under three divisions; one an uninterrupted flat extending for 70 m. N. of the Ganges, to the forests of Nepaul and Morung; a second, or central div., extending 60 m. S. from the Ganges, consisting only in part of plains, but yielding nearly ⅓ds of the whole annual produce of opium; and a third and more elevated region, S. of the latter, with an area of 18,000 sq. m., less fertile than the others, but said to contain diamond mines, and thence called Nagpoor. Climate temperate, but in the hot seasons parching wind from the W. often prevails during the day. Forests are rare, but during the cold seasons the thermometer often ranges from 35° to 70° (Fahr.) in the course of the day, among the hills; and in this district the winds are very bracing to European constitutions. No diseases are peculiar to the prov., but bronchocele is very prevalent on the N. side of the Ganges. Soil fertile, and productive of the drier grains: it also produces large quantities of nitre, with sulphate and muriate of soda, especially N. of the Ganges, where nitre is a gov. monopoly. Agriculture, commerce, and manufactures, have always been in a comparatively flourishing state in this province; partly from its central position, easy internal communications, and being a thoroughfare for the trade of Bengal with the upper provinces; and partly from its fruitfulness and natural fitness for tillage. Here, however, as well as in Bengal, only about ⅓d part is supposed to be under cultivation. (*Hamilton's E. I. Gaz.*, i., 177.) Opium, a staple commodity of the province, is perhaps the best in India. It is a government monopoly, Bahar and Benares being the only provinces within the Bengal presid. where it is allowed to be cultivated: in 1826-27, the produce of Bahar was 9981 factory maunds, of the value of £1,387,573 sterling; and it has since increased. (*Rep. Revenue*, iii., p. 701.)

Indigo is very extensively grown in Tirhoot, where much forest land, and land formerly used for grain, has been appropriated to its culture, and where the produce is also manufactured upon a large scale. The planters and cultivators are now on good terms with each other; and since it was agreed that only one planter should settle in a village, quarrels among the latter have also ceased. The people in the indigo districts are said to be in a much better condition than elsewhere. Sugar-cane, betel, tobacco, and grain of all kinds, are cultivated largely, and there is a good stock of cattle. Most part of the lands in Bahar are held in small lots by cultivators or *ryots*, who pay a land tax of half the produce: the permanent settlement has been by no means so widely established as in Bengal; jaghires are there rare, but frequent here; while, on the other hand, there are in Bahar but three large zemindaries, viz., those of Shahabad, Tirhoot, and Ticcary. This arises from the circumstance that the zemindars of Bahar were always inferior in power and influence to those of Bengal, and their zemindaries much smaller; so that they were sooner and more easily identified with the body of cultivators.

The chief manufactures are, cotton cloths for exportation, essences, and saltpetre, the manufacture of which scarcely passes the E. limits of the prov. Bahar is divided into eight districts or collectorates, viz., Bahar, Bhaugulpore, Dhurrumpore, Ramgur, Shahabad, Sarun, Tirhoot, and Patna; and yielded (1830) an annual revenue of 7,167,471 rup., or £716,747, sterl.: the revenue has varied but little since 1813. The chief city is Patna. The natives have a finer physical appearance, but are inferior to their Bengal neighbours in cleanliness and domestic economy. In the S. parts agriculture is wholly carried on by slaves; and many of these consist of individuals who, by a practice peculiar to this prov., mortgage their labour until able to redeem a debt; a third part of the pop. are Mohammedans. This prov. anciently is supposed to have formed two independent sovereignties—that of Mithila in the N., and Magadha in the S.; and distinct languages still continue to be spoken in them. It was acquired from Cossim Ali by the British in 1765, since which it has enjoyed perfect tranquillity. The city of Gaya was the birthplace of Buddha, but no Buddhists now remain in Bahar. (See *Hamilton's E. I. Gaz.*, i., 102-106; *Fleming, W. M., Esq., Letter in Rev. Report*, p. 282-288.)

BAHAR (DISTR. OF ZILLAH OF), occupies the central portion of the above prov.; being bounded N. by the Ganges; E. by the district of Bhaugulpore, S. by those of Bhaugulpore and Ramgur; and W. by Shahabad: extreme length, E. to W., 120 m.; breadth, 80 m.; area, 5235 sq. m. Pop., in 1811, 2,755,000, of whom 795,000 were Mohammedans. Surface generally level, especially in the N., where the banks of the Ganges are highly cultivated: there are, however, many scattered hills, and three principal ranges, in the heart of the district, of primitive formation, containing granite, gneiss, mica, quartz, jasper, hornstone, silicia, &c.; but, except towards the S. boundary, none of them probably exceed 700 feet in height. Next to the Ganges, the chief river is the Sone, its channel being sometimes nearly as large as that of the former; its E. banks are overwhelmed with sand, blown up from its bed in the dry season: there are no lakes, and few marshes in this district, although in the wet season much of the country is under water. There are many hot springs in various spots; bituminous and other volcanic substances have been also met with, and in one place an extinct crater is distinctly visible. About 490 sq. m. are covered with woods and thickets, including the bamboo, palm, mango, fig, apple, pomegranate, &c., which are all cultivated (tamarisk and zizyphus bushes in large quantity); the *strychnos, nux vomica*, soap-nut, and the *salkar*, believed by Mr. Colebrook to be the tree yielding gum olibanum. The chief wild animals are a large and formidable black bear, the spotted tiger, ichneumon; a few monkeys, squirrels, foxes, and dogs; many birds of prey; porpoises, and a profusion of fish, are found in the Ganges, as well as alligators; but there are no wild elephants, rhinoceroses, or buffaloes; few tigers, and neither parroquets, &c., nor singing birds. The lands near the river yield two crops in the year, but this is not the case with more than ⅓th part of the arable land in the interior. Rice is by far the most important article of culture, but the ears only are reaped; the straw being abandoned to the cattle, or left uncut, till wanted for thatch. Wheat is next in importance; and with it,

or with pulse, barley is often sown: maize is almost wholly confined to the banks of the Ganges. Cruciform plants, linseed, and sesamum, are cultivated for their oil; ginger, coriander, capsicum, the potato and other succulent vegetables, are likewise grown; cotton on 24,000 begas, the sugar-cane on 20,000 b., indigo by itself on 1500 b., and tobacco on 480 b.; betel only on 265 b., but the poppy is very extensively planted, though generally in conjunction with some other produce. The plough and cattle used are both wretched, though the latter are somewhat better than those more to the E.; the grain is trodden out by cattle, and kept by the more opulent proprietors in hovels of mud and thatch. The *ashraf*, or higher ranks, pay no rent for land occupied by their houses, and no landlord may refuse to grant them land for building; but Europeans, not being dignified with the title of ashraf, find much difficulty in obtaining it. Few of the cultivators are rich. A large portion of the land, perhaps about a half, is exempted from the land tax; and yet it is affirmed, and we believe truly, that the taxed portions are the best cultivated and most productive. Some of the rent-free estates are still large, but, owing to the rules of inheritance, they are rapidly subdividing; and many of the zemindars are reduced to the condition of peasants, or are but little above beggary. Many occupiers are in the habit of receiving advances from their landlords, to enable them to carry on their business; while others borrow money for the same purpose, at 2 per cent. per mo. interest; and, ruinous as such payment may appear, the latter are universally observed to be in the end the best off. The cultivators are not subject to the illegal exactions that press on the tenantry in Bengal, and are in consequence attached to their landlords, and ready to promote their interests. The total land revenue in 1830 amounted to £167,970 sterl. Bahar distr. is divided into twelve pergunnahs; it contains a number of considerable towns, one of which, Gaya, the birth-place of Buddha, is celebrated as a place of pilgrimage, and some years since was annually visited by nearly 30,000 devotees: there are a great many small towns, of from 100 to 500 houses. Cotton stuffs, blankets, and carpets, are manufactured; with paper, soap, leather, bricks, &c.; and there are extensive nitre factories and sugar refineries.

Tradesmen have very little capital; general dealers seldom more than 25 rupees, and many of the dealers in grain no more than 400 rupees The people are of a warlike disposition, passionate, and jealous; the habits of the women proportionally strict. The great subdivision of property has banished everything like opulence; and marriages and funerals, by the expenses they cause, often bring families to poverty. The houses are neither so well built nor so clean as those met with in Bengal. Drinking to excess, betel chewing, and smoking, are not, however, pursued so far. Among other customs of this distr., girls are never married till puberty: the feet of dying persons are not put into the Ganges; but the parents and children, not of the vulgar, but of "men of rank and learning," are turned out of doors when they are about to die, exposed to all the inclemency of the weather. This odious custom, which would disgrace a nation of savages, has been in numerous cases perverted to the most infamous purposes. (See *Hamilton's E. I. Gaz.*, i., 106–111; *Martin's Hist. Topog. Antiq., &c., of E. India*, i., 1–389.)

Bahar (*Vihar*, a monastery of Buddhists), a town in the above prov. and distr., in lat. 25° 13′ N., long. 85° 35′ E., 35 m. S.E. Patna. It is a large straggling place, containing about 5000 houses, and probably, therefore, about 30,000 inhab. It has few or no good streets; most of its public buildings are in a state of decay; and it has a ruinous appearance. It is supposed to have been at some remote æra the cap. of the prov. The plain on which it stands is well watered, fertile, and well cultivated.

BAHAWULPOOR or DAODPOOTRA, a territ. of Hindostan, formerly belonging to Caubul, but now tributary to the maharajah of the Punjab, between lat. 28° and 30° N., and long. 70° and 74° E.; length N.E. to S.W. 280 m.; greatest breadth 120 m.; having N. the Punjab; E. the Bicanere territ. (Rajpootana); S. and S.W. Jaysulmere and Sinde. Its N.W. boundary is for the most part formed by the Sutleje, but for a certain distance opposite the cap. it includes both banks of that river, as well as those of the Chinauf. The banks of the rivers are everywhere fertile; but the rest of the country towards the E. is a mere desert. For 4 or 5 m. on either side the Sutleje, the soil is formed by the slime deposited by that river, and is annually watered by its inundations: some portions of it are highly cultivated; others are covered with a soft turf, and the rest with jungle and coppice of low tamarisk trees, abounding with wild hogs, wild geese, game, &c., but having interspersed many small hamlets. The inhabitants are chiefly Juts and Beloooches, Mohammedans, who came thither from the district of Shikarpore, where they were settled early in the reign of Aurungzebe. They are a fair and handsome race, and apparently in a better condition than some of their neighbours. Lieut. Conolly says, "As soon as we had crossed the frontier (from Shikarpore) into Bahawal Khan's territory, we were struck with the improved appearance of the land; the ground was cleared, and cultivated with the better sorts of grain; the people, also, seemed more orderly and respectable." The principal towns are Bahawulpoor, Ahmedpoor (the residence of the chief), Julalpoor, Seedpoor, and Ooch. Durawul, an ancient fort in the desert, is the only place of strength in the country. The public revenue is about 10 lacs rup. a year. The khan maintains an army of about 2000 regular troops; but in time of war he can raise more than 20,000 men. The government is despotic; but the late khan, who died three years ago, ruled mildly and paternally, and was much beloved by his subjects. This territory was taken from the Moguls by the Persians, and, after the death of Nadir Shah, belonged to Caubul, to which kingdom it was tributary as long as the monarchy lasted. The three last rulers have been nearly independent; but the political power of the country has been broken by the seikhs, and the rajah of the Punjab only spares it on condition of pecuniary payments. It is at present governed by a son of the late Bahawal Khan. (*Elphinstone's Caubul; Burnes's Trav.; Hamilton's E. I. Gazetteer.*)

Bahawulpoor, the ancient cap. of the above territory, near the S. bank of the Sutleje, 320 m. W.S.W. Delhi. lat. 29° 21′ N., long. 72° 10′ E.; at the point of junction of the road leading from Bombay and Calcutta to Caubul. It is about 4 m. in circ., but includes gardens and mango groves. It is surrounded with a thin wall of mud, the houses being of unburned bricks, with mud terraces. The inhabitants consist chiefly of Hindoos, mostly occupied in the manufacture of the silken girdles and fine turbans for which Bahawulpoor is celebrated. The Hindoo traders are distinguished by their enterprise; they deal extensively in European goods, which they receive by way of Bicaneer, and carry these and the productions of India to Balkh and Bokhara, and sometimes to Astrakhan. The Sutleje is navigable, but not used in the transport of merchandise. Notwithstanding the manufactures and trade of Bahawulpoor, Lieut. Conolly says that it shows symptoms of general decay. (See *Elphinstone's Caubul; Conolly's Journey*, ii., 243.)

BAHIA, a marit. prov. of Brazil, on the E. coast, extending from about 9° to 15° 45′ S. lat. It comprises, as at present divided, nearly all the territory included formerly under the ancient captaincy of the same name, together with a portion of that of Ilheos. It derives its name from *Bahia de Todos os Santos*, and is bounded N. by the provinces of Sergipe and Pernambuco (from the latter of which it is divided by the Rio San Francisco); on the S. by Porto Seguro, and Minas Geraes; on the W. by Pernambuco, though still separated by the Rio San Francisco, and on the E. by the ocean. Its length is estimated at about 480 m., and its breadth at from 150 to 200. The estimates of its area vary from 54,000 to 97,000 sq. m. The latter, we are inclined to think, is nearest the mark. The accounts of the population are also very various: perhaps it may amount to about 700,000. It is subdivided into three comarcas, viz., Bahia, Jacobina, and Ilheos.

The province of Bahia is traversed from S.W. to N.E. by the Serra Cincora, Giboya, and Itabayana. The Serra de Montequevia forms the chief ridge in the interior. Bays and inlets abound along the coast, among which the most celebrated is All Saints bay. Numerous rivers traverse the province, and the Rio San Francisco, one of the largest of the Brazilian rivers, flows along its N.W. frontier.

The cultivation of tobacco is peculiar to the province, and its produce is much sought after, not only for the market of Portugal, but also for Spain and the whole of Barbary. The soil is admirably adapted to the cultivation of the sugar-cane; and the sugar of Bahia bears a high character for its excellent quality, which is sufficiently proved by the fact that Bahia alone exports more sugar than the whole of the rest of Brazil. (*Malte-Brun*, vi., 552.)

The growth of cotton exhibits an annual increase, and Bahia is already become a formidable rival to Pernambuco. The other productions are, rice, of a superior quality; coffee, much excelled, however, by that of Rio de Janeiro; and Brazil-wood, equal to that of Pernambuco.

The province of Bahia was one of the first peopled by Europeans, and it is also one of those from which they have most effectually removed all traces of the original inhabitants.

Bahia, or San Salvador, the cap. of the above prov., immediately within Cape St. Antonio, which forms the right or E. side of the noble bay of All Saints (*Bahia de Todos os Santos*), whence the prov. and the city derive their names; lat. (of lighthouse on Cape Sape St. Antonio) 13° 0′ 30″ S. long. 38° 30′ W. It was founded about 1549, by Thomas de Souza, first captain-general of Brazil, and was, until 1763, the capital of the colony. Since that period Rio

has been acknowledged as the capital, and it also has been the residence of the court since its emigration to Brazil. But, though now inferior to its rival in population and commercial importance. Bahia is one of the largest and most important cities of South America. The estimates of the population vary from 120,000, to 160,000, of which a third are supposed to be whites, a third mulattoes, and a third blacks. It is built partly along the ridge, and partly on the declivity, of a very high and steep hill fronting the entrance of the bay. It consists of an upper and a lower town, the former including the suburbs of Bom Fim and Victoria. The upper town stands on the ridge between the sea and a lake on the N., and contains several fine streets, in which reside the principal inhabitants of the city. The lower town is extremely dirty, and although the streets are very narrow, it is no uncommon thing to see them occupied by artificers, with their tools and benches. The city is defended by Fort do Mar, and some other fortifications, but none of them are of any very great strength. The local revenue is derived from direct taxes on land and provisions, excise upon exports and imports, and harbour-dues. Land is subject to a tax of one tenth of its produce, and, since the revolution, church lands have also been rendered subject to the same impost, and the clergy are paid by the government. The taxes on provisions, which include beef, fish, flour, vegetables, &c., &c., are annually farmed out in separate parishes. As respects the number and beauty of its public buildings, Bahia ranks first among the cities of Brazil. In the upper town, among the chief may be enumerated the cathedral (formerly the church of the Jesuits), dedicated to San Salvador, built of European marble, and considered the handsomest ecclesiastical building in Brazil. The interior is very richly decorated, and over the high altar are two portraits, one of Ignatius Loyola and San François Xavier, probably the only remarkable objects of art which any of the public buildings of Bahia have to offer. (*Denis Brézil*, p. 234.) The other public buildings are, the ancient college of the Jesuits, now converted into a military hospital and medical school; the palaces of the archbishop and the governor; the town-hall (caza de camarca); the tribunal of appeal (caza de relaço); the theatre, built upon a rock; several hospitals (part of the funds for supporting them are derived from lotteries); a caza de misericordia, a bank, &c., &c.

Bahia contains a great number of religious houses, all of them situated in the upper town, but they offer nothing worthy of observation. It also contains between thirty and forty churches, scattered through the upper and lower towns. The clergy are very numerous, in consequence of its being the residence of the archbishop, who has the control of the ecclesiastical affairs of the empire.

In the lower town the exchange, a massive building of modern date, is worthy of remark. It is built in a peculiar style, in which it has been attempted to imitate the Grecian. The principal street is the Praya, in which is situated the church of the Conceiçao (conception), remarkable on account of the stones with which it is built having been prepared and numbered in Europe, and brought thence in two frigates; so that on their arrival they had merely to be arranged in the order previously allotted to them. (*Denis Brézil*, p. 234.) The houses are chiefly constructed of stone, and, contrary to the usual mode in S. America, many consist of three, four, and even five stories. In the upper town are many handsome houses, constructed with balconies and blinds, instead of windows.

The city of San Salvador is almost destitute of institutions devoted to intellectual improvement. Among the seminaries of education is one which furnishes a large number of ecclesiastics. There is a public library, with from 60,000 to 70,000 volumes, among which are a few ancient Portuguese works, and some MSS. The greater portion of the good works are in French.

The vehicles generally used in Bahia are called *cadeiras*, and are a kind of palanquin, supported by negroes, who make a practice of clustering at the corners of the streets, to be hired for that purpose.

The harbour of Bahia is one of the very best that is anywhere to be met with. It may be entered either by day or by night, and at any time of the tide. The largest ships anchor close to, and immediately abreast of, the town, in from 6 to 7 fathoms. N. and N.W. of the town the bay expands into a noble basin, studded with islands, and affording safe anchorage for innumerable ships. The trade of Bahia is very extensive. The exports consist principally of sugar, cotton, and coffee; the average export of sugar, since 1830, being about 50,000 chests (13 cwt. each), 40,000 bales of cotton (each 174 lbs.), and from 4000 to 5000 tons coffee; with tobacco, hides and horns, rice, dye and fancy woods, nuts, bullion, &c.

Of the imports into Bahia, slaves, notwithstanding the nominal suppression of the trade, continue to be the most important article. It is, indeed, impossible to get any accurate accounts of the numbers imported; but those brought to the city and the other ports of the bay are believed not to fall short of from 12,000 to 15,000 a year! Next to slaves, the most important articles of import are cotton manufactures, woollen and linen stuffs, fish, flour, earthenware, wine, copper, iron, &c. The total value of the articles imported into Bahia in 1835, exclusive of slaves, has been estimated at £1,412,521; of which Great Britain furnished no less than £942,956; viz., cotton goods, £573,097; woollens, £64,740; linens, £57,497; earthenware, £13,912, &c. The value of the imports from Portugal during the same year was £104,354; from France, £156,733; from Hamburg, £105,473, &c. (*Board of Trade Tables*, v., 439.)

The country round nearly the whole bay of Bahia, to the extent of from 12 to 20 m. inland, is known by the name of the Reconcavo, and is the most fertile and productive in the comarca. Its soil, called by the inhabitants *massapá*, is black, and its fertility is proverbial. In this district is situated the town of Cachoeira or Caxoeira, which ranks next Bahia, as regards extent, population, and importance. It carries on an extensive trade with the interior of the province, and has a population of about 16,000 inhabitants. The district called the Reconcavo comprises several flourishing villages and country towns, which owe their prosperity to the abundance of their agricultural productions. Among these Tapagipe, or Nossa Senhora de Penha, may be distinguished on account of its containing the country residence of the archbishop of the prov. It contains also a dock-yard, whence many well-built and substantial vessels are constantly launched.

The island of Itaparica, situated in the bay of Bahia, is the largest with which it is studded. It is about 14 m. in length and 6 in its greatest width. Fruit-trees are very extensively cultivated throughout the island. The industry consists chiefly of whale-fishing, the distillation of rum, and some rope-making. Several towns in the Reconcavo equip vessels for prosecuting the whale-fishery in the bay, which forms a branch of industry on this line of coast.

In the comarca of Ilheos the chief town is San Jorge dos Ilheos, which was formerly flourishing and comparatively opulent and extensive, but has now the appearance of being deserted. It was frequently subject to the ravages of the tribe known under the name of the Gherina.

The expulsion of the Jesuits gave the finishing blow to its importance, and the college in which they dwelt (built 1723) is now falling to ruins.

Camamu is worthy of notice, on account of the magnificent bay upon which it is built. Next to San Salvador it is the important port in the prov. of Bahia.

The comarca of Jacobina comprises the W. portion of the prov. of Bahia. Nearly all the cattle consumed at Bahia are pastured in this district. The chief city is Jacobina.

BAHLINGEN, a town of Wirtemberg, circ. Black Forest, on the Eyach, 14 m. N.E. Rotweil. Pop. 3000. It has fabrics of cloth and woollen stuffs, tanneries, and numerous breweries and distilleries. There are mineral springs in the vicinity.

BAHREIN, or AVAL ISLANDS, a group consisting of one large, and several smaller islands, in the Persian gulf, subject to the imam of Muscat, in a bay near the Arabian shore, between lat. 25° 45′ and 26° 16′ N., and long. 50° 15′ and 50° 20′ W. The largest island (Bahrein) is about 25 m. in length, N. to S., by 6 or 7 m. wide, and 80 or 90 m. in circuit: a hilly tract occupies its centre; ⅓ths of its surface are waste, but the remainder is well watered, partially cultivated, and thickly inhabited. The pop. of the whole group of islands is, perhaps, 60,000, and composed of several different tribes. The native Bahreins number about 40,000 or 50,000; they are a mixed breed between the Persians and Arabs, but possessing more of the indolence and cunning of the former than of the bold frankness of the latter. They are chiefly cultivators, merchants, and fishermen; and for the most part Mohammedans, of the sect of Omar; the rest of the inhabitants are mostly Arabs. The pearl fishery, for which these islands are chiefly noted, employs, during the season, 30,000 men; and yields pearls of the value of from £300,000 to £360,000 yearly. Most of the fishery boats belong to merchants possessing considerable capital, but the largest proprietor in them is the sheik himself, who has upwards of 2000 boats, each manned, during the season, with eight or ten men; he imposes also a small tax on every other boat. The fishing season is from the beginning of June till October. The diving is conducted pretty much in the same manner as in Ceylon (*see* CEYLON); but the divers attach their oyster-net to their waists, and are in the habit of always stuffing their ears and nose with bore or other substances: they can remain under water nearly two minutes at a time. They are often in the most abject circumstances, and generally in debt to the merchants, who obtain the pearls at their own price. Bahrein has a considerable traffic, and might be rendered valuable under a good government, and made the centre of all the

commerce on this part of the Arabian coast. Although the only cultivation consists of date plantations, and a few wheat, barley, and clover fields, at least ¼ part of the soil is very rich; and by irrigation much of the rest is capable of being greatly improved. Pomegranates, mulberries, figs, melons, &c. are produced; and cattle, poultry, and plenty of vegetables obtained from the neighbouring coast. Numerous small villages and towns are scattered over the cultivated parts of the island; and at its N. portion there are two towns, Manama and Ruffar. Manama is the residence of the principal merchants, and contains a fort originally built by the Portuguese; the remains of several fine reservoirs and aqueducts, constructed by the same people, exist on this island. At the N. end are two harbours; that to the N.W. having a depth of four to seven fathoms water near the shore. The principal exports are pearls to India, Persia, Arabia, and Bussorah; dry dates, tortoise-shell, canvass, sharks' fins, &c. to India; and dates, canvass, mats, and coloured cloths to the other countries. The chief imports are, rice from Bengal and Mangalore; sugar, pepper, blue and white cloths, planks, iron and other metals, cinnamon, camphor, drugs, indigo, &c. from India; coffee, dry fruits, grain, &c. from Bossorah, Persia, and Muscat. There are 20 merchant-vessels, of 140 to 350 tons, belonging to Bahrein, chiefly employed in the India trade. The islands of Maharag, Arad, and Tamahoy, lie N.E. Bahrein, and contain 7500 inhabitants. Maharag is the residence of the sheik, and has a town with a pop. of 6000. The sheik of Bahrein keeps up five armed vessels; but in time of war, can fit out 15 or 20. One of his ships is of 400 tons burden, and mounts 22 guns. He also maintains a body of troops, consisting of a few hundred men; but the best defence of Bahrein is in the multitude of reefs surrounding it; and 500 determined men might oppose the landing of as many thousands. The sheik's authority extends over a few places on the Arabian coast. These islands were known to the ancients by the name of Tylos, and are mentioned by Arrian. The Portuguese established a settlement here soon after Ormuz had been taken by Albuquerque; but they were expelled by the Persians subsequently to the fall of Ormuz. For a long period the Persians and the Alassar sheiks contested the possession of Bahrein; but since 1790 it has been wholly separated from the Persian dominions. (*MSS. belonging to the Royal Geogr. Soc.; M'Culloch's Dict. of Commerce.*)

BAIÆ, a famous marine watering-place of ancient Italy, the Brighton of the Roman world, on the W. shore of the bay of Naples, 8 m. W. of that city, and 2½ m. N. Cape Misenum. Baiæ was indebted for its rise and celebrity to a variety of circumstances—to the softness and serenity of its climate, the beauty of its situation—

> Nullus in orbe sinus Baiis præluceat amœnis—

the abundance of its hot springs, which gave to the Romans, who were passionately fond of the bath, the opportunity of indulging in that luxury in every form that was most acceptable, &c. It seems to have come into fashion previously to, or about, the æra of Lucullus, who had a splendid villa either in the town or its immediate neighbourhood, as had also Cæsar, Pompey, and Augustus; and it continued to increase in popularity, and to be a favourable resort of the emperors and of the affluent voluptuaries of Rome till the irruption of the barbarians under Theodoric the Goth. The town was built originally on the narrow slip of ground between the hills and the sea; but as this space was but of very limited dimensions, after Baiæ became a fashionable resort, the foundations of its streets and palaces were projected into the bay itself! This is alluded to by Horace:

> Marisque Baiæ obstrepentis urgues
> Submovere litora,
> Parum locuples continente ripa. H. *Od.*, 18.

No sooner, however, had opulence withdrawn her powerful hand, than the sea gradually reassumed its old domain; moles and buttresses were torn asunder, washed away, or tumbled headlong into the deep, where, several feet below the surface, pavements of streets, foundations of houses, and masses of walls, may still be descried. Earthquakes and other convulsions of nature have also largely contributed to the destruction of Baiæ, of which only a small portion of the ruins now remain. (*Swinburne's Two Sicilies*, ii., 29; *Cramer's Ancient Italy*, ii., 157.)

BAIBOUT, a town of Asiatic Turkey, pach. Erzeroum, on the Tchorokhi, 62 m. W. by N. Erzeroum. Pop. 3000? It is a straggling, ill-built town, supposed to occupy the site of the ancient *Varutha*, with a castle which has some marks of antiquity. Instead of walls and bastions, it is defended by portable towers made of logs of wood. They are musket-proof, of a triangular shape, and have raised turrets at each angle. If required in any distant part of the country, as not unfrequently happens, they may be taken to pieces, or, if the roads permit, transported on wheels! The accumulation of snow in winter is here so great as to cut off all communication between Baibout and the circumjacent villages for four months in the year. Cowdung baked in the sun, and collected during the summer months, is the only fuel the poor can afford to purchase. The natives in this part of Armenia are described as a short, stout, and active race of men; remarkably dark in their complexions, brave and hardy, passionately fond of hunting the stag, with which their mountains abound, and invariably civil. (*Kinneir's Asia Minor, &c.*, p. 352.)

BAIKAL (LAKE OF), sometimes called the *Sviatoe Mere*, or Holy sea, in Siberia, in the gov. of Irkoutsk, between 51° and 56° N. lat., and 103° and 116° E. long. Its greatest length, in a N.N.E. and S.S.W. direction, is nearly 400 m.; but, where greatest, its breadth does not exceed 60 m., and is in most parts much less. It is of very unequal depth, sand-banks and shallows occurring alongside of all but unfathomable abysses. It is situated in a mountainous country, and receives several considerable rivers, while its surplus water is entirely carried off by the Angara, a large and rapid river, an affluent of the Jenissei. The fisheries of this lake are very valuable. Great numbers of seals, of a silvery colour, are captured; the skins of which are sold to the Chinese. Sturgeon, to the extent of about 1000 poods a year; salmon, &c., are also taken; but the grand object of the fishery is the *omul*, a sort of herring (*Salmo autumnalis, vel migratorius*), taken in vast numbers (about 100,000 poods a year) in Aug. and Sep., when it ascends the rivers. The most singular fish belonging to the Baikal is the *golomynka* (*Callyonimus Baicalensis*), from four to six inches in length, so very fat that it melts before the fire like butter. The latter is never taken alive; but is cast dead upon the shore, sometimes in immense quantities, after storms. It yields an oil, sold to great advantage to the Chinese. The surface of the lake is frozen over from Nov. to the end of April or the beginning of May. (*Klaproth, Mémoires Relatifs à l'Asie*, iii., 89–108; *Storch, Tableau de la Russie*, ii., 142.)

BAILLEUL, a town of France, dep. du Nord, cap. cant., on a hill near the Meterbecque, 16 m. W.N.W. Lille, within a short distance of the Belgian frontier. Pop. 9911. It is open, and is generally well built; it has various fabrics of cloth, cotton and lace, paper and hats, with a large distillery, oil-mills, tanneries, potteries, &c. A species of cheese, dit *de Bailleul*, made in the environs, is highly esteemed. Bailleul is the name of several small towns in various parts of France, but all too inconsiderable to deserve notice in this place.

BAILEYVILLE, p. t., Washington co., Me., 209 m. E. Augusta, 795 W. Bounded on the N.E. by St. Croix river, and N. by the outlet of Scoodie lakes. It contains one saw-mill, four schools, 154 scholars. Pop. 399.

BAIN, a town of France, dep. Ille et Vilaine, cap. cant, 18 m. S. Rennes. Pop. 3515. It has manufactures of serges and woollen stuffs.

BAINBRIDGE, p. t., Chenango co., N.Y., 104 m. W. by S. of Albany, 390 W. Watered by Susquehannah river and its tributaries. It contains nine stores, seven grist-mills, twelve saw-mills, twenty-four schools, 1064 scholars. Pop. 3324.

BAINBRIDGE, t., Berrien co., Mich. Pop. 251.

BAINBRIDGE, t., Geauga co., O. Watered by Chagrin river and its branches. It contains one store, one grist-mill, two saw-mills, ten schools, 380 scholars. Pop. 988.

BAINBRIDGE, p. v., capital of Decatur co., Ga., 188 m. S.S.W. Milledgeville, 845 W. Situated on the E. side of Flint river, and contains a court-house, jail, and a number of dwellings.

BAIRDSTOWN, p. t., capital of Nelson co., Ky., 40 m. S.W. Frankfort, 60 m. W.S.W. Lexington, 615 W. Situated on a small branch of Beech fork, of Rolling fork, of Salt river. It contains a court-house and jail, of stone; a market-house, one academy, 100 students, one school, 35 scholars. Pop. 1492. It is the seat of St. Joseph's college, under the direction of the Roman Catholics, which was founded in 1819, has a president, and thirteen professors or other instructers, 150 alumni, 60 students, and 7000 vols. in its libraries. The commencement is on the 1st of August. The edifice is of brick, 120 feet long, and four stories high.

BAIS, a town of France, dep. and arrond. Mayenne, cap. cant. Pop. 2443. This also is the name of a town of about the same size, in the dep. Ille et Vilaine, arrond. Vitré.

BAJA, a town of Hungary, co. Bacs, near the Danube, 29 m. N. by W. Zombor, lat. 46° 10′ 26″ N., long. 38° 56′ 17″ E. Pop. 12,000. It is the seat of the courts of justice for the co., has a Catholic and a Greek church, a synagogue, and a Catholic gymnasium. It contains the castle of Prince Grassalcovics.

BAKER, county, Ga. Situated in the S.W. part of the state, and contains 1350 sq. m. Drained by Flint river and its branches. It contained, in 1840, 12,450 neat cattle, 879 sheep, and 12,355 swine; and produced 1931 bushels of wheat, 92,509 of Indian corn, 2718 of oats, 5222 of potatoes, 815,473 pounds of cotton, 4260 of sugar. It had eight stores,

two grist-mills, two saw-mills. Pop.: whites 2447; slaves 1773; free coloured 6; total, 4226. Capital, Newton.

BAKERSFIELD, p. t., Franklin co., Vt., 30 m. N.N.E. Burlington, 49 N.N.W. Montpelier, 551 W. First settled in 1789, chartered in 1791. Watered by branches of Missisquoe river. It contains a town-house, a Congregational church of brick, a Methodist chapel, an academy, three stores, one fulling-mill, one grist-mill, four saw-mills, nine schools, 197 scholars. Pop. 1258.

BAKEWELL, a town of England, co. Derby, hund. High Peak, par. Bakewell, 28 m. N.N.W. Derby. Pop. (1821) 1782; (1831), 1898. Area of township, 3380 acres. The town is beautifully situated on the W. bank of the Wye, 2 m. above its confluence with the Derwent. The church, a spacious Gothic structure, on an eminence, contains many fine monuments. The Independents and Wesleyans have each a chapel. There is a free school, founded in 1636, with a small endowment, and an alms-house for six old men. Over a chalybeate spring (which had a high reputation in the Saxon times), modern baths have, within a recent period, been formed; these are constantly supplied with fresh water, which, on its influx, emits considerable quantities of carbonic acid gas: its temp. is 60° Fahr. There is a news-room, museum, &c., connected with the establishment. Near the entrance to the town, from Ashford, is a cotton manufactory, built by Sir Richard Arkwright: it employs about 300 hands. Many of the other inhabitants are employed in the lead mines and marble quarries of the neighbourhood. The weekly market is held on Friday, but there is little business of any kind transacted. There are annual fairs held. Easter Monday, Whit Monday, Aug. 29th, Monday after Oct. 10th, and Thursday after Nov. 11th. The petty sessions for the hundred are held in the town. It is the chief polling town for the N. division of the county. The living is a vicarage, in the patronage of the dean and chapter of Litchfield. The poor-rates levied in the township in 1836 amounted to £1064 4s.

Three miles N.E. of the town is Chatsworth, the splendid seat of the Duke of Devonshire, on a gentle rise near the base of a finely-wooded hill: the Derwent, spanned by a handsome stone bridge, flows past its principal front. The mansion forms a square of 190 ft., enclosing a spacious court, with a fountain in the centre; it has a flat roof surrounded by balustrades, and is decorated with Ionic columns. At the principal entrance, a grand flight of steps leads to a terrace extending the length of the building. The water-works (with the exception of those of Versailles) are considered the finest in Europe. The present edifice stands on the site of the mansion built by Sir William Cavendish in the 16th century, in which Mary, queen of Scots, was imprisoned thirteen years. It was completed in 1706, but a wing and other additions have been made to it by the present duke, and many improvements are still in progress. Altogether, it is one of the noblest residences in the kingdom, and contains a very large collection of pictures, statues, and articles of *vertu*. Haddon Hall, the property of the Duke of Rutland, the most perfect of the ancient baronial mansions remaining in the kingdom, is about 2 m. S. of the town, on an eminence overlooking the fine vale of Haddon. It was built at different periods; the most ancient part in Edw. III.'s reign; another, in that of Hen. VI.; and the most modern, in the reign of Eliz.; at which period it came into the possession of the Manners family.

The present name of the town is a contraction of its old Saxon name, derived from the chalybeate spring. The castle stood on a knoll, on the E. bank of the Wye. The parish in which this township is situated is the largest in the co., its area being 43,020 acres; and it includes, besides the towns of Bakewell and Buxton, eight chapelries, ten townships, and four hamlets. The entire population in 1831 was 9503. (*Lysons's Mag. Brit.; Glover's Hist. of Derbysh.*)

BAKTCHISERAI (palace of the gardens), a town of Russia in Europe, in the Crimea, of which, while under the Tartars, it was the capital and the residence of the Khan, 7 m. S.W. Simpheropol. Pop. 9500. "This," says Dr. Clarke, "is one of the most remarkable towns in Europe; first, in the novelty of its manners and customs; these are strictly oriental, and betray nothing of a European character; secondly, in the site of the town itself, occupying the craggy sides of a prodigious natural fosse, between two high mountains, somewhat like the appearance exhibited by Matlock in Derbyshire. The view breaks all at once upon the traveller, exhibiting a variety of objects in a most irregular and scattered manner; while bubbling fountains, running waters, gardens, terraces, hanging vineyards, and groves of the black poplar, seem to soften the horror of rocks and precipices, and even to make them appear inviting" (vol. ii., p. 170, 8vo ed.). But, notwithstanding this profusion of fountains and water, Baktchiserai is not distinguished by its cleanliness; on the contrary, its streets are narrow, winding, and filthy. It suffered a good deal after its first occupation by the Russians, but latterly it has improved: it is entirely occupied by Tartars. The ancient palace of the khans has been repaired, and is preserved in all its former magnificence. (*Schnitzler, La Russie, &c.*, p. 734; *Lyall's Travels*, i., p. 261.)

BAKU, or BADKU, a sea-port town of the Russian dominions, prov. Daghestan, on the S. shore of the peninsula of Abscharon, on the W. coast of the Caspian sea, of which it is one of the best and most frequented ports; lat. 40° 22′ N., long. 51° 10′ E. Pop. 5000? It is defended by a double wall and deep ditch, constructed in the reign of Peter the Great. It has some mosques and caravanseras, but is meanly built: the houses, which are flat-roofed, are covered with a coating of naphtha. Its excellent harbour, and its central and advanced position, give it great advantages as a trading station. The value of the imports, consisting principally of raw silk and cotton goods from Persia, amounted, in 1831, to 1,702,460 roubles. The exports consist principally of naptha, saffron, &c.

The peninsula of Abscharon is famous for its naptha springs and mud volcanoes, and before the Mohammedan conquest was a favourite resort of the Ghebers, or fire-worshippers. "The quantity of naphtha procured in the plain to the S.E. of the city is enormous. It is drawn from wells, some of which have been found to yield from 1000 to 1500 lbs. a day. These wells are, in a certain sense, inexhaustible; for they are no sooner emptied than they again begin to fill, the naphtha continuing to increase till it has attained to its former level. It is used by the natives as a substitute for lamp oil, and, when ignited, emits a clear light, with much smoke, and a disagreeable smell. E. of the naphtha springs the attention is arrested by the Atash-Kudda, or fire-temple of the Ghebers; a remarkable spot, something less than a mile in circ., from the centre of which a bluish flame is seen to arise. Here some small houses have been erected; and the inhabitants, in order to smother the flame, have covered the space enclosed by the walls with a thick loam of earth. When fire is, therefore, required for any culinary purpose, an incision is made in the floor, and on a light being produced, the flame immediately arises, and, when necessary, is again suppressed by closing the aperture! With the fire a sulphureous gas also arises; and a strong current of inflammable air, with which leathern bottles are frequently filled, invariably continues after the flame has been extinguished. The whole country, indeed, around Baku has, at times, the appearance of being enveloped in flames. It often seems as if the fire rolled down from the mountains in large masses, with incredible velocity; and during the clear moonshine nights of November and December, a bright blue light is observed, at times, to cover the whole western range. This fire does not consume; and if a person finds himself in the middle of it, he is not sensible of any warmth." (*Kinneir's Persia*, p. 359.) The mud volcanoes, in the vicinity of the town, often throw up vast quantities of mud. Baku was acquired by the Russians from the Persians, in 1801, and, along with Astrakhan, carries on the whole trade of the Caspian. (*See* CASPIAN SEA.)

BAKU, or BAKOWA, a town of Moldavia, on the Bistritz, near its confluence with the Sereth, lat. 46° 30′ N., long. 26° 47′ E. It is a poor, miserable, filthy place, but has a considerable trade in cattle, corn, salt, and wood. It occupies the site of a city which was once the residence of a Catholic bishop; the ruins of the cathedral still exist.

BALA, a township, market, and assize town of N. Wales, co. Merioneth, hund. Penllyn, 37 m. N.W. by W. Shrewsbury, at the W. end of the largest of the Welsh lakes, in a wild and mountainous district. Pop. of par., 2359; of town, about 1200. The town, which consists of one wide street, with a smaller one branching from it, has a neat and respectable appearance. It has a chapel of ease, and two other chapels belonging to Independents and Calvinistic Methodists; an endowed grammar school, founded in 1712, where 30 boys are clothed and educated each for four years; a book society, established in 1828; and a town-hall, to which one of the co. bridewells is attached. The market is held on Saturdays, and is well attended. There are five fairs, chiefly for the sale of live stock, on the Saturday before Shrovetide, May 14th, July 10th (a large lamb fair), Oct. 24th, and Nov. 8th. Bala appears to have been anciently incorporated, but at present is merely a nominal borough in the jurisdiction of the co. magistrates. The spring assizes, the summer and winter quarter sessions for the co., are held here, and a co. court for debts under 40s. every other month; all the courts being alternately held here and at Dolgelly. The town and neighbourhood have been famous from a remote period for the manufacture of knitted stockings and gloves, esteemed for their strength and softness of texture; but this has of late years declined considerably. At present (1838) about 40,000 dozen stockings and socks, and 5000 pairs of gloves, are annually made. At the S.E. end of the town is a large artificial mound, supposed to be of Roman construction, from the summit of which is a magnificent view, having the lofty Arrans on

one side, and Cader Idris on the other. The lake Bala, Tegid, or Pimblemere, is about 4 m. in length by 1 in width; it abounds with pike, perch, trout, and still more with the white-scaled gwyniaid. The whole is the property of Sir W. W. Wynn, who has a fishing-seat on it. The Dee rises in Arran Penllyn, a mountain at the head of the lake, and emerges from it near Bala, where it is spanned by a bridge, near which, on the E. bank, a castle was erected in 1202, of which some traces are yet visible. A branch of the Roman Watling St. passed through or very near the present town, and at the head of the lake are the remains of a Roman station. The artificial mound above mentioned was occupied by the Welsh as one of a chain of forts across this part of the principality, to prevent the incursions of the English lords marchers: at a subsequent period the place was a dependency of Harlech castle. Bala is a favourite resort of sportsmen during the grouse season.

BALACHNA, a town of European Russia, gov. Nijni Novgorod, on the Wolga. Pop. 3000.

BALAGANSKOI, a town of Asiatic Russia, gov. Irkoutsk, 98 m. N.W. Irkoutsk, on the Angara.

BALAGUER (an. *Bergusia*), a town of Spain, Catalonia, on the Segre, 14 m. N.E. Lerida. Pop. 4000. It is situated at the foot of a steep mountain in a fertile plain, and is defended by a castle.

BALAGHAUT CEDED DISTRICTS, an isl. prov. of S. Hindostan, presid. Madras, between 13° 15′ and 16° 20′ N. lat., and 75° 40′ and 79° 20′ E. long.; consisting of part of the region called Balaghaut, or above the Ghauts (which extends from the Krishna to the S. of Mysore, and formed the anc. Hindoo emp. of Karnata), having N. Kurnool, and the territories of the Nizam; E. Guntoor, Nellore, and Arcot; S. Mysore; and W. Dharwar: length about 200 m., breadth various, area 25,456 sq. m. Pop. (1836–37) 2,176,003. It is almost equally divided between the collectorates of Bellary and Cuddapah. It consists mostly of elevated table-lands stretching out into extensive plains; but large tracts are rugged, and there is a great deficiency of wood. There are no large rivers: the Toombuddra forms part of its N. boundary, and fills some watercourses about Bijanagur, the anc. Hindoo capital; but elsewhere irrigation is scarce, and drought frequently prevails. The soil is in most parts either black or red mould: the former is most common in the W. districts, where it forms an extensive plain: it is deep, without vegetable remains; and when cleared, broken up, and properly pulverized, is found to be exceedingly fertile, and is afterward very easily cultivated. But this bringing in of the black soil is a very expensive process; and, in consequence, though the red soil be less fertile, yet, as it is more easily brought into a productive state, the poorer classes are generally settled upon it. Drill husbandry is universal. Rain is uncertain; and if it fail in June, the whole crop is in danger of being lost. The *dry* cultivation is almost universal; the *wet* not being supposed to exceed 7 per cent. of the whole. Plantations of indigo, betel, sugar-cane, red pepper, tobacco, &c., are pretty extensively scattered over the country. In 1807 garden produce paid about 6·8 per cent. of the ground rent. The temperature is much cooler than in the surrounding and less elevated districts. Manufactures inconsiderable.

The land has always been regarded as belonging to government, and the metayer system was prevalent under both the native and Mohammedan dynasties. Between the conquest of the latter and the reign of Aurungzebe, the class of *poligars*, who were originally either mere collectors of the revenue or heads of villages, having greatly increased in numbers and influence, withheld the revenues, set up for petty chiefs, and having established a kind of feudal system, desolated the country by their mutual wars, and reduced it to a state of anarchy and of the utmost misery. When it came into the possession of the British in 1800, its inhab. generally were the poorest in our dominions: they were seldom even fixed as tenants, but migrated from farm to farm, and from village to village, where they clubbed together to carry on their cultivation." The judicious administration of Sir T. (then Col.) Munro, who was appointed principal collector, not only averted a famine, in consequence of drought, in 1803, but in seven years raised the revenue, without burdening the cultivators, from 1 million to 1½ million pagodas. In 1836–37 the land revenue amounted to 4,083,377 rup., the total revenue for the same year being 5,362,738 rup., or £536,273. The average total revenue paid by each inhab. of Bellary is 2 rup. 8 an. 8 pic.; and that paid by each inhab. of Cuddapah, 2 rup. The village settlement is predominant in this prov., especially in Cuddapah. The inhab. are more laborious, hardy, and manly, and their food, dress, and weapons, ruder than those of the people below the Ghauts; they were never thoroughly subdued by the Mohammedans, who settled in this prov. at a comparatively late period, and do not now exceed 1-15th part of the pop. Balaghaut formed part of the last Hindoo empire of Bijanagur; after the fall of the Delhi dynasty, it became separated into several indep. states, was conquered by Hyder before 1780; and after 1792 belonged to the Nizam, by whom, in 1800, it was ceded to the British. (*Hamilton's E. I. Gazetteer*, i., p. 113–118; *Madras Almanac for* 1838.)

BALAKLAVA, a small sea-port town of European Russia, at the S.W. extremity of the Crimea; lat. 44° 29′ N., long. 33° 34′ 40″. E. It has a small but excellent harbour, land-locked, and with water sufficient to float the largest ships. It has no trade, and is resorted to only by coasters.

BALAMBANGAN, an isl. of the E. Archip., fourth division, lying off the N. extremity of Borneo: lat. 7° 15′ N., long. 117° 5′ E.; 15 m. long and 3 broad, but uninhabited. It has a rich soil, and two harbours abounding in fish. A settlement, formed in 1774, by the E. I. Company, was soon after destroyed by the Sooloos, and a subsequent settlement planted in 1803 was afterward abandoned.

BALASORE (*Valeswara*), a sea-port town of Hindostan, presid. Bengal, prov. Orissa, distr. Cuttack, of which it is the chief port; lat. 21° 32′ N., long. 86° 56′ E.; 125 m. S.W. Calcutta. Pop. (1822) 10,000. It is a large straggling place, on the S. bank of the Boori-Balang, and much fallen off. Formerly it was a flourishing town, with Portuguese, Dutch, and English factories. It has dry docks, but is at present frequented only by Maldive vessels, salt boats, and other small craft: its exports are chiefly rice to Calcutta in winter. (*Hamilton's E. I. Gaz.*, i., 120.)

BALATON (LAKE OF), in Hungary. *See* PLATTEN-SEE.

BALBRIGGAN, a markt. town of Ireland, co. Dublin, prov. Leinster, near the mouth of the small river Delvin, forming the co. boundary to the N., 17 m. N. by E. of Dublin. It was the scene of a sanguinary battle in 1329 between the first Earl of Louth and some of the English settlers, who disputed his claim to the palatine dignity of the county, but were defeated. William III. encamped here on his march to Dublin, after the battle of the Boyne. It has been much improved by the exertions of the proprietor, who has succeeded in making it both a respectable manufacturing and commercial mart, and a desirable watering-place. It is well built, and baths of every description have been constructed. It is a chapelry formed from Balrothery parish. The chapel, built in 1816, at an expense of upwards of £3000, was accidentally burned down in 1835, and has not yet been rebuilt. There is also here a Rom. Cath. chapel, and a place of worship for Methodists. There is a dispensary, and petty sessions are held every alternate Tuesday. The town is the head quarters of the co. constabulary, and near it is a martello tower, with a coast-guard station. There are two cotton mills here, one only of which is (1838) in action, giving work to 90 persons, of whom 84 are females. The yarn is wrought into cloth chiefly in the town, where there are 250 looms thus employed; besides which, in the village of Garriston 150 looms, are worked for the Balbriggan manufacturers. The finished article is chiefly sold in Dublin and Glasgow. The embroidering of muslin is carried on here and in the neighbourhood so as to give employment to upwards of 1000 females, at the permanent average wages of 2*s.* a week throughout the year: this department is carried on through Belfast and Glasgow agencies, the cloth being embroidered by the workers in their own dwellings, and is bleached in Belfast. Hosiery is also manufactured here, and sold in Dublin. There are 36 frames, which employ 50 persons. The corn trade is extensive. Four flour mills supply flour, meal, and bran to all the neighbouring places, and to Drogheda. The public markets are held on Mondays, in a market-house erected in 1811. The fairs are on the 29th April and 29th September.

The exports and imports of the port for 1835, including the coasting trade, were as follow:

Exports.			Imports.		
	Tons.	Value.		Tons.	Value.
		£			£
Corn, Meal, and Flour	645	5,418	Coals, &c.	11,373	8,054
			Bark	20	200
			Potatoes	1,108	2,759
			Salt	361	388
Totals	645	5,418	Totals	12,862	11,398

The post-office revenue for 1830 was £327, and for 1836, £403. A *caravan*, a mail-car, and two other cars, conveying, at an average, 30 passengers each trip, ply between Dublin and Balbriggan every day. The fishery, particularly for herrings, used to be carried on extensively in Balbriggan, but has declined considerably since 1830, when the bounties which had been granted by the Board of Irish Fisheries were withdrawn. The number of fishing vessels, and men, in 1830 and 1836, are said to have been,

	1830.			1836.		
	No.	Tonnage.	Men.	No.	Tonnage.	Men.
Decked Vessels	95	3,073	576	10	357	70
Half-decked ditto	4	60	22			
Open Sail Boats	1	. .	5			
Row Boats .	59	. .	331			
Total . .	149	3,133	934	10	357	70

Supposing these returns to be correct, they afford no grounds for impeaching the policy of withdrawing the bounties. On the contrary, they strongly evince its wisdom; as they show that, while it existed, vessels had been fitted out as much in the view of catching the bounty as of catching herrings.

The harbour, which is naturally small and much exposed, was considerably improved by a pier built about 1765. The quay, which is now 600 feet long, with a lighthouse at the extremity, is frequently filled with craft. At the pier head there is 14 feet water at high spring-tides, but the harbour dries at low water. (*Priv. Information.*)

BALD EAGLE, t., Clinton co., Pa., 16 m. N. Bellefonte. Watered by Bald Eagle creek and its branch, Beach creek, flowing in the W. branch of the Susquehanna river. The main ridge of the Alleghany mountains occupies the interior of the town. Is contains four stores, two forges, two flouring-mills, one grist-mill, three saw-mills, one distillery, two schools, 99 scholars. Pop. 1178.

BALD EAGLE, mountain, Pa., a branch of the Alleghany mountains, running N.E. in Huntingdon, Centre, and Clinton counties, it terminates at the W. branch of Susquehanna river near Dunstown. Bald Eagle creek runs along its N.W. foot, to the Susquehanna. The valley of the creek is about 5 m. wide, with a fertile soil of calcareous loam.

BALDWIN, t., Cumberland co., Me., 40 m. N.W. Portland, 150 N.N.E. Boston, 583 W. Sebago pond bounds it on the E. and Saco river on the S.W. It contains four grist-mills, four saw-mills, eleven schools, 471 scholars. Pop. 1134.

BALDWIN, county, Ga., situated in the central part of the state, and contains 216 sq. m. Watered by Oconee river. It contained, in 1840, 6041 neat cattle, 2639 sheep, 12,549 swine; and produced 9779 bushels of wheat, 1195 of rye, 210,686 of Indian corn, 12,556 of oats, 9486 of potatoes, 1,561,654 pounds of cotton. It had eighteen stores, four saw-mills, four tanneries, four printing-offices, four weekly newspapers, one college, 50 students, seven academies, 233 students, one school, 12 scholars. Pop.: whites, 3075; slaves, 4107; free coloured, 68; total, 7250. Capital, Milledgeville, which is also the capital of the state.

BALDWIN, county, Ala., situated in the S. part of the state, and contains 2000 sq. m. Along the gulf of Mexico it is a sandy plain, but rises into fine ridges in the interior. The soil on the streams is fertile. It contained in 1840, 17,559 neat cattle, 648 sheep, 3175 swine; and produced 49,330 bushels of Indian corn, 12,941 potatoes, 15,180 pounds of rice, 213,121 of cotton. It had eleven stores, fourteen grist-mills, thirty-nine saw mills, two distilleries, seven schools, 110 scholars. Pop.: whites, 1161; slaves, 1707; free coloured, 83; total, 2951. Capital, Blakeley.

BALDWINSVILLE, p. v., Lysander to., Onondaga co., N. Y., 145 m. W. by N. Albany, 262 W. Situated on the N. side of Seneca river. It contains two churches, an academy, eight stores, three flouring-mills, three saw-mills, one iron foundry, 150 dwellings, and about 1000 inhabitants.

BALEARIC ISLANDS. *See* MAJORCA, MINORCA, &c.

BALFRON, a village of Scotland, in the W. part of Stirlingshire, in the parish of the same name, 19 m. N. Glasgow, and 19 m. W. Stirling. Pop. of par. 2057. The village is neat and well built. The inhab. are principally employed as weavers for the Glasgow manufacturers, and in the Ballindalloch cotton mills in immediate vicinity. The latter employ a great number of hands.

BALFROOSH, a town of Persia, prov. Mazanderan, on the Bawool, about 12 m. from the S. shore of the Caspian sea, lat. 36° 37' N., long. 52° 42' E. This is a large flourishing city. There are, however, no accurate details with respect to its population; but that was estimated by Mr. Fraser at 200,000, though we should be disposed to think that this was rather beyond the mark. It is situated in a low, swampy, but rich country; and stands literally in the middle of a forest, it being surrounded and interspersed with fine trees. It has an extensive trade, to be accounted for principally by the comparative immunity it has enjoyed from oppressive imposts, as the roads leading to it are bad, and its port, 12 m. off, little better than an open roadstead. It is, or at least was, when visited by Mr. Fraser, entirely peopled by merchants, mechanics, and their dependants, and learned men; and was prosperous and happy, far beyond any other place he had seen in Persia. Streets broad and straight, but unpaved; houses mostly constructed of bricks, in good repair, and roofed with tiles. It has no public buildings of any consequence; the only places of any interest being the bazars, which extend for a full mile in length, and consist of substantially-built ranges of shops covered from the sun and weather by a roofing of wood and tiles, kept in excellent repair. There are about ten principal caravansaras, several of which are attached to the bazars, and are parcelled out into chambers for the merchants, and warehouses for their goods. All the bazars and caravansaras are well filled with various commodities, and present a scene of bustle and business, yet of regularity, very uncommon in this country, and, therefore, the more gratifying. There are between twenty and thirty medrasses or colleges, Balfroosh being nearly as much celebrated for the number and eminence of its moolahs, or learned men, as for its commerce. The river is crossed by a bridge of nine arches. (*Fras. Trav. along the Caspian Sea, &c.*, p. 82–99.)

BALI, BALLY, or LITTLE JAVA, an isl. of the E. Archipelago, W. or 1st division, between 8° 6' and 8° 50' S. lat., and 114° 40' and 115° 42' E. long.; 70 m. long by 35 m. average breadth. Pop. estimated in 1815 at 800,000. Coast rugged and without harbours; surface rising gradually to the centre, where a chain of mountains stretches W. and E. across the island, terminating in the peak of Bali, which is volcanic; geology the same in other respects as that of Java. The land is productive where well watered, as around the coasts, by numerous streams, and elsewhere by artificial means: irrigation is so necessary, that the sovereigns of Bali imposed a tax not on the land but on the water by which it is fertilized. In the lower tracts rice is much cultivated, maize and sweet potatoes in the upper lands; in addition to these articles, the Balese, though mostly Hindoos, eat poultry, hogs' flesh, and even beef, without scruple, excepting the sacerdotal class. The chief exports are rice, coarse cloths, cotton yarn, hides, salted eggs, birds' nests, oil, *dingding* (dried flesh), *gambier* (catechu), &c.: the imports, opium, betel, gold, silver, and ivory. The natives being superior to the Malays and Javanese in size, strength, and intelligence, are preferred by the Chinese as slaves. Bali was divided, in 1815, into eight independent states, governed by despotic chiefs: the village system prevails here as in Java. There are but few Buddhists or Mohammedans; but Hindoolsm prevails in Bali only, of all the islands of this archipelago. The mass of the people, however, worship the elements, and the tutelary gods of rivers, forests, mountains, &c. There are no religious mendicants, but suttees and immolations are conducted on a much more aggravated scale than in India. The Sanscrit tongue may be distinctly traced in the language of Bali. (*Hamilton's E. I. Gazetteer*, i., 190–122; *Crawfurd's Hist. of the Indian Archipelago*, ii., 236–259, &c.)

BALIZE. *See* HONDURAS.

BALKH, or BULKH (an. *Bactra*), a prov. of Central Asia, now subordinate to the khanat of Bokhara, chiefly between lat. 35° and 37° N., and long. 63° and 69° E.; having N. the Oxus; E. Buduk-shun; S. the Hindoo, Koosh, and Paropamisan mnts.; and W. the desert; length, E. to W., about 250 m.; breadth 100 to 120 m.: area 30,000 sq. m. Pop. about 1,000,000. (*Elphinstone*, ii., 195.) The S. part is full of stony hills, but has many good and well-watered valleys; the E. is mountainous, and more valuable than the W., which, as well as the N., is sandy and barren. It formerly comprised several districts, which now belong to separate governments, as Khoolloom, Koondooz, and others to the E. Its capital, and the territory subordinate to it, have, since the fall of the Dooraunee monarchy in Caubul, to which state it formerly belonged, been taken possession of by the khan of Bokhara. (*Elphinston's Caubul; Burnes's Trav. into Bokhara.*)

BALKH (the *Zariaspa* and *Bactra* of the Greeks), a decayed city of central Asia; cap. prov. belonging to the khanat of Bokhara, but gov. by its own chief, who receives the whole of its revenues: on the right bank of the Adirsiah or Balkh river, in a plain 6 m. N.W., a range of the Paropamisan mountains, 18 m. S. the Oxus, and 250 S.E. Bokhara: lat. 36° 48' N., long. 67° 18' E. Pop., in 1805, under 2000. (*Burnes.*) The ruins of Balkh occupy a circuit of 20 m.; they consist chiefly of fallen mosques and decayed tombs, none of an age prior to that of Mohammed. The city, like Babylon, has become to the surrounding country an all but inexhaustible mine of bricks. There are many inequalities on the surface of the plain, probably proceeding from buried ruins, and clumps of trees in many directions. Balkh seems to have inclosed many extensive gardens, but these are now neglected and overgrown with weeds. The aqueducts, of which there are said to be 18, are dried up or choked, and overflow after rains, leaving standing pools, which make the place very unhealthy, though Balkh be not naturally in a marshy position, but on a gentle slope towards the Oxus, about 1800 feet above the level of the sea. A mud wall, of late construction, surrounds a portion of the present town, excluding the ruins on every side for about 2 m. The town contains three large colleges, but empty and decaying; and at its N. side is the citadel, a solid building,

but not strong as a fort: it contains a stone of white marble, pointed out as the throne of "Cyrus!" The country round is flat, fertile, and well cultivated, said to contain 360 villages, and is watered by 18 canals, drawn from a celebrated reservoir in the Paropamisan mnts. Its wheat and apricots are remarkably fine. Balkh is said to have been built by Kyamoors, the founder of the Persian monarchy, and is called by the natives *Omm-el-Buldan*, "mother of cities." After its conquest by Alexander the Great, it flourished as the capital of a Grecian kingdom. In the 3d century of the Christian æra, Artaxerxes held an assembly at Balkh for the recognition of his authority. The Magi were expelled by the Caliphs: Jenghiz, Timour, Aurungzebe, Nadir shah, and the Afghans, successively possessed it: within the last 12 years it has belonged, with its territory, to the khan of Bokhara. (*Burnes's Travels*, ii., 204, 207.)

BALKHAN. *See* TURKEY.

BALLARD, county, Ky., situated in the W. part of the state, and contains 375 sq. m. It was taken, in 1842, from Hickman and McCracken counties, and in the census of 1840 was included in those counties. Bounded W. by Mississippi river and N. and N.W. by Ohio river. Drained by Mayfield creek and its branches. Capital, Columbus.

BALLENSTEDT, a town of the duchy of Aahalt Bernburg, on the Getel, 15 m. S.E. Halberstadt. Pop. 2600. It is situated at the foot of a hill, and is ill built. In its environs is a castle, the residence of the duke, which commands a fine view, and has fine gardens. It has fabrics of linen, dyeworks, and a hospital.

BALLINA, an inland town of Ireland, co. Mayo, prov. Connaught, on the Moy, 126 m. W.N.W. Dublin. Its former name was Belleek, "the ford of flags." The pop., including that of Ardnaree, a village on the Sligo side of the Moy, connected with it by a bridge of 16 arches, and which may be regarded as a suburb of Ballina, was, in 1821, 6243, and in 1831, 7992: the numbers in both parts of the town not being specified in the census of 1834, but included generally in those of the parish in which they are situate, no satisfactory statement can be made of the proportions of the several religious denominations, but the Roman Catholics appear to outnumber the Episcopal Prot. in the ratio of 16 to 1, and the number of Presbyterians is quite insignificant. The town, which occupies a pleasing and healthy position, contains several good streets and houses. The parish church is a plain building; the Rom. Cath. chapel, which is considered as the cathedral of the Rom. Cath. bishop of Killala, is a large and very ornamental edifice; there are also places of worship for Baptists and Methodists. The town contains eight public schools, in which, and in several private seminaries, about 800 children receive instruction. Here also is a dispensary. A new bridge below the town is now being erected, and arrangements are being made for widening the old bridge, which is inconveniently narrow. Races are held in May, on a fine course in the neighbourhood. General sessions of the peace are held in July, and petty sessions every Tuesday in the court-house, a neat modern building. Here is a station of the constabulary, and a barrack. The market, for which commodious shambles are erected, is held on Mondays; fairs on 12th May and 12th August. There are two ale and porter breweries, and two large flour mills: 8399 bushels of malt paid duty in 1836. A tobacco and snuff manufactory has been carried on since 1801, and coarse linen is woven but not to any extent. Within the last four years the provision trade has been introduced, and is now very flourishing; large quantities of pork and bacon being cured, chiefly for the London market. In the neighbourhood is a very productive salmon fishery, rented at £1500 per annum: the fish is packed in ice, and exported to London. Eels are also taken in large quantites from September to the beginning of November: the fry is sold at 2d. per quart. A branch of the Provincial Bank was opened here in 1828, of the Agricultural in 1835, and of the National in 1837. The post-office revenue increased from £643, in 1830, to £1212 in 1836. The communication with the interior is kept up by the mail road between Castlebar and Sligo, which passes through the town; a new line is also opened from Swinford and Foxford to Killala.

The following is a general Estimate of the Inland Traffic in Merchandise and Produce of every kind.

Carried into the Town.	Tons.	Carried from the Town.	Tons.
For exportation . .	8,000	Proportion of imports	500
Agricultural produce used as food . .	4,500	Surplus produce of breweries, &c. .	400
Ditto in breweries and distilleries . .	200	Coals, manure, &c. .	1,200
Ditto shop goods and exciseable articles .	600	Total . .	2,100
Stone, lime, turf .	26,000*	Add. . .	39,300
Total . .	39,300	Total to and from	41,400

* The turf alone is estimated at 21,500 tons.

Three mail-cars, conveying at an average seven passengers each trip, ply daily between the town and Crossmolina, Killala, and Swinford.

The Moy is navigable for vessels drawing 11 feet of water for 5 m. from the sea, but the farther passage is checked by a bar 1½ m. below the town. A ship canal was commenced a few years ago, to obviate this defect, and to admit vessels of large draught to discharge at the town quay, but the works have been discontinued. The principal exports and imports for 1836 were as follow:

Imports.	Tons.	Value. £	Exports.	Tons.	Value. £
Corn and Meal	8,940	51,000	Coal, &c. .	600	540
Provisions .	458	19,106	Iron . .	160	1,050
Kelp . .	40	150	Sugar . .	35	3,000
			Herrings .	283	1,700
			Spirits . .	19	1,650
			Cottons . .	16	1,600
			Woollens .	16	2,000

The total value of these imports and exports, including several minor articles, amounted to £70,568 and £13,532 respectively. The entrances and clearances for the years 1835–36 were, in tons,

	Ships Entered. Cargoes.	Ballast.	Total.	Ships Cleared. Cargoes.	Ballast.	Total.
1835	4371	3424	7795	7288	424	7712
1836	3609	2127	5736	5696	281	5977

On the whole, the general aspect of the town, combined with its present improved state in manufactures, trade, and commerce, afford indications of rapidly-increasing prosperity. The working classes are generally in a state of comfort; fuel is cheap and abundant. (*Private Inform.*)

BALLINASLOE, an inland town of Ireland, co. Galway and Roscommon, prov. Connaught, on the Suck, 78 m. W. by S. Dublin. It owes its origin to a castle (now fitted up as a private residence) on the Roscommon side of the river, long considered as one of the strongest forts in the province. The battle of Aughrim, in 1691, in which the army of William III., under Ginkell, afterward earl of Athlone, completely defeated that of James II., under St. Ruth, who was killed in the action, was fought in its neighbourhood. Pop., in 1821, 1611; in 1831, 4615. The proportion of episcopal Protestants to Rom. Cath. is about 1 to 5. The two portions into which the town is divided by the river are connected by a line of road, consisting of a causeway and two bridges between the banks, and an island that intercepts its course, having together 16 arches: the whole line is about 500 yards in length. The private buildings have increased rapidly both in number and respectability, nearly a half having been erected within the last 12 years. The parish church is a plain building, with an octagonal spire springing from scrolls, that give it a very singular appearance: the Rom. Cath. chapel is also a neat unornamented structure. The Methodists have two places of worship. About 700 children of both sexes are instructed in the public and private schools. The district lunatic asylum for the province stands on the Roscommon side of the river. It is built in the form of a cross, with accommodations for 214 patients, and is surrounded by an enclosed area of garden and airing ground of 14 acres. The total expense of the land and buildings was upwards of £27,000. Some statements relative to it, in the return for 1837, call for immediate attention. From them it appears that 16 additional cells then building are defective, from want of ventilation, are exposed to the weather, and have no means of being properly heated; that four new rooms, built for incurable patients, are dark, and some feet below the ground level; that there is no sufficient fall for the sewers, and that four acres of the garden ground are too wet for cultivation! A very objectionable practice of admitting patients who pay for their accommodation is also noticed. A dispensary is maintained in the town. An agricultural society meets here in October, and a horticultural in March. The town is the head-quarters for the Galway constabulary, and there is a small barrack for infantry. Petty sessions are held on Wednesdays and Saturdays in the court-house, and there is a small bridewell, so defective in its interior arrangements, that the male and female convicts are confined in the same sleeping room! There are four flour and meal mills, three tan yards, two breweries, a pork and bacon store, and manufactories of coaches and hats: 5694 bushels of malt paid duty in 1836. The post-office revenue increased from £601, in 1830, to £980, in 1836. Branches of the bank of Ireland, and of the agricultural and national banks, were opened here in the same year. The market is held on Saturdays, in the market-house; there is a large supply of grain, the trade in which, and in other departments, has been materially increased, by a branch of the Grand canal from the Shannon having been lately carried hither, a distance of 15 m. The principal fair, not only of the district but of Ireland, for the sale of sheep and black cattle, is held

in October, and is numerously attended by buyers and visiters from all parts of the United Kingdom. It continues from the 5th to the 9th of the month. A field in Lord Clancarty's demesne, of Garbally Park, is opened the day before the fair for the show of sheep, and large enclosed spaces are prepared for the sale of both kinds of stock. We subjoin an account of the numbers exposed for sale and purchased every 10th year since regular returns have been made.

	Sheep.			Horned Cattle.		
Year.	Sold.	Unsold.	Total.	Sold.	Unsold.	Total.
1790	58,231	2,700	61,931	7,782	850	8,632
1800	67,007	3,279	70,286	5,275	2,474	7,749
1810	69,431	21,580	91,001	5,331	1,727	7,058
1820	59,943	30,833	90,776	4,504	4,001	8,505
1830	66,874	14,611	81,485	5,894	1,563	7,457
1837	63,129	6,177	69,306	7,735	1,402	9,137

In 1828, the number brought to sale was greater than in any other year between 1790 and 1837: viz., 97,384 sheep, 11,513 horned cattle. The decline in the numbers from 1828 to the present period is principally caused by the establishment of sheep and cattle fairs of a similar kind in other places. Wool was formerly sold in this fair in large quantities, but the trade is now generally managed by factors in the great staple towns; there is, however, a wool fair for four days on the 6th of July, in which large purchases are made, and fairs of an inferior description for live stock are held on 7th May and 4th July. The town is a great thoroughfare, a main division of the roads leading into Galway and Mayo branching off from it. The conveyances for passengers are numerous; a mail coach and a stage coach from Dublin to Galway passes through it, another mail coach plies between it and Westport; a stage coach plies to Dublin, another to Tuam, and cars daily to Athlone, Roscrea, Galway, and Tuam, conveying an average of 35 passengers each trip. Passengers are also conveyed by the Grand canal from Dublin, by boats fitted up for their accommodation. The town is extremely well kept; much attention is paid to external cleanliness; the lower classes are generally employed, and comfortable; and the constantly increasing influx of visiters every year, whether for business or pleasure, seems to have acted upon those interested in its welfare as a powerful stimulus for its farther improvement.

BALLINROBE, an inl. town of Ireland, co. Mayo, prov. Connaught, on the Robe, 25 m. N.N.W. Galway. Pop., in 1821, 2191; in 1831, 2575; that of the entire parish, in 1834, was 9635, of whom 372 were of the Estab. church, and 9263 Rom. Cath. The town consists of a main street and two branches of well-built houses. Near it is a turlogh or winter lake, called Lough Shy, which, though flooded to a considerable extent in winter, dries in the summer months, and affords pasturage for sheep. Lough Mask, into which the Robe discharges itself, lies about 3 m. W. of the town. The par. church is a small building; the Rom. Cath. chapel is spacious; the Baptists have a place of worship. Two schools, supported by subscriptions, and seven private schools, afford instruction to about 500 children. A dispensary is maintained here. Barracks of considerable dimensions, both for cavalry and infantry, are now unoccupied. There is a flour-mill, a malt-kiln, in which 2231 bush. of malt paid duty in 1836, a brewery, and a tan-yard. A brisk trade in corn and potatoes is carried on, for which a Monday market is held. Fairs are held on Whit-Tuesday and 5th Dec. General sessions of the peace take place in June and December, and petty sessions are held on Mondays in the court-house, which is also used as a market-house. The bridewell contains sufficient accommodation for the prisoners confined temporarily in it. The post-office revenue, in 1830, was £247, and in 1836, £348. A daily car, conveying three passengers each trip, plies to Tuam. Though the town does not lie on any of the great lines of internal communication, it is in a state of progressive improvement, attributable chiefly to the increased attention to agriculture in the district, and the general spirit of improvement.

BALLON, a town of France, dep. Sarthe, cap. cant., on the Orne, 14 m. N.N.E. Le Mans. Pop. 2322. It has manufactures of coarse linens and etamines.

BALLSTON, t., Saratoga co., N.Y., 26 m. N. by W. Albany, 395 W. In its S.E. part is Long lake, 4 miles long and half a mile wide, the outlet of which affords water power. Organized in 1788. The Schenectady and Saratoga railroad passes through it. It contains two stores, one woollen factory, one fulling-mill, one saw-mill, three tanneries, one academy, 23 students, eleven schools, 69 scholars. Pop. 2044.

BALLSTON SPA, p. v., Milton t., capital of Saratago co., N.Y., 28 m. N. by W. Albany, 399 W. Situated on Kayaderosseras creek, a small tributary of which flows through the village. The total fall of the creek here is 60 feet and the dams afford several agreeable cascades. It contains a court-house and jail, of brick, a county clerk's office, a bank, an academy, four churches, one Presbyterian, one Episcopal, one Methodist, and one Baptist; twenty stores, two flouring-mills, one saw-mill, one iron foundry, one distillery, two tanneries, one academy, 23 students, eleven schools, 269 scholars, 200 dwellings, and about 1500 inhabitants. Its mineral waters, formerly very celebrated, have lost some of their properties, and are greatly inferior to those of Saratoga, in its vicinity. The Sans Souci hotel is a beautiful boarding house, built of wood, 160 feet long, with two wings extending back 153 feet, and can comfortably accommodate 150 guests. It is surrounded by pleasant grounds, and is still a fashionable place of resort.

BALLVILLE, t., Sandusky co., O., situated on both sides of Sandusky river, which affords good water power. It contains six schools, 199 scholars. Pop. 1007.

BALLYCASTLE, a marit. town of Ireland, N. coast co. Antrim, prov. Ulster, on a bay to which it gives name, 42 m. N. by W. Belfast. It originated in a castle built here by the Earl of Antrim in the early part of the reign of James I., but was not remarkable as a town until about 1770, when large parl. grants were voted to aid the working of the collieries in its neighbourhood. Pop. in 1821, 1436; in 1831, 1683; that of the parish of Ramoan, in which it is situated, was, in 1834, 4977; of whom 1718 were of the Estab. church, 1549 Prot. diss., and 1710 Rom. Cath. It lies in a beautiful valley in the inner extremity of the bay, and consists of two detached portions, the upper and lower towns, connected by an avenue bordered by forest trees. The houses are mostly respectable, all slated, and kept with much neatness. The church is a handsome building; the Rom. Cath. chapel is small; the Presbyterians and Methodists have each a place of worship. Twenty alms-houses, provided for workmen reduced or disabled in the collieries, or their widows, are now tenanted by deserving paupers. A manor court is held monthly by the seneschal, for the recovery of debts under £20: courts baron are held in April and October, and petty sessions on alternate Tuesdays. For these purposes there is a convenient court-house. Ballycastle was formerly a place of considerable business, having in it a brewery, glass-house, and salt-works, all of which have declined since the stoppage of the mines; and it is now little more than a fishing village and a summer watering-place. The collieries, from which it derived its temporary prosperity, lie on each side the promontory of Fair Head; and the discovery of old workings and rude implements, in a part of the cliff previously unexplored, shows that they had been opened at a very remote period. The seam of coal, which shows itself in the face of the cliff at a considerable height above the sea, forms, in one part, a single bed 4½ feet thick; at another, it appears in six strata from 1 to 2½ feet each, four of which are of flaming, and the two others of bituminous or blind coal. The workings, after having been carried on for a number of years to a considerable extent, have been relinquished, partly on account of the difficulty of penetrating to the dip of the old excavations, and partly from the want of a safe harbour for shipping. The only existing manufacture is that of linen, carried on in the houses of a few cottiers. The fishery of salmon, taken from February to September, appears, from the official return of 1836, to employ nine boats and twenty-seven men. The markets are held on Tuesdays, that of the first Tuesday in every month being so numerously attended as to resemble a fair. The regular fairs are held on Easter Tuesday, the last Tuesdays in May, July, and Aug., and on 25th Oct. and 22d Nov. Large numbers of a very small breed of horses, called Raghery ponies, are brought for sale from the island of Rathlin or Raghery. This island, which lies about 5 m. off the main land, is remarkable both for the singularity of its geological formation, and for having afforded shelter to Robert Bruce when forced to fly from Scotland. The post-office revenue declined from £325 in 1830, to £267 in 1836. The town is on the extreme N. point of the line of road leading round the coast of Antrim from Belfast to Coleraine, and out of the direction of any great channel of trade. The only public conveyances for passengers, who are chiefly visiters to the Giant's Causeway in the vicinity, are two *caravans* to Coleraine, which ply once a week, each conveying a total average of twelve passengers each trip; and mail cars to Dervock and Cushendall, both which carry an average of six passengers daily. The harbour, which was originally capable of admitting vessels of large draught, was unsafe from the heavy seas thrown in from the ocean by the northerly gales; but, after upward of £150,000 of the public money had been expended in attempting to remedy this defect by the erection of a pier, the harbour was filled up with sand, and the pier having been neglected, has gone to ruin. In consequence of this and of the stoppage of the collieries, the trade of the place is almost extinguished.

BALLYMENA, an inl. town of Ireland, co. Antrim, 23 m. N.N.W. Belfast, on the Braid, an affluent of the Maine, which flows into Lough Neagh. The town was taken by assault by the insurgents in 1798, after a sharp engagement,

but was immediately after evacuated. Pop. in 1821, 2740; in 1831, 4063: that of the parish in which it is situated amounted, in 1834, to 8005, of whom 912 were of the Establishment, 5709 Prot. diss., and 1384 R. Cath. The town stands in the midst of an extensive plain of uninviting appearance, though pretty well cultivated, and interspersed with low hills, marsh, and bog. The river is crossed by a large stone bridge; many of the houses are antique, with gabled fronts, but those of modern erection are generally of respectable appearance. The ecclesiastical buildings consist of the par. church, a R. Cath. chapel, two places of worship for Presbyterians, one for Seceders, and one for Methodists. The diocesan school of Connor was removed here from Carrickfergus in 1829, and large schools for boys and girls are maintained on an endowment by John Guy. Courts leet and baron are held annually; a manor court monthly, for the recovery of small debts; the general sessions in January and June, alternately with Ballymoney; and petty sessions on alternate Tuesdays; there is a well-arranged bridewell, and a police constabulary station. The town owes its prosperity chiefly to the linen trade: the brown linen sales average £70,000 annually; and upward of 14,000 pieces are bleached yearly in fourteen bleaching-grounds in the neighbourhood. There is a mill for spinning linen yarn. A distillery in the town paid, in 1836, duty on 41,778 gal. spirits; and in the same year 3393 bush. malt paid duty in the town. The market for linens is held on Saturdays; there are also two other markets in the week for grain and provisions, principally pork, large quantities of which are sent to Belfast. The market-house is a well-built edifice in the middle of the town. The fairs are held on the 26th July and 21st Oct. The post-office revenue in 1830 was £757; in 1836, £937. A branch of the Provincial bank was opened here in 1833; of the Belfast and Northern banks, in 1834; and of the Agricultural bank, in 1836. The town lies on the mail-coach road from Belfast to Londonderry, and maintains a coach, a *carvan*, and a car, to ply to Ballymoney, each six times a week, carrying an aggregate average of sixteen passengers each trip. The general appearance of the place, both as to its external aspect, and that of its population in dress and manners, is the same as what is to be seen in most other towns in the N. part of Ireland under similar circumstances.

BALLYMONEY, an inl. town of Ireland, co. Antrim, prov. Ulster, on a small branch of the Lower Bann, 8 m. S.E. Coleraine. Pop., in 1821, 1949; 1831, 2222; that of the parish was, in 1834, 12,003, of which number 1019 were of the Establishment, 9489 Prot. diss., and 1495 Rom. Cath. It is irregularly built on an eminence, about 3 m. E. of the Bann. Its places of worship are, the par. church, a Rom. Cath. chapel, and houses for Presbyterians, Remonstrants, Seceders, and Covenanters. A school, on the foundation of Erasmus Smith, is established, and several others on private endowments, in which, including private seminaries, about 700 children are instructed. There is a dispensary, and a mendicity association. A steeple chase in December for a gold cup has been substituted for races, which had been a favourite sport. A manor court is held on the first Friday of every month; general sessions of the peace in January and June, alternately with Ballymena; and petty sessions on alternate Tuesdays. The court-house is in the centre of the town, and there is a well-arranged bridewell: a chief constabulary station is fixed here. The trade is principally in fine linens, a species of which, called Coleraines, is in great demand: there are two markets for coarse linens. An extensive trade is also carried on in grain, butter, and provisions. In 1836, duty was paid on 102,792 gall. spirits, and 12,993 bush. malt: there is also a tallow manufactory, a brewery, and a tan-yard; a large mill for spinning flax, and a flour-mill. The regular market-days are Thursdays; fairs are held on 6th May, 10th July, and 10th Oct. The post-office revenue for 1830 was £365; for 1836, £519. A branch of the Belfast bank was opened in 1834, and of the Ulster bank in 1836. The town lies on the mail-coach road from Belfast to Londonderry; a coach and two cars ply each six times a week between it and Ballymena, conveying an aggregate average of eighteen passengers each trip.

BALLYSHANON, a marit. town of Ireland, co. Donegal, prov. Ulster, on the Erne, where it discharges itself into Ballyshannon bay, 108 m. N.W. Dublin. It consists of three very steep and irregular streets on one side of the river, and a poor suburb, called the Purt, on the other: the communication between them is by a bridge of fourteen arches. The parish church stands on the summit of the hill on which the town is built: there are two Rom. Cath. chapels, two places of worship for Methodists, and one for Presbyterians. An artillery barrack adjoins the place, and it is a chief constabulary station. The bor. was incorporated by James I., in 1613, and returned two m. to the Irish H. of C. till the Union, when it was disfranchised. A manor court for pleas to the amount of £2 is held every three weeks, petty sessions once a fortnight. The court sits in an upper apartment of the market-house, which is also used as an assembly-room. In the immediate vicinity of the town is a magnificent cascade formed by the Erne, here 150 yards broad, throwing its waters over a ridge of rock 16 ft. high, with a noise audible for several miles. Salmon and eels are caught in great numbers; the former chiefly for the British markets: the annual produce is upward of fifty tons. There are no manufactures of any consequence, and the trade is confined chiefly to retail dealings, owing to the badness of the harbour, which, notwithstanding the most spirited exertions of the chief proprietors, is still impracticable for vessels of any draught. There is a distillery, which in 1836 paid duty for 114,631 gallons of spirits; also a brewery; 8234 bushels of malt paid duty the same year. The post-office revenue in 1833 was £570; in 1836, £852. A branch of the Provincial bank was opened in 1835. Markets are held on Tuesdays and Saturdays; fairs on 18th Sept., and on the 2d of every other month. A mail-coach, conveying an average of three passengers each trip, plies between Enniskillen and this town every day in the week; and a car to Sligo carries an average of three passengers each trip on every day but Sunday. The land traffic of goods carried to and from the port is estimated for the year 1836 by the railroad commissioners as follows:

Carried into the Town.	Tons.	Carried from the Town.	Tons.
For exportation . .	1,860	Proportion of imports .	860
Agricultural produce for food . . .	2,850	Distilleries, &c. . .	200
For distilleries . .	1,100	Coal, manure, &c. . .	700
Excisable and shop articles . . .	200	Total .	2,060
Stone and lime, &c. . .	2,650	Carried into the town .	17,400
Turf	8,500	Grand Total .	19,460
Total . .	17,400		

The exports are, oats, 1794 tons, value, £11,130. Imports, coal, &c., 1925 tons; stone and slate, 310 tons; corn and flour, 354 tons; sugar, 24 tons; with other minor articles of the total value of £9524.

The fishery is carried on from the town and the neighbouring village of Bundoran, in not more than two open sail-boats and six row-boats, which employ but forty-six hands.

Natural impediments connected with its locality have prevented this town, otherwise advantageously placed near the mouth of a large river, opening, after a course of a few miles, into Lough Erne, which washes the shores of a great tract of country, from rising rapidly in the scale of improvement.

BALTA, a town of European Russia, gov. Podolia, on the Kadynia, 160 m. S.E. Kamenetz. Pop. 1600. Its suburb, on the S. side of the river, now in the gov. of Kherson, was formerly in Turkey, while the bulk of the town, or the portion on the N. side of the river, was in Poland. The latter is comparatively well built, and the inhabitants are industrious.

BALTIC SEA, an internal or mediterranean sea, in the N.W. part of Europe, surrounded and very nearly enclosed by Sweden, Finland, Russia, Prussia, Germany, and Denmark. It is usually understood to commence S. of the Danish islands (Funen, Zealand, and Laland), and, thus limited, it is unquestionably the most nearly isolated of any similar body of water in the world. But N. of these islands the Kattegat and the Skager Rack can only be regarded as parts of the Baltic, which may, therefore, be described as commencing at the Naze of Norway, in long. 7° E., and extending to St. Petersburg on the gulf of Finland, in long. 30° 28′ 45″ E. Its extreme points in lat. are Wismar, in Mecklenburg, 53° 50′ N., and Tornea, on the gulf of Bothnia, 65° 51′ N. These points mark also its greatest length, which is, consequently, about 840 m.; its width varies from 75 to 150 m., and its area is estimated at 155,000 sq. m., without including the Kattegat and Skager Rack, for which an addition of 18,000 or 19,000 sq. m. may be made. (*Catteau, Tableau de la Mer Baltique*, i., 2–37; *Thomson's Travels in Sweden*, 384.)

The direction in which the Baltic penetrates the land is extremely tortuous. The Skager Rack, the first great gulf of the North sea, runs N.E. between the shores of Jutland and Norway for rather more than 150 m., to the W. coast of Sweden; and the Kattegat, from the Skaw (the N.E. point of Jutland), has a direction almost due S. between Jutland and Sweden for about 120 m. The *average* width of these gulfs is nearly equal (70 m.); but the former is much the most uniform, the Kattegat being narrowest at its N. end, between the Skaw and Gottenburg, and widening considerably towards the S. From Laholm bay to the opposite Danish coast is full 100 m. The two belts and the sound are the three straits which connect the Kattegat with the Baltic, properly so called; and their direction is the same as that of the gulf in which they terminate, namely, S. This sea has been so long known to Europeans, that its peculiar entrance has ceased to excite attention; yet

there is not one, perhaps, where navigation is so intricate. The direct distance between the Kattegat and the *open* sea of the Baltic is less than 110 m.; that between the shores of Jutland and Sweden is nowhere more than 130 m.; and in this space, which would not be accounted large, even were it clear, are crowded between sixty and seventy islands, with shoals and sand banks innumerable. Two of these islands, Funen and Zealand, may be called large, and some of the others, as Alten, Langland, Laland, Falster, and Moen, of respectable size, their situation in a close sea being considered. It is the two large islands which, with the Danish and Swedish coasts, form the three straits: the smaller isles and sand-banks serving to break up their channels, which would otherwise be sufficiently direct, into many small and variable currents. The Little Belt (the strait between Jutland and Funen) is, at its N. end, less than ¾ m. in width. It expands, however, immediately, and between Arroesund and Assens is 8 m. broad. Still farther S. the continent recedes into a great bay; and the island becoming broken up into several smaller islets, the greatest width of the Little Belt is, perhaps, not less than 45 m. Its most S. channel contracts again to about 8 m., between the islands of Alten and Æroe. The Great Belt (between Funen and Zealand) is more uniform in its width; which averages about 20 m. Towards the S., however, this strait also stretches out W. into a large bay, formed by the islands of Zealand and Laland, and at its S. termination it is divided into two channels by the island of Langland, of which the widest or most E., between Langland and Laland, is about 8 m. across, the other not more than 4 m. The Sound, at its entrance between Elsinore in Zealand, and Helsingburg on the coast of Sweden, is about 4 m. wide; but it spreads into a succession of bays upon the Swedish shore, and, towards its S. end, into one of considerable size (Kidge bay) on that of Zealand. It is here about 28 m. across, but the return of the land contracts its final outlet to about half that amount. (*Catteau*, i., 2–26; *Thomson*, 385; *Carr*, *Northern Summer*, 27, 30, 102, &c.)

The direction of the sea from these straits is first E. to Memel (about 300 m.), and then N. as far as the lat. of Stockholm, 59° 21′, a distance of 350 m. It is to these portions that the term BALTIC SEA, in its limited sense, is restricted, for at this point it separates into two great gulfs; of which one, the gulf of Finland, runs nearly due E. between the Russian territories of Finland and Revel; the other, the gulf of Bothnia, a little E. of N., between Finland and Sweden. The gulf of Finland is 200 m. in length, with a mean breadth of 60 or 70 m.; that of Bothnia is about 400 m. long, and 120 m. in *average* width, but at its narrowest part, the Quarken, opposite Umea, it does not much exceed 40 m. The gulf of Riga, or Livonia, S. of that of Finland, is also an important inlet, stretching into the countries from which it is named, about 80 m. from E. to W., and about 90 m. from N. to S. (*Catteau*, i., 27–114; *Thomson*, 396.) Beyond the Danish islands the Baltic is a tolerably clear sea, except on the coasts, where alluvial islands are continually forming. In the main stream the only interruptions to the continuity of water are found in Rugen (which is, however, close to the Pomeranian shore); Bornholm, between the coasts of Prussia and Sweden, but much nearer to the latter than the former; Oeland, on the S.E. of Sweden; Gothland, N.E. of Oeland; Oesel, Dago, and several smaller islands between the gulfs of Riga and Finland; and the Aland archipelago at the mouth of the gulf of Bothnia. Opposite to these last the S.W. coast of Finland is crowded with an innumerable quantity of islets, which seem as though the main shore were advancing by rapid strides to join the larger islands of Aland, as a stage in its progress towards a junction with the opposite Swedish shore. (*See* ALAND, BORNHOLM, GOTHLAND, &c.)

The Baltic is not, like other close seas, the Mediterranean, Red sea, &c., shut in by rocks and high mountains. On the N.W. and N., indeed, the mountains of Sweden and Norway form a sufficiently definite boundary; but towards the E., S.E., S., and even S.W., its borders stretch away in plains occupying much more than half Europe. On the S. the nearest high lands are the Hartz, the Bohemian mountains, and the Karpathians; S.W. lie the flat lands of Jutland, Holstein, and Holland; S.E. the plain is unbroken to the shores of the Black sea and Caspian; and E. there are no hills except the insignificant elevations of Valdai, between the Baltic and the Oural mountains. The basin of this sea is, therefore, by no means well defined, except towards the N. and N.W. In every other direction it has to be determined by the direction of the running water only, and that on land so level that the basin of the Baltic is constantly combined with those of other seas; with that of the White sea, for instance, through the lakes of Russian Lapland; with that of the Caspian, by the close approach of many of the affluents of the Wolga to lakes Onega and Ladoga; and with that of the Black sea, among the innumerable streams of Lithuania and Poland. It is, therefore, impossible to calculate accurately the amount of land constituting this basin, but it is of very considerable extent, its *extreme* points being in lat. 49° and 69° N., in long. 7° 40′ E. (*Arrowsmith's Atlas*; *Von Buch's Travels*, 337; *Catteau*, ii., 44, &c.) With the exception, *perhaps*, of some portions of America, there is no part of the world more abundantly watered than this district: upwards of 240 rivers find their way to the Baltic; the lakes in its neighbourhood are all but innumerable, and altogether this sea drains more than a fifth part of the whole surface of Europe. The rivers which flow from the S. and S.E. run the longest courses, varying from 330 to 750 m. (*See* ODER, VISTULA, NIEMEN, DWINA, &c.) Some of those from the E. appear at first to be much shorter, as the Neva, which *from lake Ladoga* does not exceed 45 m.; but as this lake is connected with that of Onega by the Svix, and as Onega receives the Voila, a stream rising close to the 40th meridian, the whole of this water-course is not less than 400 m. in length. The other Finnish rivers are not long; but W. of the gulf of Bothnia the rivers of Sweden vary from 200 to 300 miles. The most peculiar part of this basin is the S.W corner, where, though the nearest mountains are those of the Hartz, the basin itself does not exceed 20 or 25 m. in width. The Elbe, which runs within 50 m. of the Baltic, and the Eyder, which rises close to its shores, fall into the North sea, and their affluents belong, of course, to that system; but such is the flatness of the country in this part of Germany, that the different waters are constantly uniting, and a canal of less than 3 m. has served to connect the Baltic with the Elbe by joining the rivers Trave and Stricknitz, below Lubeck. A similar junction has been effected between the Baltic and the Eyder, a little to the N. of Keil. (*Catteau*, i., 86; ii., 1–81; *De Luc*, *Geol. Trav.*, 136, 192, 274, &c.)

The Baltic is extremely shallow, being not more in its W. parts, between Keil and Copenhagen, than 16 fathoms deep, and most commonly not more than 8 or 10 (*Von Buch*, 10); but farther E. it deepens considerably, and midway between Memel and Oeland it is from 60 to 100 fathoms. This is, however, its greatest depth, for the gulf of Finland suddenly shallows from 50 to 60 fathoms to 16 fathoms, 4 fathoms, and, in the bay of Cronstadt, to even less than this. The average depth of the gulf of Bothnia is not greater than that of the rest of the sea, but it is less encumbered with sand banks, and its harbours are more convenient: none of those S. and E. of the gulf of Finland have more than 20 ft. water, and but few have as much as 16. (*Catt.*, i., 39–114.)

The Baltic, being a close sea, with its entrance *from* the approach of the tidal wave is, of course, not subject to the phenomena of tides. These, so very powerful in the German ocean, are found to decrease sensibly in the Skager Rack and Kattegat, to be barely perceptible in the entrances of the straits, and entirely to vanish S. of the Danish islands. (*Catteau*, i., 115–118.) But though tides be wanting, a variation in height equal, frequently, to 3½ feet* (Swedish) is observed, at irregular intervals, in the waters of this sea. This phenomenon occurs at all seasons, but chiefly in the autumn or winter, or at the time of heavy rains, or when the atmosphere is charged with clouds, though unattended by falling weather. The water maintains its height frequently for several days, sometimes even for weeks, produces considerable agitation in the gulfs and straits, and, except in winter, when its power is restrained by the accumulated snow and ice, inundates the low wastes to a considerable extent. Prevalent winds, flooding rains, melting snows, and many other causes, have been assigned for this very remarkable phenomenon, which continued, however, to occur under circumstances totally incompatible with any or all of these; but in 1804 Schulten, a Swedish physician, after collecting all the observations that had been made, found that the greatest height of the water corresponded to the greatest depression of the barometrical column, and conversely. The extreme variation of the latter amounts in N. Europe to 2¼ inches, equivalent to nearly 34 inches of water; and combining this with the fact that the movement of the water always preceded, by a little, that of the mercury, he concluded that the former was owing to the *unequal* pressure of the atmosphere upon different parts of the surface; the extreme height sometimes attained being dependant upon local and accidental circumstances. It need scarcely be remarked that the almost total absence of oceanic action in this sea leaves the cause, thus assigned, to operate with full power; and if Schulten's hypothesis be confirmed, of which there is now but little doubt, it will, in all probability, serve to explain similar phenomena, observed in other close waters; as the Caspian, lake Baikal, and the lake of Geneva, to the similar variations in which Saussure has assigned a cause analogous to that offered by Schulten in the case of the Baltic. (*Mem. Acad. Stock.*, 1804; *Saussure's Voyage dans les Alpes*, i., 15.)

* The Swedish foot is 14·69 inches, English.

The currents of such a sea as the Baltic must depend, in a great degree, upon its rivers; and as these exist in the greatest number towards the N. and E. parts, the general direction of the water is from N.N.E. to S.S.W., as far, at least, as the latitude of Konigsberg. The impulse from the S. here given by the great rivers of Prussia aids the resistance of the land to turn the current W., towards the Danish islands, among which it of course becomes broken into many parts, all combining at last in a general N. direction through the Kattegat, and thence S.W. through the Skager Rack into the N. sea. The currents of the Baltic are, therefore, outwards; and when a W. wind forces the water of the ocean into its gulfs, these currents, always intricate, become extremely complicated, and even dangerous. (*Catteau*, i., 125–132.) This general direction of the water, together with the number of rivers which flow into the Baltic, account for the very slight degree of saltness which it is found to possess. It is well known that the ocean holds in solution salt, muriate of magnesia, sulphate of lime, and sulphate of soda, to the amount of about 1-27th of its own weight; but at Copenhagen, Von Buch found this proportion reduced to considerably less than 1-100th; and Thomson, at Tunaberg, S. of Stockholm, found it less than 1-210ths—a quantity so slight as scarcely to affect the palate; and it is said that farther to the N. and E. the sailors commonly use the water of the Baltic for their food. The following is the relative gravity of the waters of the ocean and of the Baltic, under various circumstances: for, it is to be observed, that the latter becomes much salter under a W. wind, when the water of the ocean is forced into it, and that this effect is perceptible for a considerable distance:

	sp. gr.		sp. gr.
Open sea at Heligoland .	1·0321	Sound . .	1·0047 to 1·0068
Frith of Forth . .	1·0290	Tunaberg . . .	1·0047
Baltic at the Scaw . .	1·0203		

In a N.W. wind the gravity at Copenhagen rose to 1·0189; and near Stockholm the following changes were observed, under the various circumstances:

	sp. gr.		sp. gr.
Wind E.	1·0030	Storm at W. . . .	1·0119
Wind W.	1·0067	Wind N.W. . . .	1·0096

Lastly, the quantity of salt procured from 1000 grains of water, from the following places, was as under:

	grs.		grs.
Frith of Forth . . .	36·6	Sound	11·2
Scaw	32·0	Tunaberg	7·4

When it is considered that all these experiments were made S. of the lat. of Stockholm (59° 21′), and that an immense number of rivers flow into the gulf of Bothnia, it seems reasonable to conclude that the N. part of that gulf should be still less salt, if, indeed, it be not free from any saline mixture whatever. (*Von Buch*, 10; *Thomson*, 386–390.) The experiments of Von Buch and Thomson, conducted independently, and with every possible care, must be received as satisfactory; but it is, perhaps, necessary to observe that Catteau gives the amount of salt held in solution by the Baltic, generally at 1-30th to 1-40th of the water. (i., 142.) It is not, however, possible to reconcile this statement with others by the same author: such as, that in many bays the water is used for cooking; that in *summer* the gulf of Bothnia yields only one ton of salt from 300 tons of water, and that the specific gravity varies between 1.0126, 1·0047, 1·0041, and 1·0038. (i., 144.) Neither is this quantity of salt consistent with the following table of the relative amount in 3 lbs. (German) of water taken from the North sea and Baltic; which is given by Catteau, on the authority of Halem and Vogel (i., 143):

	N. Sea.	Baltic.
	gr.	gr.
Muriate of Soda	522	263
Magnesia	198 ½	111
Sulphate of Lime	23 ½	12
Soda	1 ½	1
Residuum	1 ½	1
Total	746 ½	388

The German pound is a variable weight, but it is nowhere lighter than the English, and in most places on the Baltic it is from 400 to 500 gr. heavier; taking, however, the English pound of 7000 grains, the above results give less than 1-54th, and not 1-40th, far less 1-30th as the proportion of salt to the water of the Baltic. The proportion for the N. sea is about 1-28th, differing very little from that assigned above.

This freshness of the water combines with its shallowness and confined situation to render it peculiarly liable to congelation; in fact, it is every year encumbered with ice, and its straits are usually impassable from December to April. Severe frosts made the sea passable in its widest parts between Prussia and Denmark, in 1333, 1399, 1423, and 1429. The climate, like that of all Europe, and more especially of Germany, has become more mild under the effects of better drainage and cultivation; but, even within recent times, Charles XII. marched across the sound and the two belts to the attack of Denmark; and so late as 1809 a Russian army crossed the gulf of Bothnia on the ice. (*Catteau*, i., 146–158; *Thomson*, 130, 138.) The temperature in the neighbourhood of this sea does not appear to diminish with increase of lat. so much as might be expected: at Tornea, nearly 66° N., Von Buch affirms that the season does not differ from that of N. Germany by more than a month; and that the polar winter does not set in till the end of November.

The productions, animal and vegetable, of the surrounding countries are somewhat modified by the presence of this considerable body of internal water. (*See* SWEDEN, DENMARK, PRUSSIA, FINLAND, *&c.*) The sea itself is extremely rich in fish of many varieties; the taking of which forms an important branch of industry in all the neighbouring countries. The larger amphibia—morses, lamantins, *&c.*, are absent; but seals are very plentiful, not only in the sea, but in the neighbouring lakes of Ladoga, Onega, *&c.*: they do not form a part of human food, as in other less fertile countries of the North, but are chased with great avidity for their oil and skins. Whales are stated to be sometimes of enormous dimensions, but are very rarely found: one was seen in the gulf of Bothnia, in July, 1811; but this, like every other appearance of the animal, was regarded by the inhabitants as an evil omen. Of other and smaller cetacea, the marsouin (*Delphinus Phocena* of Linnæus) is common enough in the Baltic. (*Catteau*, i., 199–251.)

The Baltic *is decreasing*. Of this there can be now little reasonable doubt, the nature of the surrounding countries and recent observations being taken into consideration. The innumerable lakes that lie between it and the White sea are nothing but the last remains of a once continuous sea, which may be considered as proved by the appearance of similar animals in these waters, though now fresh, and the broad band of tertiary strata which extends throughout the whole space. (*Lyell, Prin. Geol.*, i., 289.) On the S., even within the period of *modern* history, great changes have taken place. Lubeck, which when first built was undoubtedly a sea-port, is now 12 m. from the shore, and incessant pains are requisite to preserve its communication with it by the channel of the Trave. The numerous lakes of N. Germany, like those of Finland, are but the last remnants of the sea, which once and lately lay upon the soil, as is incontestably proved by the continual choking up of some, and the constant detaching of others from the main body of water by the deposites brought down by the rivers. The Haffs of Prussia are now quite detached; the isle of Rugen is all but joined to the German continent; while its former division into several separate islands is attested by the different names bestowed upon its different parts, of which *Rugen Ansich*, in the language of the country, means Rugen Proper. Similar instances might be accumulated all along this coast, all parts of which are full of evidences of the same gradual and rapid changes (*De Luc*, 200, 236, 243, 247, 276, *et pass.*); and were other proof wanting, it would be found in the extensive mosses abounding in marine plants, which constitute so great a part of N. Germany. (*Von Buch*, 2; *De Luc*, 192, *et pass.*) In the N., on the gulf of Bothnia, the same decrease is going on with equal, if not greater, rapidity (*Von Buch*, 386); and though it is certain that the surface of the sea *cannot sink*, this the laws of equilibrium would prevent; yet, from every observation, it is no less evident that its bed is filling up, and that the surrounding land is slowly (perhaps not *very slowly*) rising. Olaf Dalin, a Swedish mathematician of the last century, calculated the change at one inch per annum; and judging by the very evident alterations in many parts, this is not probably too high, though the hypothesis was held in scorn when first broached. (*Algarotti's Letters*, 86.) As the same operation may be traced on the shores of the Caspian and Black seas (*See* CASPIAN and BLACK SEA), there can be little doubt but that these are the last drainings of the European plain towards the S.E., as the Baltic is towards the N.W., or that these waters were once in connexion; the very trifling elevation between their basins serving to determine the direction of the rivers, and the consequent deposite of new land. (See *Lyell's Geol. Map of Europe*, i., 209.) One of the most peculiar appearances on the shores of the Baltic consists of the immense number of granite blocks, boulders, as they are called, with which the alluvial soil is everywhere covered: after all that has been said upon this subject, the appearance of these anomalous masses continues a mystery. The opinion of De Luc, that they were forced by explosion through the superstrata, is perhaps the least objectionable; at all events, it is less violent than the supposition, that they were floated from a distance upon water or ice. (*Geol. Trav.*, 59–76; *et pass.*)

The ancients were but very slightly acquainted with the Baltic: it is mentioned by them under the title of *Sinus*

Codanus (gulf of the Goth Dane); but it was the theatre of those marvels, which, in ancient geography, always mark imperfect knowledge. Its shores gave forth, however, the warriors who overthrew the Roman empire, and laid the foundations of modern European society. In modern times its straits are more crowded with ships of all nations than those of any other inland sea; and the toll charged by Denmark, on all vessels passing the sound, is a considerable source of revenue. Large quantities of amber are collected on its shores, especially those of Prussia and the isle of Rugen. (*Catteau*, i., 189–251.) The origin of the name Baltic has divided etymologists. Some derive it from the Danish *Belt* (a girdle), and others from the word *Balta*, which, in the Lithuanian tongue, signifies White. The great quantity of snow which annually falls in its neighbourhood, renders this last derivation far from improbable, though the former be evidently not less applicable; at all events, the name has existed from very early times, though at present the general designation, used by the inhabitants of its shores, is *Oost-see* (Eastern sea), as serving to distinguish it from the Atlantic, or *Western ocean*.

BALTIMORE, county, Md. Situated in the N. part of the state, and contains 900 sq. m. Watered by Gunpowder river, and bounded on the S. and W. by Patapsco r. The surface is uneven but not mountainous. It contained in 1840, 13,723 neat cattle, 16,826 sheep, 28,863 swine; and produced 153,181 bushels of wheat, 79,132 of rye, 523,423 of Indian corn, 300,278 of oats, 183,684 of potatoes, and 9417 pounds of tobacco. It had 70 foreign commercial and 108 commission houses engaged in foreign trade, with a capital of $4,404,500; 1310 retail stores, with a capital of $6,795,038; two woollen-factories, thirteen cotton-factories with 34,102 spindles; thirty-three flouring-mills, forty-eight grist-mills, thirty-four saw-mills, twenty-seven tanneries, two forges, five powder-mills, one glass-factory, nine potteries, four paper-mills, nineteen printing-offices issuing six daily, seven weekly, and five semi-weekly newspapers and six periodicals; the whole, with other manufactures, employing a capital of $4,294,792: four colleges with 395 students, 61 academies, 2372 students, 94 schools, 3043 scholars. Pop.: whites, 105,331; slaves 7595; free-coloured; 21,453; total, 134,379. Capital, Baltimore.

BALTIMORE, city, port of entry and capital of Baltimore co., Md., the third city in size and population in the United States, situated on the N. side of Petapsco river, 14 m. from its entrance into Chesapeake bay, and 200 m. from the ocean by ship channel, is in 39° 17′ 23″ N. lat., and in 76° 37′ 30″ W. long. from Greenwich, and 0° 26′ E. long. from Washington. It is 40 m. N.E. Washington, 97 m. S.W. Philadelphia, 183 m. S.W. New-York, 398 m. S.W. Boston, 160 m. N.E. Richmond, 230 m. E.S.E. Pittsburg, 590 m. N.E. Charleston. The population in 1790 was 13,503; in 1800, 26,514; in 1810, 35,583; in 1820, 62,738; in 1830, 80,625; in 1840, 102,313, of whom 3199 were slaves. Employed in commerce, 1991; in manufactures and trades, 8847; learned professions, 554. It had four colleges with 395 students, fifty academies and grammar schools with 2044 students, sixty-three common schools with 3401 scholars. The city is pleasantly situated on a bay which sets up from the N. side of the Patapsco river, on gently uneven ground, which gives it a fine drainage, and affords many handsome sites for dwellings, with commanding elevations on the N. and E. As laid out, it includes four miles square; but the part compactly built extends about two miles in length from E. to W., and a mile and a half from N. to S. The number of elevations and depressions exceeds fifty, and the highest of the former, on which the Washington monument is placed, exceeds 150 ft. above the harbour. The streets are regularly laid out, generally crossing each other at right angles, and are of ample width, being from 50 to 100 ft. wide. The streets are paved in the centre, and the sidewalks are generally laid with red brick, in a diagonal interlacing. The N. end of the town is the fashionable quarter, in the vicinity of the Washington monument; and the principal promenade is Baltimore-street, 86 ft. wide, two m. in length from E. to W., through the centre of the city. It curves a little on the E. side of Jones's fall, a small stream passing through the city from N. to S., a little E. of the centre. Over this stream are three elegant stone bridges and four wooden ones, connecting the different parts of the city. The houses are generally built of red brick, with marble or granite basements, the materials for which are produced in the vicinity; and they evince substantial wealth and general prosperity, without an appearance of ostentation or an attempt at display. Among the public buildings the City hall, on Holliday-street, is a plain edifice, three stories high; has a portico and an entablature, supported by four massy columns, without much pretension to architectural elegance, but is a substantial and convenient building, occupied by the city council and several public offices. The Court house, corner of Washington and Monument streets, is a large and commodious building, appropriated to the city and county courts and their connected offices. It is 145 ft. long and 65 wide, and two stories high, constructed of brick and marble. The building is elevated ten or twelve feet above the adjacent streets, and is approached in front and rear by a flight of steps leading to a platform, supporting several Tuscan columns, on which rests a plain entablature. The building is surmounted by a cupola of imposing appearance. Its interior arrangements are such as to render it one of the finest court houses in the United States. The State penitentiary, corner of Forrest and Madison streets, consists of three separate edifices. The centre building is occupied by the keeper's family, officers, and guards; the W. wing by the female convicts, and the E. wing by 320 dormitories, ranged on both sides of the building. There are also ranges of workshops, extending 250 ft. in length and 25 in width, and some of them two stories high, though more only one. The prisoners work together by day, and are confined in separate cells at night. The county prison, near the penitentiary, is a neat building, with a semi-octagonal tower at each end, is two stories high besides the basement and the attic, surmounted by a neat cupola. Among the churches, two are particularly distinguished for architectural elegance. The first is the Roman Catholic cathedral, corner of Mulberry and Cathedral streets, which is in the form of a cross, 190 ft. long; its breadth at the arms of the cross 177 ft., and its height from the floor to the top of the cross which surmounts the dome 127 ft. The building is well lighted by windows in the dome, concealed from the spectators below. There is an elliptical arch between each of the supports of the dome, one of which, at the head of the cross, forms the exterior of a lesser dome above the grand altar. At the W. end rise two tall towers, crowned with Saracenic cupolas, resembling the minarets of a Mohammedan mosque, between which the original architect, Mr. Latrobe, designed to place an elegant Ionic portico, which has not been completed on account of the great expense of the building. This would add greatly to its symmetry and beauty. The high altar is very imposing, both in its architecture and its decorations. The church has the largest organ in the United States, having 6000 pipes and thirty-six stops. It contains two splendid paintings, the one the descent from the cross, presented by Louis XVI., and the other St. Louis burying his officers and soldiers slain before Tunis, presented by Charles X. of France. The Unitarian church, corner of Charles and Franklin streets, is admired for the beauty of its architecture. It is 108 ft. long and 78 wide. In front is a colonnade consisting of four Tuscan columns and two pilasters, which form three arcades. From this portico five bronze doors, in imitation of those of the Vatican at Rome, open, three conducting to the body of the building and two to the galleries. The interior of the church is a square, formed by four equal arches of 33 ft. span, which support a dome of 55 ft. in diameter. The summit of the cupola is 80 ft. high, and terminated by a star of light passing through the glass at the top of the dome, being an imitation of that of the Pantheon at Rome. The organ, in external shape resembling a lyre, the perpendicular pipes representing the strings, contains 1400 pipes and twenty-two stops. The whole interior of the building is finished with much neatness and taste. St. Paul's Episcopal church, having a lofty tower and steeple; the first Presbyterian church, with two towers, surmounted by cupolas; and the first Baptist church, with an Ionic portico and circular dome, are prominent public buildings of the city. The Washington monument, at the intersection of Charles and Monument streets, is the most imposing structure in the city. It consists of a Doric column, rising from a base 50 ft. square and 20 ft. high. The shaft of the column is 180 ft. high and 20 ft. in diameter, is hollow, with a winding staircase on the inside, by which it is ascended to its top, where is a statue of Washington, 13 ft. in height. The whole is constructed of white marble. From its top is a commanding view of the city and its environs. The Battle Monument, at the corner of Calvert and Fayette streets, was erected in 1815, in memory of those who fell defending the city, when attacked by the British in 1814. The base is Egyptian, rising to the height of about 20 ft. from the ground, lessening in the breadth of the square mass as it ascends. On each front is an Egyptian doorway, and the whole is surmounted with a deep overhanging cornice, with the winged globe and other Egyptian symbols. Above the base, the column rises in the form of a Roman fasces, on the bands of which are inscribed, in letters of gold, the names of those who fell in the battle which it commemorates. The whole is surmounted by a beautiful female figure, emblematical of the city of Baltimore. This monument is constructed of fine white marble, and its entire height is 52 ft. These, with some other monuments, have caused Baltimore to be denominated the Monumental city. There are six markets in the city. It is well supplied with pure and wholesome water. In different parts of the city are public springs or fountains, enclosed by circular railings, and covered by

small, neat, open temples, consisting of columns supporting a dome. They are denominated the City spring, Western fountain, Centre fountain, and Eastern fountain, and they are equally ornamental and useful. Water is also brought from an elevated part of Jones's falls in an aqueduct half a mile long, into a reservoir in Calvert-street, and thence distributed in pipes over the city.

The literary and scientific institutions of Baltimore are various and respectable. The Maryland institute was established for the promotion of the mechanic arts, to diffuse scientific knowledge by means of lectures and otherwise, and has a fine chemical laboratory, and a very complete philosophical apparatus. The Maryland Academy of Science and Literature is located in the Athenæum buildings. The Maryland University, Lombard-street, between Green and Paca streets, was incorporated in 1812, and Baltimore College has been merged in it. It is well supplied with professors, and it has medical and law departments, which are respectable. The Baltimore Eye Infirmary is connected with the medical department, and affords the students an opportunity of witnessing its operations. St. Mary's college, corner of Franklin and Green streets, is under the direction of the Roman Catholics, was founded in 1799, has a president and twenty-four professors and other instructers, 187 alumni, 73 students, and 12,000 volumes in its libraries. The commencement is on the third Tuesday in July. Among the other institutions are M'Kimm's Free School, occupying a fine building of Gothic architecture, after the model of a temple at Athens; the Oliver Hibernian Free School, designed mainly by its founder for the education of the children of Irishmen; the City Library, the Apprentices' Library, and the Exchange Reading-rooms. A number of the public schools have handsome and convenient edifices. The charitable and benevolent institutions are numerous. Among these, the hospital in the north-western suburbs has a commodious building, commanding a fine view of the city and surrounding country, which cost $150,000; the alms-house, already noticed, the city dispensary, several orphan asylums, and various other societies for the relief of human suffering are conspicuous.

The commerce of Baltimore is extensive, for which it enjoys great facilities. It possesses most of the trade of Maryland, half that of Pennsylvania, and a portion of that of the western states. The harbour, which is very fine, consists of three parts. The entrance to it between fort M'Henry and the lazaretto is 600 yards wide, with 22 ft. of water. This depth is continued, with an increased width, for a mile and a quarter, to near Fell's point, where the width is contracted to one fourth of a mile. This is the entrance to the second harbour, which is about 12 ft. deep, but it widens above into an ellipse, a mile long and half a mile wide, and 15 ft. deep. The third or inner harbour has a depth of 10 ft., and penetrates to near the centre of the city. It is defended by fort M'Henry, at the entrance of the outer harbour, which successfully resisted a powerful attack by the British fleet during the last war. Vessels of 500 or 600 tons can lie at the wharves near Fell's point, and those of 200 tons can come up to the town in the inner harbour. Baltimore is the third or fourth city in point of commerce in the United States. As a market for tobacco it is second to no other, and it is the greatest flour market in the world. In 1840 there were inspected 764,115 barrels and 31,606 half barrels of flour. Its tonnage in 1840 was 76,022. Among the commercial institutions, the Exchange, between Water and Gay streets, is a splendid building, 225 ft. long and 141 ft. deep, and three stories high above the basement. The room where the merchants assemble is 53 ft. square. The building has colonnades of six Ionic columns on its E. and W. fronts, the shafts of which are single blocks of fine Italian marble, of fine workmanship, and the whole is surmounted by a dome 115 ft. above the street. The Custom house is entered from Water-street, and has a spacious saloon, divided by colonnades into three apartments. The officers' desks are ranged between the columns, and the centre is occupied by persons doing business here. The collectors' room is at the upper end of the hall. A telegraph is located on Federal hill, near the basin, communicating with another on a point on Chesapeake bay, giving notice of the approach of vessels in the bay. On the Basin, at the foot of Harrison street, is an immense tobacco warehouse for the storage of this great staple of the state of Maryland. There were in 1840 nine banks, besides savings' institutions, with an aggregate capital of $2,500,000; and nine insurance companies, with a total capital of $2,450,000 dollars. One of them was a mutual assurance company, without a definite capital. The public debt of the city, January 1st, 1842, amounted to $4,295,379.

The manufactures of Baltimore are not less extensive than its commerce. A great amount of water-power is concentrated in the vicinity, which has been extensively improved for manufacturing purposes. Jones's falls, a small stream which passes through the city, has a succession of falls which afford considerable water-power. The Patapsco, though not a large river, has a fall of about 800 ft. in the course of 30 m., affording many valuable mill sites. There are, within 20 m. of the city, sixty flouring-mills, besides numerous cotton manufactories, and other manufactories of cloth, powder, paper, iron, copper, glass, steam-engines, chemicals, tobacco, &c. There were in 1840 seventy commercial and 108 commission houses engaged in foreign trade, with a capital of $4,404,500; 1254 retail stores, with a capital of $6,708,611; twenty lumber-yards, with a capital of $267,500; machinery was produced to the amount of $284,000; hardware and cutlery to the amount of $10,300; the precious metals, $13,000; various other metals to the amount of $310,000; one woollen-factory, with a capital of $20,000; one cotton-factory, with 3600 spindles, which, with a dyeing and printing establishment, employed a capital of $16,200; tobacco employed a capital of $118,900; thirteen tanneries, a capital of $132,800; three distilleries and three breweries, a capital of $87,000; one powder-mill, a capital of $30,000; paints, drugs, &c., a capital of $79,000; one glass-factory, a capital of $30,000; nine potteries, a capital of $22,300; six sugar-refineries produced $176,000; three paper-factories produced $59,000; eight rope-walks employed a capital of $66,500; one grist-mill and two saw-mills employed a capital of $27,000; furniture was produced to the amount of $268,200; 213 brick and stone houses and one wooden house were built, at a cost of $548,400; nineteen printing-offices, ten binderies, six daily, seven weekly, and five semi-weekly newspapers, and six periodicals, employed 279 persons and a capital of $119,900. The total amount of capital employed in manufactures was $2,729,983.

Baltimore was originally settled by tolerant Roman Catholics; and this religious denomination has still a preponderance in the city. Next to these in numbers are the Methodists, and the Episcopalians probably occupy the third place. There are in the city forty-two churches, of which the Roman Catholics have six, including their splendid cathedral; the Methodists nine, the Episcopalians five, the Baptists four, the Presbyterians three, the Scotch Presbyterians two, the Unitarians one, besides Lutherans, German Reformed, Friends, and some others.

Of places of amusement, there are two theatres, a circus, a museum, two assembly-rooms, and concert-hall for musical entertainments.

The communication of Baltimore with the surrounding country is greatly facilitated by several important rail-roads. The Baltimore and Port Deposite rail-road extends 36 m. to Havre de Grace, and connects with a chain of rail-roads to Philadelphia, having a total distance of 95 m. The Washington branch of the Baltimore and Ohio rail-road extends 38 m. to Washington city. The Baltimore and Ohio rail-road has for some time been in operation 80 m. to Harper's ferry. It is designed to be completed to Wheeling, on the Ohio river. It is in progress, and nearly or quite completed to Cumberland; and, when finished, it will constitute the most direct communication between the Atlantic coast and the valley of the Mississippi. The Baltimore and Susquehanna rail-road extends to York in Pennsylvania, and connects with a chain of rail-roads to Philadelphia. Baltimore has lines of steam packets to Philadelphia and Norfolk, and other packet lines to New-York and to various places on the Atlantic coast.

The municipal government in Baltimore is vested in a mayor and city council. The city council consists of two branches: one consists of two members from each of the twelve wards into which the city is divided, and are elected annually by the people. The other consists of one member from each ward, and are elected every two years by the people. The mayor is elected for two years by twelve electors, one from each ward, chosen by the people. The two branches of the common council sit in separate chambers, and have a negative upon each other, and the mayor has a veto upon both, unless overruled by a vote of three fourths of both houses.

Baltimore was first laid out as a town in 1729. In 1765 it contained only fifty houses. It was chartered as a city in 1797. Few towns in the United States have risen more rapidly: a proof of its great natural advantages. Its growth has been healthy, and it is destined to future and great advancement. Baltimore, during the last war, sustained a combined attack by a British force of about 12,000 troops and forty or fifty vessels. Sixteen ships of the British squadron, on the 13th of September, 1814, bombarded fort M'Henry for twenty-four hours, but were repulsed, and drew off. The troops landed at North point, on the 12th, to the amount of 9000 men, and proceeded to within six m. of the city, where they were met and opposed by the Baltimore brigade under Gen. Stryker, consisting of 3200 men; a severe battle ensued, and the British commander, General Ross, was killed early in the engagement, which was continued by the second in command. The Americans re-

treated towards the city, and were slowly followed by the enemy on the 13th. But, fearful lest their retreat should be intercepted, which was in contemplation, they precipitately retired on board their fleet, and left the Chesapeake. It was to commemorate this bloody but successful defence of the city that the noble Battle Monument was erected.

BALTIMORE, t., Windsor co., Vt., 65 m. S. Montpelier, organized in 1794. It has one school 40 scholars. Pop. 155.

BALTIMORE, hundred, Sussex co., Del. It has seven stores, two grist-mills, two saw-mills, six schools, 185 scholars. Pop. 2941.

BALTIMORE, a marit. town of Ireland, co. Cork, prov. Munster, on a bay of the same name, near Cape Clear island; 46 m. W.S.W. Cork. Pop., in 1831, only 459. In appearance and accommodation it is merely a village, and claims rank as a town only from having been incorporated, and being a port. The houses are built round the remains of the old castle, and have latterly been increasing in number and respectability. The church is a new and elegant building on an elevated site: there is an endowed school-house for both sexes, and a dispensary. Baltimore was incorporated by James I., in 1613, and sent two mem. to the Irish H. of C. till the Union, when it ceased to be represented, and its other privileges fell into disuse. The jurisdiction of the port extends from Mill Cove to Galley Head, including the creeks of Berehaven, Bantry, Ross, Glandore, and Castle Townshend, in the last named of which (ten miles distant) the custom-house and principal fiscal establishment is held. The customs' duties were, in 1834–1836, respectively £1041, £2151, £1408; the increase in the second of these years was occasioned by the import of timber for the Allihies copper-mine near Castletown, and for which the greater part of the duty was returned. The exports during the same year from Baltimore, with Castle Townshend, Glandore, and Ross, were corn, &c., 5681 tons; potatoes, 895 tons; copper ore, 85 tons; swine, 107 head; estimated value, £37,144. The imports, in tons, coals, &c., 697; iron, 113; sugar, 55; salt, 118; herrings, 66; with some minor articles: total estimated value, £17,767.

The fisheries, for the protection of which a small pier and quay were erected in 1833, are carried on to some extent. The following is a statement of the number of boats and men employed, as given by the commissioners of fisheries for 1830, and by the coast-guard officers for 1836:

	1830.			1836.		
	Vessels.	Tonnage.	Men.	Vessels.	Tonnage.	Men.
Decked	4	107	25	2	45	14
Half Decked . .	27	445	143	20	200	120
Open Sail . . .	40	. .	226	20	. .	104
Row Boats . .	336	. .	1,973	70	. .	350
Total . .	417	552	2,267	112	245	588

The post-office revenue is included in that of Skibbereen, at which town the conveyance S. by public vehicles ceases.

BALTINGLASS, a par. and town of Ireland, co. Wicklow. The town is situated on the S. side of the Slaney, 34 m. S.W. Dublin. Pop. of par., in 1831, 4110; of town 1670. The latter is remarkable only from a parliament having once been held in it, and from its having formerly returned two mem. to the Irish H. of C.

BAMBARRA, a considerable country of interior Africa, the precise position of which is far from being accurately ascertained. On Rennell's map to Park's first expedition, its lat. is given from 12° to 15° 22′ N.; its long. from 15′ E. to 5° 20′ W. The map to the last journal of Park makes the lat. extend from 11° 15′ to 16° 26′ N.; the long. from 1° 35′ E., to 4° 52′ W. (See also, *Advertisement, Park's 2d Journal.*) And, lastly, Caillié appears to place it between 9° 20′ and 14° N. lat., and between 4° 40′ and 9° 20′ W. long. (*Travels, 2d Map*, i., 364, *et seq.*) A mean among these different statements will give about 400 m. for its greatest length, from N.W. to S.E., and about 300 m. for its greatest breadth, in the direction of the meridian. Upon Park's map, the area is about 95,000 sq. m.; but, of course, little reliance can be placed upon the accuracy of these results. The names of the surrounding countries are known with more certainty; they are, on the E., Gotto, Baedoo, and Maniana; on the S., the Mandingo country and district of Kong*; on the W., Kaarta; and on the N. and N.E., Beeroo and the tributary kingdom of Masina. (*Park*, p. 92, 140, 216, &c., and *Map.*) Bambarra is, for the most part, a plain country, with a general inclination to the N. and E. The W. portion is, however, mountainous, or, rather, hilly, and forms the E. termination of the high lands of Kaarta, Manding, &c. These mountains are of granite and other old formations, but of no great height; and the soil, both on their sides and on the plains, though in the immediate neighbourhood of the Sahara, is generally good. The Niger, Joliba or Quorra, has its rise about 150 m. S.W. from the frontiers of Bambarra, and flows through the whole length of that country from S.W. to N.E. It is an important stream at this early part of its course, but by no means so gigantic as it afterward becomes. At Sego, the Bambarran capital, it is about the size of the Thames at Westminster. (*Park*, p. 194.) There is no other river of importance in the country, but the smaller water-courses are innumerable; they all overflow during the rainy season, which lasts full 5½ months, so that the moisture is fully sufficient to render the land in a very high degree productive. The climate is one of intense heat, especially in the N., where the land borders upon the desert; but, upon the whole, the temperature is more endurable in Bambarra than in some of the neighbouring countries; and in the S. parts it is cold enough in the rainy season to render a fire desirable. (*Caillié*, i., 327.) The rainy season extends from June to November, and is ushered in by violent tornadoes. Its termination is usually marked by the dry N.E. wind called Harmattan (*see* ASHANTEE), which is here, however, not cold, as on the coast of Guinea, and so far from being dreaded, is accounted salubrious, particularly to Europeans, from the rapidity with which it absorbs the superabundant moisture of the air.

The mountains are said to be rich in gold, but less so than in Jallonkadoo and other countries farther W. They also produce iron, and there can be little doubt but that a well-directed industry would turn their mineral treasures to account. Vegetation is varied and abundant; of trees there are the immense baobab, the bombax (silk cotton), oil palms, dates, tamarind, and a great variety of forest trees. The earth produces, with little labour, yams, cassava, maize, small millet, folgne, rice, &c., many of which yield two crops a year; and the lotus (*rhamnus lotus* of Linnæus) is an important article of food. The tropical fruits, so common in Guinea, are, however, very scarce here; Park (p. 260) did not meet with the pine-apple, orange, or banana, except near the mouth of the Gambia; and though Caillié (i., 181), mentions them, their locality is fixed by him also near the coast, and, consequently, at a considerable distance from Bambarra. It does not appear that the sugar-cane, coffee, or cocoa-tree are met with; but to compensate for this, corn, rice, &c., are so plentiful, that, in the language of the natives, "hunger is never known." This must, however, be received with limitation, since war and neglect of cultivation have sometimes produced destructive famines. The most remarkable production of this country is the shea, or butter-tree, a plant about the size and appearance of the American oak, the oleaginous fruit of which answers every purpose of butter made from cow's milk, combined with the incalculable advantage, in such a climate, of preserving its firmness and sweetness for the whole year without salt. This last is an article peculiarly deficient in Bambarra and the neighbouring countries; so much so as to be a valuable article of foreign commerce, and bought at a high rate with the corn and gold dust of the district. Tobacco is cultivated in many parts with great success. The animals, except monkeys, which are strangers, are the same as those of tropical Africa, generally; lions, tigers, wolves, panthers, elephants, camels, giraffes, antelopes, &c. Cattle are not abundant, and in some few places unknown (*Caillié*, i., 325); neither do sheep or hogs appear to be plentiful, but goats and dogs are very numerous. There are birds of many species, and a great variety of reptiles, among which are crocodiles, in the river, but these do not appear to be particularly dangerous; the hosts of powerful and venomous insects are regarded with a much greater degree of apprehension.

The natives of Bambarra are a part of the great Mandingo family, which extends from the W. coast to the river Niger (*see* MANDINGO): they speak the same language, though with a peculiar dialect; and their habits, appearance, and general attainments, are the same. The towns and villages are very populous; some of them containing as many as 30,000 inhabitants; but, on the other hand, the open country is utterly deserted, for which two reasons may be assigned; viz., the constant danger from wild beasts, and the constant wars between the different states and princes. From Park's account of the pop. of Sego, Sansanding, Wapola, and other towns, combined with the number of such towns which appear on his map, it may perhaps be inferred, that Bambarra contains altogether between 2,000,000 and 3,000,000; of whom 3-4ths at least are slaves. In customs they do not materially differ from other negroes; they are tolerable agriculturists, work in gold and iron, and tan, dress, and manufacture leather. These are the only arts which are held in esteem as distinct callings; but spinning, weaving, and dyeing, are very diligently performed by the women, and the Bambarran cloth, though coarse, is soft and durable, and generally of a rich, lasting blue colour. A pretty extensive trade, at least for a barbarous people, is carried on with the Moors of the desert, the more remote kingdoms of Timbuctoo and Houssa, the territory of Kong, and even with Ashantee and Senegambia. Their exports

* This term, though the generic appellation for a mountain in the Mandingo language (*Caillié*, i., 366), appears unquestionably to be the proper name of a kingdom also (*Parks*, p. 240), and not improbably the high range in 9° or 10° N. may be called Kong, *The Mountains*, by way of eminence.

are iron, cloth, *sometimes grain*, ivory, and, above all, slaves; their imports consist of salt, with a few Manchester goods, some hardware, and arms. In skill, refinement, and cleanliness they are far below the negroes of the Gold Coast; but in moral feeling they appear to be above them: their slaves, who are of two kinds, native born, and foreigners, either purchased or captured in war, are usually treated with kindness; the disgusting cruelties which mark the festivals of the Guinea negroes (*see* ASHANTEE) are unknown among them; and they are said to be anxious (especially the women) to assist, to the utmost of their power, the sick and unfortunate: the worst trait in their characteris their propensity to theft. The government is rather oligarchical than monarchical; the king is nominally the head of the state, but he appears to have little more power than to recommend certain lines of conduct to the *dooties* (governors) of towns, which recommendation is not always attended to. The Moors of N. Africa long since introduced Mohammedanism among the tribes S. of the desert; the great majority of these retain, however, their old faith, which, in Bambarra, seems to extend no farther than a general acknowledgment of a supreme being and a future state, with a periodical assembling for worship, only at the time of the full moon. The only religious buildings are the mosques, the ministers of which are also *schoolmasters*; for instruction, to some small extent, is given to the young negroes, but it is in Arabic, or, perhaps, in some cases, in the native language, written in the Arabic character, there being no negro tongue which possesses an alphabet. The Moslem Bambarrans are called Bushruns, the Pagans, Kafirs or infidels. Polygamy is common with both sects, and among their marriage laws is one which is rather peculiar: a woman may refuse to become a wife, but should she, after that, contract marriage with another, the first suitor has the power of seizing her as a slave. The domestic relations are, however, generally maintained with great kindness, and the affection of children to their mothers is touching and peculiar. The food is usually vegetable; the amusements, music, dancing, and singing; and the effect of simple diet, and cheerful, or, rather, thoughtless, disposition, is evinced by the fact, that, though the climate breeds fevers, fluxes, yaws, elephantiasis, leprosy, and guinea-worm, the Bambarrans, as a people, must be described as healthy, though they do not usually attain to any very great age. (*Park's Travels*, p. 185–328; *Caillié*, i., 321–475.)

BAMBERG, a town of Bavaria, circ. Upper Mayne, on a piece of uneven ground on the banks of the Regnitz, about 3 m. above its confluence with the Mayne, 33 m. N. Nuremberg, lat. 49° 53′ N., long. 10° 50′ E. Pop. 21,000. The Regnitz divides it into 3 parts, the communication between them being maintained by two bridges. It is well built, paved, and lighted, and is partially surrounded by ramparts and fossés. Among the public buildings is the cathedral, a noble structure in the Byzantine style, founded in 1004, and finished, after being partially burned down, in 1110. It contains tombs of its founder, the emperor Henry II., and of his spouse, the empress Cunigunda, with that of Pope Clement II., &c. St. Martin's church, erected by the Jesuits, is a fine building. The church and old convent of St. Michael occupy a height adjoining that on which the cathedral stands. The convent has been converted into a poor-house. There is also a *schloss*, or palace, formerly the residence of the bishops or princes of Bamberg, a plain building of considerable extent, with a gallery of bad pictures; a town-house, theatre, &c. Bamberg is the residence of an archbishop, a court of appeal for the circle, &c.; and has numerous literary and charitable institutions. At the head of the former may be placed the lyceum and gymnasium, that have replaced the old university, suppressed in 1585, and which furnish a very complete course of instruction for between 700 and 800 pupils; it has also a seminary for the instruction of schoolmasters, a school for mechanics, a museum of natural history, a royal library with nearly 60,000 volumes, and numerous literary societies, and private collections of books and pictures. The infirmary has surgical, anatomical, and other medical schools attached to it, and a botanical garden. Large quantities of beer, in much repute in the surrounding country, are produced here; and there are also manufactures of gloves, jewellery, wax, tobacco, porcelain, &c. A great deal of liquorice is raised in the environs; and its preparation forms a considerable branch of business. Garden seeds are also largely produced. It has two annual fairs, and is the centre of a considable commerce.

Bamberg was formerly the capital of an independent bishopric, secularized in 1801, and assigned in 1803 to Bavaria. (*Murray's Hand-book for S. Germany*; *Reichard, Guide des Voyageurs*; *Penny Cyclopædia*, &c.)

BAMBOROUGH, a small town of England, on the coast of Northumberland, nearly opposite to the Fern islands, and 17 m. S.E. Berwick-on-Tweed. Though once considerable, it is now so small as to have only about 420 inhab., and would be unworthy notice were it not for its old castle. The latter, which is very extensive, and in good preservation, is built on a basaltic rock, 150 ft. above the level of the sea, from which it is a most conspicuous object. The castle and some other property having been purchased by Lord Crewe, bishop of Durham, he bequeathed it, in 1730, for charitable purposes. In pursuance of the benevolent intentions of the founder, the castle has been partially renovated and repaired. Watch is constantly kept, and signals made from the tower in hazy weather, to warn ships of their approach to this dangerous coast; a life-boat is also kept in readiness, and the most efficient measures adopted, not merely for the prevention of shipwreck, but for the relief of those who have undergone that misfortune. A school on the Madras system is established in the castle, in which there are also a library and a dispensary. The income of the Bamborough Castle estates amounted, in 1830, to £8126. (*Penny Cyclopædia*, &c.)

BAMBOUK, a country in the interior of W. Africa, in about from 12½° to 14½° N. lat., and from 10½° to 12½° W. long. In form it is nearly a parallelogram, 140 m. in length, and 100 in width, and containing apparently about 14,000 sq. m. in area: but, as the travellers in the country had frequently no better means of determining positions than by estimating distances, and marking courses, the accuracy of these observations cannot be much relied on. The surrounding countries are, Kajaaga or Galam, and Kasson on the N.W. and N.; Brooko and Fooladoo on the E.; Woradа on the S.; and Dentilla and Bondou on the W. (*Voyage au pays de Bambouc* (*no name*), Paris, 1789, p. 1; *Labat, Nouvelle Relation de l'Afrique Occ.*, iv., 1; *Golberry, Voy. en Afrique*, i., 380; *Park*, 1*st Journ.*, p. 63; 2*d Journ.*, p. 51; *Houghton, Afric. Assoc.*, cap. xiii., 9, &c.)

Bambouk is a mountain-country, most probably a table-land, near the centre of the Senegal system, with a general inclination towards the N. and N.W. In some places it is very rugged, though the peaks do not appear anywhere to attain a great elevation: the highest are not more than 600 feet, and those in the S. rarely exceed 300 feet above the general level of the land, which, however, must itself be considerably higher than the sea. Glens and valleys of the most romantic kind are scattered among these mountains, and they are skirted by plains of some considerable extent. *Park*, 2*d Voy.*, p. 60, 65, &c.; *Golberry*, i., 412, &c.) Water, is very abundant, the Senegal forming the N.E. boundary, and two large affluents of that river, the Fa-leme and the Bar-fing, constituting the W. and E. frontiers of the country. Park considers the latter to be the main stream of the Senegal (1*st Journ.*, p. 336); and it is certainly much larger than the branch which meets it at the N.E. corner of Bambouk, though the direction of the latter be the same as the after course of the river. Besides these, there are a great abundance of rivulets, more especially towards the W.; and there is one other stream, the Sanon Colez, or Golden river, which is of considerable size. It rises near the capital, and, after traversing the whole country with a N.W. course, is received into the Fa-leme. (*Labat*, iv., 20, &c.; *Golberry*, i., 381, 412, &c.) The climate is extremely hot, and Golberry remarks (i., 412), that the heat of the interior, which is screened from every wind except that of the desert, is quite insupportable. Towards the S., however, cool days are experienced, and the grass is fresh and verdant throughout the year. The rainy season commences about July or August, and lasts four months: during this period the low country is flooded, the whole rendered frightfully unhealthy for Europeans, and probably not very salubrious to the natives, since their labours seem to be confined to the eight dry months. (*Voy. au pays Bambouc*, p. 37, &c.; *Labat*, iv., 4, &c.; *Golberry*, i., 411; *Park*, 2*d Journ.*, p. 52, &c.) But the effect of the heat, combined with this abundant moisture, is to render Bambouk one of the most prolific countries in the world. The few sterile spots are on the summits of the highest mountains, where, denuded of soil, the bare granite refuses, of course, to nourish vegetable life, but in all other situations the vegetation is rich and varied, almost beyond example. Among trees, there are the majestic boabab, the banyan,* calabash, tamarind, every species of palm, and a great variety of acacias. The vine grows wild and in great luxuriance, but its fruit, like that of all the other trees, is extremely acid, though eaten with great avidity by the natives. As in other countries north of the Kong mountains (*see* BAMBARRA), the rich fruits of Guinea are absent; but the earth produces in great abundance, and almost without culture, maize, two sorts of millet, manioc, water-melons, and nearly every species of leguminous plants. The low lands, also, subject to inundation, are covered with rice of an extremely fine kind, and which grows to the height of eight feet. The Guinea grass is abundant, which, with a great variety of other rich pas-

* It is supposed, at least, that Golberry means the banyan by the tree which he calls *Bandaviarb* (i. 404).

ture, serves to feed innumerable herds of cattle. (*Golberry*, i., 404–411; *Voy. au pays Bamboue*, p. 31–45.) This extreme fertility is strangely contrasted with the account given by the Abbé Raynal (*E. and W. Ind.*, iii., 135) on the authority of a nameless traveller, that the soil was an irredeemable desert, producing nothing but metals, and wholly unfit for the residence of man! The traveller referred to was probably Compagnon, who, according to the author of *Voy. au pays Bamboue*, was never in the country, but had published *les impostures les plus absurdes et les plus punissables*, by confounding soils, people, governments, and manners, the most opposed to each other (p. 2, 6).

The animals of Bambouk are those of tropical Africa generally, and all in great abundance. The number of cattle has already been alluded to; the other domestic animals are horses, sheep, goats, and camels. The lion is not found upon the mountains, but is very numerous in the plains, where also wander immense herds of elephants. The rivers teem with life, and, among other inhabitants, are infested with very powerful crocodiles. Birds of all kinds are numerous, and insects as prolific as in other equinoctial regions; bees, in particular, are so plentiful, that the manufacture of mead is, next to mining and dairy work, the most common occupation of the people. This fact alone is a sufficient proof that Bambouk must abound in trees and plants of the richest kind. (*Golberry*, p. 405, 408; *Labat*, iv., p. 99–99; *Houghton's Af. Assoc.*, xiii., p. 10, 14.)

But that which has rendered Bambouk a subject of interest for many generations, is its reputed riches in gold and other metals. From the first settlement of Europeans on the coast of Senegambia, now five centuries ago, they heard of an interior country, the centre of all the auriferous mountains in that part of Africa; and, unlike most tales of wonder, the facts seem to have verified all that was related. So abundant, indeed, is the ore, and so numerous are the mines, that curiosity, even when prompted by interest, seems to have palled, and become insufficient to induce a traveller to delay his journey for the purpose of inspecting a greater number. (*David's Journ. in Golberry*, i., p. 475.) There are four principal mining, or rather gold-producing districts; but the whole soil abounds with gold, which can be collected with very little labour, and hardly any skill; it lies so near the surface, that merely scraping up and washing the earth serves, in many cases, to separate the metal in a pure state; and the more elaborate attempts at artificial operation consist in sinking a few pits, and breaking up the ore, which usually parts from its matrix in such a state that washing only is necessary to render it fit for the market. It need scarcely be remarked, that in such a country, the rivers literally run over golden sands; and should skilled labour be ever brought to bear upon the land, there can be little doubt but that its treasures are inexhaustible. At present, however, the art of mining, properly so called, is quite unknown to the natives. Besides gold, extensive veins of iron exist in Bambouk; and it is extremely probable that most of the other metals would be found if sought for. (*Golberry*, i., p. 434–480; *Voy. au pays Bam.*, p. 21–36; *Labat*, iv., p. 54–58; *Park's 2d Journ.*, p. 55–59.)

The population of Bambouk is dense. The people form a part of the great Mandingo family, from which they do not differ in any respect with regard to appearance, religion, or general manners. (*See* MANDINGO.) The government, though under a king as head, appears to be oligarchical; the farims, or chiefs, exercising almost unlimited authority, each in his own district, but acknowledging a general dependance (perhaps little more) upon the sovereign.

The Bamboukians are inferior in activity and industry to the other Mandingoes, and they have also corrupted their language by a large mixture of Jaloof, Foulah, and Moorish terms. Their arts are extremely few, but their wants still fewer; for though they manufacture nothing but some rude tools and ornaments, their only imports seem to be, cotton cloth, ornaments for their women, and salt, of which necessary article, Bambouk, like so many other African countries, is totally destitute. For these they freely give their gold in exchange, and the commerce is one of great profit to their Arab neighbours. (*Golberry*, i., p. 381, 383–418; *Voy. au pays Bam.*, p. 45–68; *Labat*, iv., p. 2–9, &c.)

Buried in the interior of a burning continent, and surrounded by mountains of difficult passage, Bambouk remained long totally unknown to the rest of the world. It is, indeed, not a little surprising, that a conquest of the country by a *European* power should have remained unheard of, till communicated by the Negroes themselves 300 years afterward. In the 15th century the *Portuguese* made themselves masters of the country, and retained it for some considerable time. The natives affirm that they acted very tyrannically, but that becoming reduced in numbers by the unhealthy nature of the climate and their own debaucheries, the remnant were set upon and destroyed in a single day! This story is confirmed, not only from the fact of many ruinous forts and houses of Portuguese construction still existing, but from the knowledge which the Bamboukians have that such a people as the Portuguese live at a great distance; from the deep-settled hate with which they regard their name; from the terror which they feel lest their former conquerors should return to take vengeance on them; and from the large mixture of Portuguese words in their language. The expulsion of the Marabouts or Mohammedan priests from their country is another singular event in Bamboukian history. (*Golberry*, i., p. 419–494; *Voy. au pays Bam.*, p. 7, *et seq.*; *Houghton, Af. Assoc.*, xiii., p. 11, &c.)

With the exception of the Portuguese, who have left no records of their observations, the first European who reached Bambouk was an English officer, named Gasche, who, ascending the Gambia, contrived to reach the Bomboukian capital in 1690. His stay was short, and his observations merely general and incidental. Compagnon's reported visit was in 1716. Soon after this, M. Brué, a director of the French African Company, formed the project of subduing Bambouk, and securing its mines of gold. To obtain the necessary information as to the practicability of his project, he attempted to enter the country from Kajaaga, on the N.; but it does not appear that he made any great progress in the interior. His impression, however, was, that with a force of 1200 men his plan could be carried into execution, and the mines secured to European industry. It is, indeed, more than probable that a less force might succeed in effecting a *first* conquest; but the fate of the Portuguese, and the extreme unhealthiness of the climate, make it also certain that their possession could be retained only by a frightful sacrifice of life, and the most unremitting watchfulness. Between 1730 and 1744 much was done to effect a better knowledge of this country by Messrs. Levens, David, Pilay, and Legrand; the two first governors, the others employés of the French African Company at Senegal: Golberry speaks, also, in high terms of an English journal published in 1782; but this work cannot now be found. Mungo Park, in his first journey outward, reached the W. and N. frontiers of Bombouk (Bondou and Kajaaga); and on his return, as also in his unfortunate second journey, he traversed a considerable part of its S. division: but the traveller from whom the most perfect information might have been obtained was Major Houghton, who not only traversed the interior of the country, but resided in it a considerable time, under terms of the closest friendship with the king. The small remnants of his papers are unquestionably the most valuable documents which exist respecting it.

Such, then, are the scanty sources whence our knowledge of this region is derived; a region the mineral wealth of which is probably not exceeded by that of any other in the world: but which, owing to its climate, will most probably continue in irreclaimable barbarism.

BAMPOORA, an inland town of Hindostan, prov. Malwah, on the Rewa river, 1344 feet above the level of the sea; lat. 24° 31′ N., long. 75° 50′ E. In 1820, it contained 4000 houses: it possesses an unfinished fort, with well-built walls, enclosing a palace also unfinished, but containing a white marble statue of Jeswunt Row Holcar, by whose order the building was constructed. The town and its territory formerly belonged to Holcar's dominions.

BAMPTON, *with Weald*, a parish and town of England, co. Oxford, hund. Bampton, 64 m. W.N.W. London. Area, 8750 acres. Pop. of parish, in 1821, 2304; 1831, 2514; of which the town has about 1600. The latter is built in a level tract of country near the Isis. Its church is an ancient and very fine structure; the living annexed to which is apportioned among three vicars. There is an endowed free school, founded in 1633, and a national school for 170 children. The chief trade of the town is fellmongering, which was once considerable, but of late years has greatly declined; its ancient market has also fallen into disuse, but an annual horse fair is still held, August 26. Phillips, author of the *Splendid Shilling*, &c., was a native of Bampton.

BAMPTON, a town and par. of England, co. Devon, hund. of same name, on the confines of Somersetshire. Area, 8130 acres; pop. of par., in 1831, 1961. The town is situated on the small river Bathern, an affluent of the Exe, 17 m. W. Taunton. It is built in a straggling manner; and was formerly of more importance than at present, having sent members to the H. of C. It has a weekly market on Saturday, and fairs for cattle and sheep, which are well attended, on Whit-Tuesday and the last Thursday of October.

BAN or BANOVICS, a town of Hungary, 16 m. S.E. Trenczen, on a hill near an affluent of the Nentra, lat. 48° 43′ 25″ N., long. 18° 5′ 55″ E. Pop. 2300. It has a considerable trade in cattle, wood, and iron.

BANAGHER, an inl. town of Ireland, King's co., prov. Leinster, on the Shannon, 68 m. W.S.W. Dublin. The river is here crossed by a bridge of 19 arches, 400 feet long and 15 wide, guarded by batteries on each side, this being considered a military pass of some importance. Pop., in

1821, 2813; in 1831, 2611: that of the parish of Reynagh, in which it is situated, was, in 1834, 4793, of whom 516 were of the Established church, and 4277 Rom. Cath. The town stands on the side of a hill overlooking the Shannon, and consists of one long street of well-built houses. The church and Rom. Cath. chapel are modern. Near the town is a school of royal foundation, endowed with 370 acres of land: in the town is a national school and a dispensary. An infantry barrack stands near the bridge, and the constabulary has a station here.

The borough was incorporated by Charles I. in 1638, and sent two mem. to the Irish H. of C. till the Union, when it was disfranchised. A court of petty sessions is held on alternate Mondays. It has a distillery, brewery, and some tan-yards. It is well situated, having a great command of inland navigation. Markets, well supplied with corn, are held on Fridays, and fairs on May 1, September 15, which continue for four days; 28th October, and 8th November. That of September is for live stock, in which it ranks next to Ballinasloe. The post-office revenue in 1830 was £292, and, in 1836, £306.

BANALBUFAR, a town of Spain, Majorca, 10 m. N.W. Palma. Pop. 5000. It is situated on a mountain cultivated with the greatest care; the ground being supported on terraces, and planted with vines, olives, &c. There is in its environs a quarry of stained marble.

BANBRIDGE, an inl. town of Ireland, co. Down, prov. Ulster, on the Bann, 23 m. S.W. Belfast. Pop., in 1821, 1715; in 1831, 2469: that of the parish of Seapatrick, in which it is situated, was, in 1834, 7748; of whom 1427 were of the established church; 4897 Prot. diss.; and 1424 Rom. Cath. It is built on the summit and sides of a hill of some height, and so steep as materially to impede the progress of heavy-loaded carriages. To remedy this inconvenience, the centre of the road was lately cut down for a length of 200 yards, to the depth of 15 feet in the middle part of the section, so as to form a carriage-way nearly level, while the great breadth of the street still admitted carriage-ways on each side on the original level, a communication being maintained between the houses on the opposite sides of the streets by a bridge or viaduct across the centre of the cut. This is a neat thriving town. A handsome church has lately been erected, partly by voluntary subscription; there are also places of worship for Presbyterians, Remonstrants, and two for Methodists; a public school, and a dispensary. Petty sessions are held every fortnight, and a party of the constabulary is stationed here. This town and neighbourhood is one of the principal seats of the linen manufacture. The great command of water in the vicinage adapts it peculiarly for bleaching, and there are large manufactures of union cloth and thread, and chemical works for the use of the bleachers. The markets are held on Mondays, in a spacious new building: there is also a separate market-place for meal and grain, and a brown-linen hall. Fairs are held on the first Monday in every month, and on the 12th Jan., first Saturday in March, 9th June, 26th Aug., and 16th Nov.; the last is a great horse fair. Branches of the Provincial and Ulster banks were opened here in 1833 and 1836. The post-office revenue increased from £536, in 1830, to £697 in 1836. The trade of the town is promoted by its vicinity to the canal between Newry and Lough Neagh, which passes at about 3 m. distance. It lies in the line of the mail-coach road from Dublin to Belfast, and coaches and cars ply several times every week between it and Belfast, Lurgan, Newry, and Rathfreland, conveying at an average 33 passengers every trip. Its manufactures have increased with a rapidity seldom experienced. The external appearance of the place, and the habits and manners of its inhabitants, correspond with this progress. The wealthier classes live in respectable independence; and squalid poverty is not perceptible even among the lowest. The highly cultivated state of the surrounding country, and the calm beauties of its scenery, tend much to heighten the pleasing impressions excited by the contemplation of such a picture of prosperous industry.

BANBURY, a bor., par., and town of England, co. Oxford, hund. Banbury, 64 m. N.W. London. Pop., 1821, 5247; 1831, 5906: houses at the latter date, 1212. The town is situated in a fertile vale, on the banks of the Cherwell; is remarkably clean and well built; and is paved and lighted by gas. The church, a spacious structure, was built in 1790. The Friends, Independents, Presbyterians, and Wesleyans, have chapels. There is a blue-coat school, founded in 1705, and endowed with £80 a year; which was incorporated with a national school in 1817. A free grammar school, once in high repute, has been given up for many years. There are almshouses, in which 12 poor women reside, and receive a charity called Widows' Groats. The market is held on Thursday; the annual fairs on January 22, March 5, April 9, May 28, June 18, July 9, August 13, September 10, October 5 and 30, and December 17. The principal manufactures of the town were horse-girths and plush, both of which have declined. The place, however, is in a flourishing state, from its numerous fairs and large weekly markets, all very well attended, and causing an extensive retail trade. The Oxford and Birmingham canal passes close to the town, and gives it also a considerable carrying trade. Many improvements in the sewerage, footpaths, &c., have been effected within a recent period. Cheese of a superior quality is made in the neighbourhood; and the town has long been noted for a sort of cake that bears its name.

Subsequent to the Municipal Reform Act, the limits of the bor. have been extended, for the purposes of local government, so as to include the whole town of Banbury, and the suburbs of Neithrop, Calthorpe, and Waterloo, which are continuations of it; the former at the N.W. end; the latter on the opposite bank of the river, which flows N. and S., along the E. side of the town, with the canal running nearly parallel to it. It was originally incorporated under a charter of 1st Mary, granted expressly for the whole parish; but the bor. came subsequently to be restricted to a part only of the town. Another charter was obtained in 6th James I.; and a third in 4th Geo. I., which was the governing charter: under it, the corporation consisted of a mayor, 12 aldermen, 6 capital burgesses, and 30 assistants. It was a close, self-elective body, with no freemen, and filled up vacancies for life, either from residents or non-residents. They possessed the exclusive privilege of returning one m. to the H. of C.; but this, of course, they were deprived of by the Reform Act, which opened the franchise to £10 house-holders resident within the limits of the par., which contains 3150 acres. Registered electors, in 1838, 371. The revenue of the corporation (independent of church trusts) consists of tenements, chief rents, as lords of the manor, and tolls of fairs and cattle-market; in all about £125 a year. A court of sessions is held twice a year. There is also a court of record, which had fallen into disuse, but has recently been revived and made effective. The lighting, paving, and police, are managed by commissioners, of whom the corporation form a portion. It is the central town of a union of thirty-eight parishes, and has a union work-house. There is a chalybeate spring near the town; and on Crouch hill, 1 m. W. of it, is a circular intrenchment, the site of an encampment of the parliamentary army in 1645, under Sir William Waller. The living is a vicarage, in the patronage of the Bishop of Oxford.

BANCA, an island of the E. or Indian archipelago, first or W. division, lying off the N.E. coast of Sumatra, between lat. 1° 30′ and 3° 8′ S., long. 105° 9′, 106° 51′ E.; length N.W. to S.E. 135 m., average breadth 35 m. Its most remarkable feature is its mines of tin, a mineral found in its common state of oxide, in the alluvial soil between the primary granitic mountains and a range of red iron-stone, of inferior elevation, in its N.W. quarter, but which is also prevalent in other parts. In 1813 the produce of tin amounted to 2083 tons, and in 1836 there were shipped from Java 47,739 peculs, or 2834 tons of tin, wholly from Banca. The produce of the Cornwall mines being at present (1839) about 4500 tons, the importance of those of Banca is obvious. The inhab. are principally of two races, one residing on the shores, the other in the interior, with Malays and Chinese: the latter are the workers of the mines. Previously to 1812 this isl. belonged to the sultan of Palembang, in Sumatra; it was then ceded to the E. I. Company; and in 1816 was transferred to the Dutch. (*Hamilton's E. I. Gazetteer*, i., 129, &c.)

BANCALLAN, a town at the W. end of the island of Madura, E. archipelago; lat. 7° 2′ S., long. 112° 45′ E. It is large and populous, contains the residence of the sultan of the island, and a fort close to the palace. Its environs are pleasant, having good roads, interspersed with country seats and pleasure grounds. (*Hamilton's E. I. Gaz.*, vol. i.)

BANDA, an inl. town of Hindostan, prov. Allahabad, cap. of the distr. of S. Bundlecund, on the right bank of the Cane river, 80 m. W. Allahabad; lat. 25° 50′ N., long. 80° 20′ E. A few years ago it was a mere village, but has now become a considerable town; its cotton has of late years obtained a superiority over that of Jaloun in the European market.

BANDA, or Nutmeg Islands, a group of twelve small islands, belonging to the third or E. division of the E. archipelago (see the art.), belonging to the Dutch; the principal, Banda Neira, lying in 4° 30′ S. lat., and 130° E. long., 120 m. E.S.E. Amboyna. Lantoir, the largest of the islands, is only 8 m. long, and 5 broad. Only six of them are inhabited. Pop. about 6000, most of whom are slaves. These isles are all high, and of volcanic origin; one of them, Goonung Api, contains a volcano, 2000 feet above the sea, which is continually emitting smoke, and sometimes flame. Climate injurious to strangers: the W. monsoon brings rain and storms in December, and earthquakes occur from October to April. The soil is chiefly a rich black mould. Four of the larger and central islands are almost entirely appro-

priated to the growth of nutmegs, their growth in the other islands being prohibited. The nutmeg-tree grows to the size of the pear-tree; it yields fruit from the 12th to the 20th year, and perishes at 24 years old. About two thirds of the trees planted are barren; the produce of the rest is said to be about 10 lbs. each, annually. The produce may be about 100,000 lbs. of nutmegs, and 30,000 lbs. mace. These islands are divided into a number of parks or plantations, each with a certain number of slaves. The people consist mostly of Papuan negroes, Chinese, and Dutch. Sago forms the chief vegetable food, but the cocoa also contributes a part: the seas abound with fish. The imports are various provisions for the Europeans, piece-goods, cutlery, and iron, from Batavia; sago, salted deer, &c., from Ceram; pearls, birds' nests, tortoise-shell, and slaves, for the Chinese and Dutch merchants from Aroos. The chief export is nutmegs. The seat of government is at Banda Neira, which is fortified, and has a good harbour. A Portuguese, named Antonio Abreus, discovered these islands in 1512. In 1594 the Portuguese, in 1599 the Dutch, and in 1810 the English, successively possessed themselves of them. In 1814 they returned under the dominion of the Dutch. (*Crawfurd's Indian Archipelago*, p. 508, &c.; *Hamilton's E. I. Gazetteer*, p. 78, 79.)

BANDON, a river of Ireland, anciently called Glasheen, has its source in the Carberry mountains, 9 or 10 m. W. Bantry. From Dunmanway, where its main branches unite, it flows nearly W. to Bandon; it then winds N.E. to Innis-Shannon, whence it pursues a S.E. course to the sea, with which it unites a little below Kinsale, built on its estuary. Its course is wholly in the co. Cork. It is described by Spencer, as

"The pleasant Bandon crown'd by many a wood."

But most part of the timber that ornamented the country in the days of Elizabeth has been cut down, and its place is but very indifferently supplied by modern plantations.

Bandon, or Bandonbridge, an inl. town of Ireland, co. Cork, prov. Munster, on the Bandon, 14 m. S.W. Cork. It was founded in the beginning of the reign of James I., and having obtained a charter from that monarch, conferring several valuable privileges, it increased so rapidly in population and wealth, that, on the breaking out of the war of 1641, it maintained four companies of foot and a corps of volunteers, and was the principal garrison of the English in these parts. On Cromwell's approach, in 1649, it declared for the parl., and in the war of 1688 the inhab. expelled the troops of James II., and declared for the Prince of Orange. Pop. (1821) 10,179; (1831), 12,617. It is situated on the declivities of the hills on each side the river, which blend into a richly-wooded valley, and consists of three parts, distinguished by the estates on which they are built; the old town being on that of the Duke of Devonshire, the Irish town on that of the Earl of Shannon, and the western portion on those of the Earls of Bandon and Cork. It is watched, and lighted with gas, under the General Municipal Police Act. It has two parish churches, a Rom. Cath. chapel and convent, a meeting-house for Presbyterians, and two for Methodists; a classical school, endowed by the Duke of Devonshire; a school for general instruction, on the foundation of Erasmus Smith, and several others maintained by private contributions or by religious associations. It has also an infirmary, fever hospital, and dispensary; three public libraries, and two reading-rooms. Assemblies and concerts are held in a suite of apartments attached to one of the hotels. Large barracks are built on the hill over the town, and the constabulary have here a station.

By charter dated in 1614, the municipal government is vested in a provost, twelve burgesses, and an unlimited number of freemen, elected at the hundred court by the general body of freemen, who also elect a common council of twelve out of their own body for life. The bor. sent two mem. to the Irish H. of C., and now sends *one* to the imperial H. of C. The franchise is vested in the burgesses resident within 7 m. and the £10 householders. The new electoral boundary comprises 439 acres. Constituency (1838) 293. General sessions of the peace for the W. riding of the co. are held here in October in the court-house, a neat building, with a well-arranged bridewell. Petty sessions take place on Mondays, at which, through the courtesy of the corporation, the co. magistrates sit with the provost. Courts, holding pleas under £2, are held every three weeks for the manors of the Duke of Devonshire, the Earl of Bandon, and the Earl of Shannon.

The woollen manufacture was carried on here to a considerable extent, and was succeeded by that of cotton: both are nearly extinct; but a manufacture of fine stuffs has been lately undertaken. Two distilleries paid duty, in 1836, on 107,395 gall. spirits; and in the same year duty was paid on 25,351 bush. malt. There are also several breweries and tan-yards, and two large flour-mills. As the Bandon is navigable for small craft to Collier's Quay, within 4 m. of the town, a small external traffic is carried on, by which grain, flour, and other produce, is sent out, and timber, coal, wine, and groceries received in return; but the domestic consumption is chiefly supplied from Cork, to which much of the agricultural produce of the neighbourhood is sent by land carriage. Markets are held on Wednesdays and Saturdays; and fairs on May 6, the Thursday before Easter-day, Oct. 29, and Nov. 8. Branches of the Provincial and Agricultural banks were opened in 1834. The post-office revenue was £775 in 1830, and £1205 in 1836. The town is on the mail-coach road from Cork to Bantry. Three coaches and a car ply to Innis-Shannon, on the road to Kinsale, six days a week, carrying an aggregate average of 42 passengers each trip; a coach six days in a week, and a mail-car every day to Dunmanway, carrying 11 passengers; and a car to Timoleague, on Courtmacherry bay, every day, carrying four passengers.

BANERES, a town of Spain, in Valencia, 28 m. N.N.W. Alicant. Pop. 9000. It has filatures of wool, distilleries, and paper-mills.

BANFF, a marit. co. of Scotland, having N. the Moray frith, S. and E. the co. of Aberdeen, and W. Elgin and Inverness. Its length from Ben Macdhu to Portsoy is about 56 m., but its average breadth does not exceed 12 m. Area, 647 sq. m., or 414,080 acres. Along the coast the surface is pretty level, and the soil, consisting of a sandy loam, is in many places well cultivated, and produces early and excellent crops. But with this exception, the surface is mostly rugged and mountainous, with a few valleys interspersed. Oats is the principal crop; but the main dependance of the farmers is on their cattle, sheep being, in this co., comparatively scarce. Property in a very few hands: tillage farms mostly small, and agriculture, though in parts much improved, generally backward. Average rent of land, in 1810, 3*s.* 9*d.* an acre. There are some thriving plantations, particularly in the vicinity of Gordon castle, the most magnificent seat in the N. of Scotland. It is partly separated from Elgin by the Spey, on which there are several productive salmon fisheries. (*See* Spey.) Minerals of little importance; but the crystals and topazes, commonly called cairngorms, are found in the mountains. Manufactures inconsiderable. Banff contains 24 parishes, and had, in 1841, 11,228 inhabited houses, 10,855 families, and 50,076 inhab. It returns one mem. to the H. of C. for the co.; and the burghs of Banff and Cullen unite with Elgin and others in returning a mem. Parl. constituency of co., in 1838, 710. Valued rent, £79,900 Scotch: annual value of real property, in 1815, £88,942.

Banff (commonly pronounced, and sometimes written Banff), a royal burgh of Scotland, cap. of the above co., on the W. bank of the Doveron, near the entrance of that river into the Moray Frith. Pop. in 1831, 2935, viz., males, 1229; females, 1706. It may be said to consist of two parts, completely separated; of which the one is inland, and lies on a plain on the river side; the other (called the seat town) stands on an elevation which terminates abruptly near the sea, by which it is bounded. The castle of Banff stands on a piece of table-land between these two places. The name of the town, which is found to have assumed different forms at different times—Baineffe, Boineffe, Bainffe, &c.—is supposed to have been derived from the word Boyne, the name of the district in which Banff is situated. A stream named Boyne traverses the district; and the parish of Boyndie is contiguous. The privileges of a royal burgh were conferred on Banff by Robert II. in 1372, and were afterward successively confirmed by James VI. and Charles II. The streets, though composed of houses of unequal size, are generally straight, and not deficient in width. Within the last few years, many of the older houses have been pulled down and replaced by others, so that there is scarcely a building now remaining to indicate the antiquity of the town. The streets were paved so early as 1551. The Carmelites (an order of friars, so called from mount Carmel in Syria), or White Friars, had a convent in Banff, but at what precise period it was instituted cannot be ascertained. (*Spottiswood's Religious Houses*, p. 16.) Of the building no vestiges can now be traced, with the exception of some scattered arches and vaults; nor is its original extent, or exact position, known. Of the castle of Banff, alluded to above, nothing remains but the outer wall and the fosse. It was a constabulary, or lodging for the king when visiting this part of his dominions; and, in his absence, it was inhabited by the thane or constable, who administered justice in his name. It was essentially royal property, and continued so till the middle of the 15th century, when James Sturt, earl of Buchan, brother of James II., was created heritable thane, the castle of Banff being at the same time bestowed on him, as the official messuage of his family. Banff gave the title of peer to a branch of the family of Ogilvie, which became extinct in 1803, on the death of the eighth Lord Banff without male issue. Banff does not make a great figure in history. The Duke of Montrose plundered it in 1645, "no merchant's goods or gear," accord-

ing to Spaulding, "being left." The Duke of Cumberland's troops passed through the town in 1746, on their way to Culloden. They destroyed the Episcopal chapel, and hanged a man, erroneously thinking him a spy. The names of two persons, eminent in very different walks of life, are connected with Banff. The famous James Sharp, who was originally a keen supporter of presbytery, and who, having betrayed that faith, rose to the archiepiscopal see of St. Andrews, was a native of Banff, his father being sheriff-clerk of the county. He was assassinated on Magus Muir, near St. Andrews, in 1679. James Macpherson, having followed the lawless and predatory life of a gipsy, was apprehended (1700), tried, and condemned to be hanged at Banff. While he was a votary of the muses, he was a proficient as a player on the violin; and when brought to the place of execution, he carried his instrument along with him, and played his own march, which had been composed by himself while in prison. This composition was published after his death, and has ever since been a favourite in Scotland. Burns wrote a new and improved version of the song, which is well known under the name of *Macpherson's Lament*, or *Macpherson's Farewell*. (*Chamber's Edit. of Burns's Poetry*, p. 100.)

The trade of Banff is inconsiderable, and not increasing. Its harbour, though it can boast of a low-water pier, constructed in 1816, is not so ample, so convenient, or secure, as that of Macduff, a borough or barony, situated on the opposite side of the Doveron, at the distance of about a mile. The number of vessels, in 1836, belonging exclusively to Banff, was 21, of which the tonnage was 1535 tons. The exports consist chiefly of grain, salmon, herring, and cured pork. As a proof to what extent grain is shipped, we may state that, in 1834, 29,790 qrs. of oats, 1174 qrs. of wheat, 976 qrs. of barley, and 194 bags of potato flour, were exported from Banff, exclusive of Macduff. In the same year 440 head of black cattle were sent to London by sea, 911 pigs, and 156 sheep and lambs. The herring fishery on the coast has not, of late years, been so productive as formerly. A Greenland whale fishery com., formed in 1819, and a thread and stocking manufactory, established fifty years ago, have been discontinued. Banff has no manufactory, if we except a brewery, an iron foundry, a distillery, and a small manufactory of ropes and sails. There are four branch banking establishments; and the town has a weekly market on Friday, and four annual fairs.

The public buildings are the town-house, built in 1798, with a spire 100 feet high, the jail, the parish church, and the Relief, Episcopal, and Independent churches. The Wesleyan Methodists have also a small chapel here. Gas was introduced in 1831. There was a grammar school in Banff so early as the year 1544. There are at present an academy, founded in 1786, at which all the branches of a learned and liberal education are taught; the commercial school, and a charity school founded by funds left (in 1804) by Alexander Pirie, merchant in Banff. There are, also, several seminaries for young ladies: another educational institution, founded by legacy left by the late James Wilson, of the island of Grenada, is about to be opened. There are several libraries of considerable extent and value belonging to different societies. Various sums have been left in mortmain for charitable purposes; and a legal assessment for the poor is unknown. The average number of prisoners, including criminals, revenue offenders, and debtors, is 45 annually. There are thirty-eight inns or shops licensed for the sale of spirits and ale.

Banff did not escape the devastations caused by the great flood that took place in the north of Scotland in August, 1829. Part of the town was inundated to the height of four or five feet; several houses were undermined and carried away: various kinds of property received serious injury. (*Sir Thomas D. Lauder's Acc. of the Morayshire Floods.*)

Banff unites with Elgin, Cullen, Inverury, Kintore, and Peterhead, in sending a member to the House of Commons. Macduff, which is rapidly rising to importance, chiefly owing to the excellence of its harbour, has, since the passing of the Reform Bill, been united to Banff in forming one parliamentary burgh, the joint constituency in 1838 being 215. There is a splendid bridge of seven arches over the Doveron, which connects the two towns in question. The amount of assessed taxes which Banff, exclusive of Macduff, yields, is (1836) £463 17*s.* 6*d.* The municipal assessment amounts to about £480. (*Boundary Reports*, 1832, p. 43; *New Statistical Account of Scotland*, No. xi., 1836; *Chambers's Gazetteer of Scotland.*)

BANG, an inl. town of Hindostan, prov. Malwah, dom. of Scindia; at the confluence of two tributaries of the Nerbudda river, on the chief road through Gujrat and Malwah; 82 m. S.W. Oozein, and 145 m. N.E. Surat. Iron ore is fused here, and before the present century the town contained 2000 houses; at present the number is much reduced. Bang is noted for some remarkable cave temples of Buddhic origin, excavated in a range of low sandstone and clay-stone hills, about 3¼ m. S. of the town. Four caves exist; the most northerly of which is the most perfect, and is reached by a flight of seventy rudely-formed steps, terminating in a platform overhung by the hill, which has once evidently been formed into a regular verandah supported by columns; and at either end of which there is a small apartment, containing some ill-carved figures of modern workmanship, and one of them a bad representation of the Hindoo Ganesa. The cave within this vestibule is entered by a rectangular doorway in a plastered and ornamented wall, and is a grand and gloomy apartment, 84 ft. square and 14½ ft. in height; the roof, which is flat, and has been once ornamented with paintings, is supported by four ranges of massy columns. Around this apartment, on three sides, are a number of small cells, 9 ft. in depth, as well as several niches, in which have been carved, in bold relief, some draped male and female figures: from one of the cells on the left hand, you enter through narrow excavations, five other similar cells, each in a plane elevated above the former, ascending through the hill. At the farther end of the principal cave, is an oblong recess supported by two hexagonal columns, through the centre of which a small doorway leads to an inner apartment, where the *dagop*, or "churn," supposed to contain a Buddhic relic, is seen, cut out of the rock, with the plain dome forming its summit, reaching nearly to the roof, to which it is joined by a small square ornament. The second and fourth caves of Bang contain little worth notice; but the third is nearly as large, and has been somewhat similar in its arrangement to the first. The whole of the walls, roof, and columns, have been covered with a fine stucco, and ornamented with paintings, in distemper, of considerable taste and elegance. It contains the *dagop* in its inner apartment; but wants the recess, and carved sculptures mentioned in the first cave. It is considerably dilapidated; and a fifth cave is so much so at its entrance as to be at present inaccessible. (*Dangerfield* in *Bombay Trans.*, ii., 194–201; *Hamilton's E. I. Gaz.*, i.)

BANGALORE, an inl. fortified town of Mysore, S. Hindostan; lat. 12° 57′ N., long. 77° 38′ E., 60 m. N.E. Seringapatam. Pop. (in 1805) said to be 60,000. It is built on a table-land, nearly 3000 ft. above the sea, and is so salubrious that Europeans often resort thither for the benefit of their health. The thermometer seldom rises above 82°, or sinks below 56° Fahr. The monsoons have their force broken by the Ghauts; but this table-land is constantly refreshed by genial showers. The vine and cypress grow luxuriantly, and apples, peaches, and strawberries are raised in the gardens. The town is enclosed with double walls; but the chief fortress, which contained the palace of Tippoo Saib, is quite detached from the other, and is built in a solid manner, with a deep ditch and spacious glacis. The palace, though of mud, built in the Saracenic style, is still a striking building, and is used by the present rajah for public entertainments. There are good barracks, assembly and reading-rooms, European shops, &c. The houses are large, some being of two stories, built of red earth, and roofed with tiles; the chief bazar is wide, regular, and ornamented with rows of cocoa-nut trees. Most of the inhab. are Hindoos. Silk and cotton are the chief manufactures; the former, which is very strong, is made from raw silk imported, none being produced in the neighbourhood. Bangalore was founded by Hyder Ali, on the site of a small village; and under him it became a place of much importance. It was taken by Lord Cornwallis in 1791. (*Hamilton's E. I. Gaz.*, i., 131, 132.)

BANG-KOK, or BANKOK, a city of Siam, having been the cap. of the kingdom, the residence of the sovereign, and seat of gov. since the destruction of Yuthia by the Birmese, in 1766. It stands on a swampy tract on both sides the Menam, lat. 13° 40′ N., long. 101° 10′ E., 15 m. N. from the gulf of Siam. Pop. probably from 50,000 to 60,000. The Memam is here ¼ m. wide, exclusive of the large space on each side occupied by floating houses, and from 5 to 10 fath. deep: there is a bar of soft mud at its mouth, but vessels of from 200 to 250 tons burden may always reach Bang-kok without difficulty. The traffic above this city is trifling, though, from the want of roads, all the intercourse is by water. Bang-kok consists of three parts; the palace, the town, and the floating town. The first, built on an island, is of an oblong shape, surrounded by a brick wall of considerable height in some parts, and furnished with some indifferent bastions and many gates; it contains, besides the residences of the king and his chief officers, many temples, gardens, inferior shops, and much waste ground. The town without stretches for some distance along the banks of the river, but a very little way inland. The houses, most of which are of wood, or mere huts of palm-leaf, are built on posts driven into the mud, being each provided with a boat. The floating town consists of a number of bamboo rafts, bearing rows of eight or ten houses, with a platform in front, on which the wares for sale are exposed; and most of the trade is thus conducted on the river, where it is

believed that half the pop. reside. There are many temples, all of which are built in a pyramidal form, with much gilding and paltry decorations: each contains a colossal gilded metal statue of Buddha, and a variety of others in clay or wood. The chief temple, or Ra-cheh-tap-pou, which is 200 ft. in height, contains as many as 1500 of these images. The palace possesses a really handsome audience-hall, 80 ft. long by 40 broad, and 30 ft. in height, painted and gilded, and furnished with English cut-glass lustres: it is surrounded by three different walls, and is built of brick; of which, or of mud, the palaces, temples, and a few of the chief residences only are constructed. Bang-kok has manufactures of tin and iron articles, and leather for mattresses, &c. Its trade is probably more extensive than that of any other emporium in the East, Canton excepted, not occupied by Europeans. It is principally carried on with China and the Malay archipelago, but mostly with the former. The great articles of export are sugar (from 10,000 to 12,000 tons), black pepper (4000 to 5000 tons), stick-lac, ivory, sapan wood, hides, &c. The trade with China employs about 130 Chinese junks yearly, some of 1000 tons burden. The imports are porcelain, tea, quicksilver, lacksoy, dried fruits, silks, fans, and other native manufactures from China; with camphor, edible birds'-nests, and other articles for the Chinese market from the Malay archipelago; and British and Indian piece goods, opium, and British woollens and glass from India. Half the pop. consists of Chinese; and besides them there are numerous Birman, Peguan, Laoan, Cambojan, Tavoyan, and Malay foreigners; some Christians of Portuguese descent; and a few Brahmins, who are supported by the king, and have a small temple of their own. (*Crawfurd's Embassy to Siam, &c.; Finlayson's Mission, &c.*)

BANGOR, a city, sea-port, and par. N. Wales, co. Carnarvon, hund. Isgorvac, on the Holyhead road, at the head of Beaumaris bay, about 2 m. from the Menai bridge. It consists chiefly of one principal street, stretching E. and W. through a romantic vale, bounded on the S. by high, precipitous rocks, on the N. by a more gradual acclivity, and opening on the E. over a splendid and extensive prospect, including the rocky shores of Anglesea and the town of Beaumaris. It has been mostly rebuilt, and otherwise very much improved, within the last few years. Pop. (1821) 3399; (1831) 4751: houses, last-mentioned year, 1171. The cathedral is an embattled cruciform structure, having a low massive tower crowned with pinnacles. It stands in a spacious area, with a fine avenue, and has a very pleasing effect, from its situation and the just proportion and simplicity of its architecture; near it are some old endowed almshouses for six poor persons, and an endowed free school for 100 boys, built in recent times on the site of an ancient friary; it was founded in Elizabeth's reign, and its revenue is upwards of £250 a year. There are also four national schools in the parish; two in the town (established 1822) for 300 boys and girls; one at Vaenol for 75, and one at Pentir for 60. The Baptists, Independents, Calvinistic and Wesleyan Methodists have each a chapel; there is a town-hall and shambles in the centre of the town, and near it, on the London road, is the Carnarvon and Anglesea dispensary. The market is held on Fridays: during the summer on Tuesdays also. There are four fairs, April 5, June 25, Sept. 16, Oct. 28; besides which four large fairs for cattle (called "booth fairs") are held at the Menai bridge (which is in this parish, and about 2 m. S.W. Bangor) Aug. 26, Sept. 26, Oct. 24, Nov. 14. They are the most frequented of any in N. Wales. It is accessible to vessels of 200 to 300 tons, which may enter the bay at any time of the tide: the trade, however, is comparatively insignificant, and is confined to the import of coals and other necessaries. By the Reform Act, Bangor was constituted one of six contributory boroughs, which conjointly send one member to the H. of C.; the bailiffs of Carnarvon being returning officers. There are in Bangor about 170 houses of £10 and upwards. It has been the seat of a bishopric from the remotest period, and has recently been united with that of St. Asaph (Feb. 1839). It previously comprised the cos. of Anglesea and Carnarvon (except four parishes), about half Merioneth, one deanery in Denbigh, and seven parishes in Montgomery: in all, 179 par. The income of the bishop, at an average of three years, ending with 1831, amounted to £4464 a year. The church is used both for cathedral and parish services; the former in English, the latter in Welsh. The living is a consolidated vicarage belonging to the vicars choral, the church of the township of Pentir being annexed to it as a chapel of ease. There is an episcopal residence and a deanery. The famous controversy between Drs. Hoadley and Sherlock took its name from this see: the former being its bishop from A.D. 1715 to 1721, when, on being translated to Salisbury, the latter succeeded him. The neighbourhood is, for the most part, unenclosed, and everywhere presents scenery of surpassing interest, having the Snowdon range on the S., and Penmanmaur on the E., and the Menai strait and bridge immediately contiguous to the town. The improvement of the Holyhead road, now the best in the kingdom, and the construction of the Menai bridge, have rendered Bangor a great thoroughfare, and made it be resorted to in summer by crowds of visiters. When Dr. Johnson visited the city in 1774, with Mr. and Mrs. Thrale, he complained that they found "*a very mean inn, and had some difficulty of obtaining lodging. I lay in a room where the other bed had two men.*" But modern travellers need fear no such difficulties. The inns in the town are very good; and there is a hotel outside the town, built by Mr. Pennant, that ranks, in respect of size and accommodation with the best in the kingdom.

BANGOR, a marit. town of Ireland, co. Down, prov. Ulster, on the S. shore of Carrickfergus bay, 12 m. E.N.E. Belfast. Pop., in 1821, 2943; in 1831, 2741; pop. of par., in 1834, 9355, of whom 757 were of the Estab. church, 8295 Prot. diss., and 250 Rom. Cath. The town took the name of Bangor, Beanchoir, or "the White Choir," from a celebrated monastery which, about the year 820, was destroyed by the Danes, when upwards of 900 monks are said to have been massacred. It is much frequented as a sea-bathing place. The public buildings are a church, two Methodist, and two Presbyterian meeting-houses, and a market-house; there is also a dispensary, mendicity institution, savings'-bank, and public library. It is a constabulary and coast-guard station. The corporation, under the charter of 1613, consists of a provost and twelve free burgesses. It returned two mem. to the Irish H. of C. till the Union, when it was disfranchised. A court leet is held once a year, and a manor court, with jurisdiction to the amount of £20, every three weeks, and petty sessions every fortnight. There are two cotton-factories; linen is also made for home consumption. The fishery is carried on to some extent, and in the neighbouring village of Groomsport, where the Duke of Schomberg's army landed in 1689, large oysters are taken in abundance. Markets are held on Tuesdays; fairs on Jan. 12, May 1, Aug. 1, and Nov. 22. Post-office revenue in 1830, £172; in 1836, £165.

BANGOR, city, p. t., cap. of Penobscot co., Me. Situated at the head of navigation on Penobscot river, on its W. side, in 44° 47′ 50″ N. lat., and 68° 47′ W. long., 68 m. E.N.E. Augusta, 120 m. N.E. by E. Portland, 230 m. N.E. Boston, 663 W. The pop. in 1790 was 169; in 1800, 277; in 1810, 850; in 1820, 1221; in 1830, 2868; in 1840, 8627. Kanduskeag stream, 190 yards wide at its mouth, divides it into two parts, connected by three bridges. One mile from its entrance into the Kennebec, this stream has falls, affording extensive water-power. Immediately above the city, a bridge, 1320 ft. long, crosses the Penobscot river, and connects it with Orrington. The harbour, directly below the mouth of the Kanduskeag, is spacious, having a breadth of 90 rods, and is sufficiently deep for vessels of a large class. The Penobscot is navigable to the town for vessels of 300 or 400 tons, the tide alone rising to the height of 17 ft. In the winter season, for about four months, the river freezes 12 m. below, to Frankfort. The trade is extensive, particularly in lumber, of which it exports a greater quantity than any other town in the United States. The amount produced in 1840 was $305,500. Ship-building is an extensive business. Vessels were built to the amount of $51,300. Twelve hundred vessels, of over 100 tons burden each, are employed, when the river is open, in the transportation of lumber; there are 100 vessels engaged in the coasting trade, and fifty in foreign commerce, and about twenty in the fisheries. The situation of the city is pleasant and commanding, affording a fine view of the Penobscot river and of the surrounding country. Its back country is extensive, and contains much good land, the capabilities of which time and good cultivation will develop. The country between the Penobscot and Kennebec rivers contains the most fertile part of Maine, and the soil about the higher portions of the Penobscot will probably prove equally productive. The immense amount of pine lumber which this country affords gives employment to innumerable saw-mills, and, when this resource shall fail, agriculture will supply its deficiency. The rise of Bangor has been rapid, and it is already the great emporium of the eastern portion of Maine. The public and private buildings of the city are, many of them, neat and elegant. It contains a court-house, jail, a bank, seven churches, one Methodist, two Congregational, one Baptist, one Episcopal, one Universalist, and one Roman Catholic. The Bangor Theological Seminary is located here; was incorporated in 1814, went into operation at Hampden, 6 m. S., since which it has been removed to this town. It is under the direction of the Congregationalists, and gives a classical and theological course in four years; has three professors, 43 students, 130 alumni, and has 7000 vols. in its libraries. The city has eleven commercial and commission houses engaged in foreign trade, with a capital of $98,500; 134 retail stores, with a capital of $318,500; two grist-mills, forty-two saw-mills, three

printing-offices, one daily and two weekly newspapers, and a capital employed in manufactures of $101,800; two academies, with 29 students, twenty-five schools, with 1647 scholars. A line of steam-boats connects it with Portland and Boston during about eight months of the year. It was incorporated as a town in 1791, and as a city in 1834. It is governed by a mayor, seven aldermen, and twenty-one common-councilmen.

BANGOR, p. t., Franklin co., N.Y., 6 m. W. Malone, 219 m. N.N.W. Albany, 530 W. Watered by tributaries of Salmon river. It has three stores, one fulling-mill, three grist-mills, two saw-mills, seven schools, 400 scholars. Pop. 1289.

BANG-PA-SOE, a considerable town of Siam, cap. of a distr. on the left bank of the Bang-pa-kung river, near its mouth, 39 m. E.S.E. Bangkok; lat. 13° 30' N., long. 101° 11' E. It is populous, has a wooden stockade, and is considered by the Siamese important as a place of defence against the encroachments of the Anamese. The Bang-pa-kung river is here little inferior in size to the Menam; it has the same depth of water on its bar, and within it from 2½ to 3 fathoms. There is said to be a good carriage-road from this town to Tung-yai, a distance of nearly 200 m. The distr. of Bang-pa-soë is an alluvial flat, very fertile in rice and sugar-cane. (*Crawfurd's Mission to Siam*, p. 441, 442.)

BANJARMASSIN, a town and distr. on the S.E. coast of Borneo; the town is built on the river of the same name, in lat. 3° S., long. 114° 55' E. The river has a shallow bar at its entrance, over which even a light boat cannot float till after the first quarter's flood. Notwithstanding this, the town enjoys a considerable trade, especially with China; many Chinese being settled in and near it. There is some trade with Singapore, but it is discouraged by the Dutch, who have a factory, forts, and government buildings in Banjarmassin. The imports consist of opium, piece goods, coarse cutlery, gunpowder, and fire-arms. The exports are chiefly gold, diamonds, and pepper; rattans to Java, camphor, wax, birds'-nests, tripang, spices, and steel of superior quality. (*Earl, Eastern Seas*, p. 336–338.)

BANN, UPPER and LOWER, two rivers in the N. of Ireland: the first, or upper Bann, rises in the plain called the Deers or King's meadow, in the N. part of the Mourne mountains, in Down. Its course, at first, is winding; but its general direction is N.W. After passing Gilford and Portadown, it falls into lough Neagh at Banfoot ferry. Near Portadown it is joined by the Newry canal; and is thence navigable by barges to the lake.

The lower Bann issues from lough Beg, connected on the N.W. with lough Neagh, and flowing N. with a little inclination to the W., falls into the sea 5 m. below Coleraine. The current of the lower Bann is rapid; and in some places it is precipitated over ledges of rock. The salmon and eel fisheries on this river are important and valuable. It is navigable by boats as far as Coleraine, but only with difficulty.

BANNALEC, a town of France, dep. Finisterre, cap. cant., 9 m. N.W. Quimperle. Pop. 4377.

BANNISTER, river, runs in Pittsylvania and Halifax cos., Virginia, and enters Dan river, 10 m. above the junction of the latter with Roanoke river.

BANNOCKBURN, a village of Scotland, co. Stirling, par. St. Ninian's, 3 m. S.S.E. Stirling, on both sides of the small river Bannock, which, after a course of a few miles, falls into the frith of Forth. The name of this village is imperishably associated with one of the most memorable events in British history. In its immediate vicinity, on the 24th of June, 1314, was fought the great battle between the English under Edward II. and the Scotch under Robert Bruce, which terminated in the total defeat of the former. The loss of the English, in the battle and pursuit, is estimated by the best-informed historians at 30,000 men, including a great number of nobles, and persons of distinction. The loss, on the part of the Scotch, whose army was very inferior in respect of numbers to that of the English, did not probably fall short of 8000. This decisive victory secured the permanent independence of Scotland, and established the family of the conqueror on its throne.

About 1 m. W. from the village, at Sauchie Burn, James III. was defeated in 1488 by his rebellious subjects and his son, James IV.; and, after being wounded in the engagement, was assassinated at a mill in the vicinity.

In more recent and tranquil times Bannockburn has been distinguished in a very different department—that of manufactures. Various fabrics of woollen, particularly tartans, are successfully carried on in it: and it has produced all the tartan worn by the Highland regiments in the British army for upwards of half a century past. The manufacture of tartan shawls, so generally worn by females in the middle and lower ranks in Scotland, is also confined to it, and are hence known by the name of Bannockburn shawls. Carpets, particularly Brussels, and hearth-rugs, are produced here to a considerable extent; and of all these no small portion is sent to the English market. The manufacture of *Tweeds*, or coarse striped woollen cloth, for trowsers and plaids, such as that for which Galashiels and Hawick are eminent, has of late been introduced into Bannockburn, but is not carried to any great extent. Tanning is also a considerable branch of trade. Various villages in the neighbourhood have been long eminent in the making of nails; but the inhabitants of Bannockburn have never introduced this branch of business, but have confined themselves to the manufactures noticed above. The portion of the parish of St. Ninian's in which this village is situated has recently been erected into a separate parish, under the name of Bannockburn; and a handsome parochial church has been built. It has also a dissenting church, an excellent school, a subscription library, and an annual fair for horses and cattle on the second Tuesday of June, old style. The village is not built on any regular plan. Pop. 750.

BANSTEAD DOWNS, in England, co. Surrey, 1st div. of Copthorne hund., par. Banstead; a tract of land remarkable for its verdure and excellent sheep pasturage, 12 m. S. by W. London, 576 ft. above the sea level. The Epsom downs are a continuation of these on the W.: their geological position is between the London clay on the N. and the chalk formation on the S. The Brighton lines of road from the metropolis cross them.

BANSWARA, an inland town of Hindostan, prov. Gujrat, and cap. of a small rajpoot principality under British protection; 80 m. E. Ahmednuggur; lat. 23° 31' N., long. 74° 29' E. It is a handsome place for this part of India, and its walls include a large circuit; though much of the space is occupied by gardens. There are some handsome temples, and a tolerable bazar; at some distance is a pool of water with a stately flight of steps, overhung by palms, peepuls, and tamarind trees; and beyond it, on the crown of a woody hill, the towers of a large castle, formerly the palace of Banswara. In 1820, there were 1000 families of Brahmins, and a considerable number of Mussulmans in the town: in the wilder districts of its territory, the inhab. are chiefly Bheels. The rajah is a branch of the family of the Odeypoor sovereign, and holds the highest judicial authority in his own hands. In 1820 he had a kind of feudal nobility of thirty-two subordinate rajpoot chiefs, who each furnished his quota of fighting men. In the same year the Banswara territory yielded a revenue of £20,786, but it was then only recovering from a state of great desolation and misery, from which it had been relieved by the British. (*Hamilton's E. I. Gaz.*, i.)

BANTAM, a decayed town of Java belonging to the Dutch, once cap. of a distr., but "now of no greater importance than the smallest residence on the coast." Its bay, formerly a great rendezvous of European shipping, is choked up by coral reefs, and islands formed by the soil washed down into it from the mountains. The Dutch abandoned it in 1817 for the more elevated station of Sirang, or Ceram, 7 m. inland. (*Earl, The E. Seas*, 1837, p. 11.)

BANTRY, a maritime town of Ireland, co. Cork, prov. Munster, at the bottom of Bantry bay, 43 m. W. by S. Cork. Pop. (1821) 3659; (1831) 4276; pop. of parish 14,665, of whom 948 are of the Estab. church, and 13,717 Rom. Cath. The town is ill built: it has a church, a Rom. Cath. chapel, Methodist meeting-house, and a neat court-house, with a bridewell. General sessions are held in February, and petty sessions on alternate Fridays. A party of the constabulary is stationed here. Manufactures confined to that of flour; and there is a small porter brewery. The fishery of herrings and sprats has been unproductive since 1828: pilchards were once abundant, but have deserted the coast since 1823. The trade of the port, which was once very considerable, is now confined to the export of grain, of which 1143 tons, of the estimated value of £6212, were exported in 1836: the value of the imports of the same year amounted to £17,293.

BANTRY BAY, an inlet of the sea, in the S.W. extremity of Ireland, co. Cork, between Crow point on the N. and Sheep's head on the S. This is one of the finest and most capacious harbours in Europe. It stretches inwards in a N.E. direction above 25 m., with a breadth varying from 4 to 6 m. Near the entrance of the bay, on its N.W. side, is Bear island, separated from the main land by a crooked strait about a mile broad, having from 10 to 30 or 40 fath. water, and affording a safe retreat for the largest vessels. Farther up the bay is Whiddy island, on the S. side of which, nearly opposite to Bantry town, there is an admirable roadstead, where ships lie land-locked in from 24 to 40 ft. water. Bear island forms, as it were, a natural breakwater, protecting the bay from the S.W. winds. There is, close to both its shores, a considerable depth of water; it is not encumbered by any shoals or rocks that may not be easily avoided, even at night; and the anchoring ground being everywhere good, it furnishes, throughout its whole expanse, convenient shelter and accommodation for the largest ships.

Having no considerable town on its shores, which are wild and rugged, nor any communication with the interior, this noble bay is but little frequented by shipping. Occasionally, however, it has been resorted to by large fleets, and has been the theatre of naval warfare; an indecisive action having been fought in it on April 30, 1689, between a portion of the French fleet that conveyed King James to Kinsale, and the English fleet under Admiral Herbert, afterward Earl of Torrington. It was in it, also, that the French fleet, with General Hoche on board, anchored in 1796.

BAPAUME, a town of France, dép. Pas de Calais, cap. cant., 15 m. S.S.E. Arras. Pop. 3122. This town was originally fortified by Charles V., but having been ceded to France in 1659, its fortifications were enlarged and completed by Vauban. It is neat, well laid out, and well built. The parish church and the hospital are worth notice. There are manufactures of woollens, calicoes, and other cotton stuffs, and of the fine thread used in the manufacture of a species of lace carried to the markets of Lille and Amiens. It is itself the centre of all the lace trade of the vicinity. Being situated in a dry country, Bapaume laboured, for a lengthened period, under a deficiency of water; but in 1723 an Artesian well having been sunk in the vicinity, furnished an abundance of excellent water, which, being conveyed into the town, supplies a handsome fountain. (*Hugo*, art. *Pas de Calais.*)

BAR, a town of European Russia, gov. Podolia, on the Row, 48 m. N. Moghilef. Pop. 2500. It is defended by a citadel built on a rock. It was called Row, from the river on which it stands, till the reign of Sigismond I., who gave it to his lady, by whom it was called Bar, in honour of her native country, Bari. It is famous in Polish history, from the confederation established in it in 1768, by the Pulowski and other Polish nobles hostile to Russia. (*Encyc. des Gens du Monde*, art. *Bar.*)

BAR, a fortified town of France, dép. Bas-Rhin, cap. cant., 19 m. S.W. Strasburg. It is situated at the foot of the Vosges, surrounded by hills planted with vineyards. An explosion of the arsenal, in 1794, destroyed most part of the houses, so that it is now almost new. It has some manufactures, and a considerable trade in wine, spirits, corn, and cattle.

BAR an inland town, of considerable extent and trade, in Hindostan, prov. Bahar, on the S. bank of the Ganges, 18 m. N.E. Bahar; lat. 25° 28′ N., long. 85° 46′ E.

BARAHAT, an inland town of N. Hindostan, cap. rajah of Gurwal, but some years since a most wretched and paltry place, 48 m. W.N.W. Serinagur.

BARAITCHE, an inland town and district of Hindostan, prov. Oude; the district divided between the King of Oude and the British; the town belonging to the former, and pleasantly situated 50 m. N.E. Lucknow; lat. 27° 33′ N., long. 81° 30′ E. The N. tracts of the district are elevated and covered with forests; the more S. parts open, fertile, and tolerably well cultivated. Many of the old Patan race inhabit the Baraitche district.

BARBADOS, the most easterly of the Caribbee islands; it is 21 m. in length and 14 in breadth, and contains 106,470 acres, of which it is supposed about 80,000 are in cultivation, and that the remainder, 26,470, are occupied by roads, buildings, &c. Bridgetown, the capital, is in lat. 13° 5′ N., long. 59° 41′ W. The time of its discovery is not distinctly known, but the first permanent settlement on it was made by the English in 1625, and it has remained in their possession ever since.

The island, viewed from the sea, has nothing interesting in its appearance, and the land, as compared with the adjoining colonies, is low, not being discernible many miles from the shore. The surface is very irregular: on the N., S., and W. sides, the land is low towards the sea, and rises abruptly by precipitous acclivities in terraces of greater and less extent, to the point of highest elevation. On the E. side it rises almost perpendicularly from the sea to a height of 50 and 80 feet. On the windward, or N.E. side, there is a ledge of rocks, called the Cobblers, at a short distance from the shore, which renders the approach to the island dangerous in the extreme, and has doubtless contributed greatly to protect it from hostile attacks in the wars in which Great Britain has been engaged.

It is highly cultivated: scarcely an acre upon it, on which a blade of grass can grow, remains unproductive; and a better system of agriculture is pursued than that followed in the other colonies. The base of the island is calcareous, consisting of the spolia of zoophytes, of which there are several species. These are so cemented together, as in some places to form a hard compact limestone, which is quarried, and very extensively used for building; and in other places they exist as a dry soft marl, on which are found a great variety of shells, many of them in perfect preservation. Upon this formation there is a deposite of a strong stiff clay, in some places of considerable depth, which constitutes the soil of the most fertile districts. On the S. and W. sides, adjoining the sea, the soil is sandy and light; but in other places it is strong, and admirably adapted to the growth of the cane. In one district, on the N.E. side, called Scotland, the scenery and soil are strangely contrasted with the flat and shelving table-land of the other parts. The scenery there is wild, irregular, and picturesque, and the soil composed of mineral substances belonging to the clay genus, particularly loam, potters' clay, and slate clay. Beds of bituminous shale are likewise frequent, and petroleum, or mineral oil, more or less abounds in this district. There are some remarkable instances of the soil in this district becoming detached from its original bed, and slipping down from a considerable elevation, carrying with it whole fields of canes to a position below; in which extraordinary migrations rows of cocoa-nut trees have accompanied the moving masses. The highest point of land in the island is mount Hillaby, which rises 1147 feet above the level of Carlisle bay.

The climate is very healthy. Except the bilious remittent fever, common to all the West India colonies, there is no malignant disease peculiar to it; and the island is free from any venomous reptile. The average quantity of rain amounts to 58 inches. The range of the thermometer, on an average of five years, were—max. 87, med. 81, min. 75. Owing to the flatness of the island, and its being open in almost every part to the sea breezes, the heat is not so oppressive as the maximum range of the thermometer would seem to indicate. The prevailing wind is the N.E. trade. It begins generally about ten o'clock A.M., and continues till sun-set, but it is very feeble during the night. In January, February, March, April, and May, it is strong and regular, and the climate, in these months, is peculiarly agreeable. In June the rains set in, and from August to October, which is called the hurricane season, and during the month of November, the heat is very oppressive. The ratio of deaths among the white troops, according to Captain Tullock, for the last 20 years, were, 58·5 per 1000 per. ann. of mean strength. Among the black troops, only 46. The cane is the chief article of cultivation, but a considerable quantity of corn, arrow-root, cotton, ginger, and aloes, is also raised, and exported.

Barbados has been frequently visited by hurricanes, of which those of August 10, 1674, October 10, 1780, and August 11, 1831, have been the most destructive in their effects. In that of 1674, 300 houses, 8 ships, and most of the sugar-works, were destroyed, and 200 persons killed: in that of 1780 the loss in human life was reckoned between 4000 and 5000, and the whole amount of damage, in buildings, cattle, and stock, was estimated at upwards of a million sterling: but the fury and violence of the last hurricane far exceeded that of either of the former; in it 2500 persons were killed, and considerably more than that number wounded, and the loss in property amounted to two millions and a half sterling. The munificence of parliament, and the industry of the inhabitants, have, however, enabled the planters to recover from these heavy losses; and, except the absence of trees, which gives a bare and naked appearance to the country, the effects of this severe visitation can now be traced only with difficulty. The island is divided into eleven parishes, and five districts. It contains, besides the principal town, a smaller town to leeward, called Speights Town, and two other towns, which are scarcely to be described as such; Oistins, or Charlestown, Saint James, or the Holetown, the spot first settled. Bridgetown extends along the shore of Carlisle bay, and, previously to the hurricane, being skirted with a belt of cocoa-nut trees, it presented a very pretty and interesting appearance to the stranger. The population is large, and may be variously estimated: it is supposed to contain 20,000 inhabitants. The shops are very good, many of them equal to those to be seen in the second class of towns of England, and some buildings, especially the stores of the wealthier merchants, are equal to corresponding establishments in the city of London. The jail is a large and airy building, in which formerly the courts of law and equity were held, and the legislature assembled; but it is now exclusively used as a place of confinement. It is in contemplation to build a council-house in some other part of the town. The barracks at St. Peter's, about 2 m. to the S. of the town, are spacious and airy, having been all rebuilt since the last hurricane: they will contain comfortably 1200 men. There is an excellent parade-ground, a brigade of guns, and a very complete establishment for warlike purposes. The government-house is about 1 m. from the town, situate on some rising ground, and commands a beautiful view of the town and bay. The market in Bridgetown is well supplied with poultry, mutton and pork, of excellent quality, quite equal, if not superior, to the corresponding productions of England. Veal is good, but not in very great plenty. Beef is but indifferent. Many of the esculent vegetables of Europe are common. The quantity of tropical fruits grown in the island is small,

but the quality excellent. The supply of fish is in general abundant. One description, the flying-fish, about the size of middling herrings, but firmer, and not so fat, are sometimes so plentiful, as to be undervalued by the opulent, and within the reach of the poorest inhabitants.

The whole population, as in the adjoining islands, may properly be divided into four classes: Creole or native whites; European whites: Creoles of mixed blood; native blacks. There has been no recent census of the island; the population, consequently, cannot be accurately given; but, from an estimate made previously to the abolition of slavery, it may be stated as follows: whites, 12,797; coloured, 6584; and if to these be added the number of emancipated slaves, ascertained by the last registration to be 83,140, the total population would be 102,521. It is conjectured, indeed, that the whole population amounts to 120,000; but this is much beyond the truth, as the same estimate which gives this return states the population of Bridgetown to be 37,000, which is an excess of at least 17,000 beyond what it really is. Of the whole population, only 1100 enjoy the privilege of electing and being elected members to serve in the colonial assembly, and in the vestries: and of this class 446 are electors for the principal town.

Barbados is the residence of the bishop of Barbados and the Leeward islands, and of one of the archdeacons. The clerical establishment is fixed upon a very liberal and effective scale. There is a rector resident in each parish, at a stipend of £333 6*s*. 8*d*. sterling, with an allowance of glebe land, and an excellent parsonage house, kept in repair at the expense of the parish. In Bridgetown, besides the cathedral and parish church, there is St. Mary's Church, and in the neighbourhood three other chapels of ease, with a minister appointed to each, and paid by the British government and the Christian Knowledge Society. The surplice fees, which are received by the rector, are upon a liberal scale. There are two Wesleyan chapels, and two Moravian chapels.

There are several public establishments for the education of the youth of the island: Codrington College, Codrington Foundation School, Harrison's Free School, and the Central School: the two latter are in Bridgetown, Codrington College is situated 13 or 14 miles E. of Bridgetown, and was founded by Colonel Codrington, a native of the island, who died in 1710. The object of the founder was the education of a certain number of white youths, and the religious instruction of the blacks; for which purposes he bequeathed landed property, capable of clearing £3000 sterling a year, to the Society for Propagating the Gospel in Foreign Parts. This establishment is under the superintendence of the bishop of the diocess, who is visiter, a principal, and two tutors. It is open to all young men, for whatever profession intended, throughout the West India colonies. There are 12 theological exhibitions. The college expense to each commoner is about £30 sterling per annum. The course of study embraces theology, the classics, logic, and mathematics. All candidates are required to be at least 17 years of age at the time of admission.

At the Central School about 160 white children are educated, upon the plan of the national schools in England. All the children are fed, and the major part clothed. From this class of boys, master tradesmen, mechanics, and overseers are supplied. A girl's school has also been founded under the auspices of Mrs. Coleridge and the ladies of Barbados.

The trade of the island has varied very much at different periods, owing to the uncertainty of the crops, occasioned by hurricanes and bad seasons. The maximum value of the exports in fifteen years, from 1822, having been, in 1826, £1,307,889, and the minimum value, in the same period, in 1832, the year succeeding the last hurricane, £408,363. The imports have fluctuated also in the same proportion, during the same periods. In 1826 they were £999,231, and, in 1832, £481,610. The total value of the exports, employing 74,497 tons of shipping, and 5194 men, in 1834, was £624,685. The exports of sugar, the staple produce of the island, have been, in 1833, 384,971 cwts.; 1834, 394,527 cwts.; 1835, 344,689 cwts.; 1836, 373,428 cwts.; 1837, 445,713 cwts. Exclusive of sugar, there were exported, in 1837, rum, 914 galls.; molasses, 70,293 cwts.; cotton, 107,611 lbs.; arrow-root, 63,823 lbs.; succades, 15,351 lbs. In the year ending January, 1838, the total value of the imports was £606,586, of which £390,569 was from Great Britain and Ireland; and in the same period the value of the exports was £897,990, of which £773,077 was to Great Britain and Ireland.

The government of the island is administered by a governor, who is also governor-general of the islands of Grenada, St. Vincent, Tobago, Trinidad, St. Lucia, and their respective dependencies. There is a legislative council, consisting of 12 members, and a representative assembly, constituted by a return of two members from each of the parishes—making 22 members. The duration of the assembly is 12 months. If there be less than seven members of council resident in the island, the governor may fill up the number to seven for the despatch of business. The governor is chancellor, but he sits in the chancery with the council, who act as judges both in the court of error and in equity. There is a court of common pleas held for each district, monthly, during eight months of the year, but no court of king's bench. A general sessions of the peace is held twice a year.

The principal articles of import are dry goods of every quality and description; flour, corn, meal, and oats; pickled herrings, cod-fish, salt beef, pork, and butter; soap, candles, and all kinds of Irish provisions, with wood-lumber, horses, cattle, and live stock, hardware, and earthenware.

The revenue of the island, previously to the abolition of slavery, was raised by a poll-tax upon slaves, and by duties on spirituous liquors, licences, &c.; but it is now derived principally from duties levied upon American produce, on the tonnage of ships, and on spirituous liquors, licenses, &c.: lately it has been as high as £40,000 sterling per annum; and the expenditure has been little more than £30,000.

A banking establishment has been lately formed by a board of directors in London, incorporated by act of parliament, which is of the greatest utility to the colony.

The proportion of the £20,000,000 voted by parliament for the abolition of slavery paid to the colony was £1,721,345 19*s*. 7*d*. The value of the slaves was estimated at £3,897,976 19*s*.; and the average value of a slave, from 1822 to 1830, was £47 1*s*. 3½*d*.

BARBANTANE, a town of France, dép. Bouches du Rhone, near the confluence of the Durance and the Rhone, 4 m. S.W. Avignon. Pop. 2926. Its environs produce excellent wine.

BARBARY, the name usually given in modern times to that portion of N. Africa which comprises the various countries between the W. frontier of Egypt and the Atlantic on the one hand, and the N. frontier of the Sahara, or Great Desert, and the Mediterranean on the other; or between 25° E. and 10° W. long., and 30° to 37° N. lat. It consequently includes within its limits the empire of Morocco and Fez, with the regencies of Algiers, Tunis, and Tripoli, including Barca. Under the Roman dominion, it was divided into *Mauritania Tingitana*, corresponding to Morocco and Fez; *Mauritania Cesariensis*, to Algiers; *Africa Propria*, to Tunis; and *Cyrenaica* and the *Regio Syrtica*, to Tripoli. Its extent may be taken at from 650,000 to 700,000 sq. m.; and its population has been variously estimated at from 10,000,000 to 14,000,000.

The name Barbary has not, as has sometimes been supposed, been given to this portion of Africa because it is occupied by a barbarous and ignorant people. It is derived from the name of its ancient inhabitants, usually styled *Berbers* or *Kabyles*, and should, therefore, in strictness, be called Berbery. The Arabians call it *Maghreb*, or the region of the W.; but though this name correctly points out its situation in relation to Arabia, it would be incorrect if used by Europeans. If a new name were now to be adopted, it might be called the *Region of Atlas*, inasmuch as it includes the whole of that great mountain chain, with its numerous ramifications. This designation has, in fact, been given to it by some geographers; but there is but little probability of its displacing the common name; and, when properly explained, it is quite as good as any other.

In antiquity, this part of Africa was distinguished as being the seat of Carthage—that great commercial republic, that waged a lengthened, doubtful, and desperate contest with Rome herself for the empire of the world. After the fall of Carthage, it formed an important part of the Roman empire. It had many large and flourishing cities, and was long regarded as the principal granary of Rome. After being overrun by the N. barbarians, it was subdued by the Saracens; and under their sway acquired a lustre and reputation scarcely inferior to that of the most brilliant period of its ancient history. But the Saracenic governments in Barbary, like those in other countries, gradually lost their vigour, and became a prey to every sort of disorder; and this great country ultimately sunk into the lowest state of barbarism and degradation. A handful of Turks and renegades acquired the government of its finest provinces, and subjected them to the most brutal and revolting despotism. Being unable to contend with the European powers in regular war, they had recourse to a system of piracy and marauding; which, though often partially abated, was not entirely suppressed till the conquest of Algiers by the French.

Barbary has far more of a European than of an African character. Owing to its being pervaded by the great chain of Atlas, it has every diversity of surface, and is remarkably well watered. The climate is excellent; and it produces all the grains and fruits of S. Europe in the greatest perfection. In ancient times its fertility was such as to be almost proverbial:

Frumentum quantum metit Africa.—*Hor. Sat.*, lib. ii., sat. 3.

and, notwithstanding the wretched treatment to which it is now subject, the fertility of the soil continues unimpaired, and with no manure, except occasionally burning weeds and stubble, it produces the most luxuriant crops. No wonder, therefore, that the site of the famous gardens of the Hesperides should have been originally placed in Barca; and that they should afterward have been carried farther W. according as the Greeks became better acquainted with the coast, and with the riches and capabilities of the country. (For a full account of this interesting region, the reader is referred to the articles on the different countries comprised within its limits and to those on ATLAS, CONSTANTINE, &c.)

BARBASTES, a town of Spain, Aragon, near the Cinca, 28 m. S.E. Huesca. Pop. 5000. It is surrounded by walls, is the seat of a bishopric, and has some tanneries.

BARBEZIEUX, a town of France, dép. Charente, cap. arrond., on the road from Angoulême to Bordeaux, 21 m. S.W. Angoulême. Pop. 3013. It is advantageously situated on the declivity of a hill, at the extremity of an extensive and fertile plain. It is well built; has a court of original jurisdiction, a linen manufacture, and some trade in wine, corn, cattle, and especially poultry. The *chapons truffés* of Barbezieux are highly esteemed. (*Huge, Dict. Géog., &c.*)

BARBOUR, county, Ala. Situated in the S.E. part of the state, and contains 1200 sq. m. Chattahoochee river bounds it on the E., by branches of which it is chiefly drained. Pear r. bounds it on the W. It contained in 1840 18,544 neat cattle, 2063 sheep, 28,465 swine; and produced 6239 bushels of wheat, 237,936 of Indian corn, 12,204 of potatoes, 4860 pounds of rice, 2,959,109 of cotton. It had thirty-six stores with a capital of $184,196; twenty-two gristmills, twenty-two saw-mills, two tanneries, one printing-office, one weekly newspaper, one academy, 50 students, twenty-two schools, 549 scholars. Pop.: whites, 6469; slaves, 5548; free-coloured, seven; total, 12,024. Capital, Clayton.

BARBOURSVILLE, p. v. Capital of Cabell co., Va., 352 m. W.N.W. Richmond, 389 W. Situated on the N.E. side of Guyandott river, 5 miles above its entrance into Ohio river. It contains a court-house, jail, three stores, one flouring-mill, and about 175 inhabitants.

BARBOURSVILLE, p. v., capital of Knox co., Ky. 119 m. S.E. by S. Frankfort, 519 W. Situated on the N. side of Cumberland river, and contains a court-house, jail, several stores, two schools, 54 scholars. Pop. 224.

BARBUDA, one of the W. Indian islands, belonging to Great Britain, 27 m. N. Antigua, 15 m. in length by 8 m. in breadth. Pop. 400, almost all blacks. It is flat and fertile. It is a proprietary of government, and belongs to the Codrington family. Corn, cotton, pepper, tobacco, are produced in abundance, but no sugar. It has no harbour, but a roadstead on its W. side.

BARBY, a town of Prussian Saxony, on the Elbe, 14 m. S.E. Magdeburg. Pop. 3100. It is well built, has an old castle, two Lutheran, and one Calvinist church, with fabrics of cloth, cotton, and flax, soap-works, breweries, and distilleries.

BARCA (Βαρκη), a district of N. Africa, forming the E. portion of Tripoli, extending from 26½° to nearly 33° N. lat., and from 19° to 25½° E. long. The limits are, however, very uncertain towards the S. and E., the country, in the former direction, terminating in the Libyan desert, and being, in the latter, divided from Egypt by wandering tribes of Bedouins, who acknowledge no authority in any settled government. On the N. Barca is bounded by the Mediterranean sea, and on the W. by the gulf of Sidra (the *Syrtis Magna* of the ancients), and the government of Sert or Sort. (*Beechy*, 210; *Pacho*, 19; *Beechy and Pacho's Maps.*) It extends 500 m. from N. to S., but the cultivated and inhabited portion terminates at about the 31st parallel, or 140 m. only, from the farthest N. point of the coast. The greatest width from E to W. is about 390 m., and the area may be estimated at about 78,000 sq. m. (*Beechy and Pacho's Maps.*)

A mountain range, at a short distance inland, fronts the whole extent of coast line: this range appears to have its greatest elevation near the 22d meridian (at the town of Cyrene), and to decline thence both towards the E. and W., terminating, in the former direction, in the plain of Lower Egypt; in the latter being continued round the gulf till it vanishes in a low swamp S. of Mesurata. The least elevation of these mountains is estimated at 400 or 500 ft., and the greatest at 1805 ft. It is upon the sides and summits of these hills that the only population and production is found, though the great plain towards the S., is probably preserved from some of the *worst* features of the desert by a range of sand hills extending from the oasis of Ammon to that of Maradeh, which must of necessity form *some* protection from the effects of the sirocco. (*Beechy*, 107, 216, 252, 434, &c.; *Pacho*, 57, 83, 134, 272, &c.)

There are no rivers, but innumerable mountain torrents, and wells are also tolerably abundant, though many of them contain only salt or brackish water. On the whole, however, the *mountain* land is not very badly irrigated. Some years since, the Americans made a temporary settlement at Derna, where, taking advantage of the many flooded ravines, they built a *water-mill* of very simple construction, which, by a little skill in damming up the stream, works nearly all the year. (*Pacho*, 99.) The ancient sacred fountain of Cyrene is permanent (*Beechy*, 424), and probably the only stream in Barca that is so, with the exception of a subterranean rivulet, near Bengazi, which is supposed by Beechy (329), on good grounds, to be the Lethon or *Lethe* of Ptolemy (iv., 4), Pliny (v., 5), and Strabo (xvii., 836), and the Erceus of Scylax. (*Perip.*, 111.) Though stretching as far as 33° N., Barca has an equinoctial climate. The rainy season appears to commence sometimes as early as November, and at others to delay its violence till the end of December, or even till January: during such delay, however, the intermediate season is *showery*, and when the rains descend in their strength, the mountain roads become nearly, if not quite impassable. The ravines pour down torrents, which, in their progress, carry with them earth, trees, and stones of enormous size; and convert the narrow belt of flat land between the mountains and the sea into enormous marshes. The temperature is, of course, generally high, but the powerful evaporation makes that of winter something lower than might be anticipated, and absolutely cold nights are not unknown. The wet season, as in other countries, is ushered in by storms. (*Beechy*, 41, 59, 247, 281, 347, &c.)

Notwithstanding the celebrity of this country in ancient times, it is only within these few years that anything accurate has been learned concerning it. Its very outline was erroneously marked in every map and chart previously to 1828 (*see* SYRTIS); and every account of its soil, climate, and fertility was nearly the direct reverse of what experience has shown to be the truth. The ancients, with the single exception of Herodotus, have combined to represent the coasts of the Syrtis as an irredeemable desert. At least such is the impression given by Strabo, Pliny, Scylax, and others, of all the country W. of Berenice (*Bengazi*); while the moderns, following Leo Africanus and the Arab historians, have extended the same description to all the land between Tripoli and Alexandria, till the term *Barca* became synonymous in European language with barrenness. (*Strabo*, xvii., 838; *Pliny*, v., 4, &c.; *Scylax*, *Perip.*, 113, &c.; *Leo. Afric.*, v., 73, &c.) But, to say nothing of the gardens of the Hesperides, situated on this coast, it is impossible to reconcile this idea of utter barrenness with the pastoral life said by Herodotus to be led by the aborigines (*Melp.*, 186), or with the subsequent colonization of the country by the Greeks. Neither is it likely that Herodotus, who so accurately describes the "*vast sandy desert*" in the interior (*Melp.*, 181), should have omitted all mention of the parched and barren soil, had any such existed on the high lands near the coast. In fact, the prevalent descriptions of Barca have been, for years, little more than fables; the S.W. corner, indeed, (joining on the desert), seems fully to justify the accounts of utter desolation given of it; but E. and N. the country rapidly improves, and presents extensive crops of corn and large fields of excellent pasturage. The mountain sides are in most cases thickly wooded, and covered with an excellent soil; and even the sand itself (on the shore), is made, by little labour, luxuriantly productive during the rainy season. The trees consist of pines, olives, laurels, with a great variety of flowering shrubs and climbers; such as roses, laurestinas, honeysuckles, myrtles, &c.; but the trees most in esteem here, as in every other Mohammedan country, are the various species of dates, palms, and figs, which flourish in great variety and abundance. The corn which this country produces is chiefly barley or dhourra, and oats.* The fruit, grapes, melons, pumpkins, melonrani (or egg plants), cucumbers, and tomatoes; a peculiar plant called Bauria, is also raised, though not in great abundance; fine artichokes, and green and red pepper, are also very plentiful. But the plant for which this country is the most remarkable is the Silphium, an umbelliferous perennial resembling the hemlock or wild carrot, of which the most marvellous tales are related by the ancients. Its origin was said to be miraculous; it perished under cultivation, but throve in the most savage and neglected deserts. A liquor produced from it was esteemed an almost universal remedy for inward ailments; and various ointments, compounded of the stalk, leaves, and root, were held to be equally efficacious in outward applications. The silphium was an object of public,

* Captain Beechy saw, in the neighbourhood of Bengazi, large quantities of oats, which he considered to be the *spontaneous* production of the soil. Their situation was, however, in open tracts, among forests, apparently deserted cultivations (p. 347), and the grain was, therefore, probably, the product of the last neglected crops. It is a singular, but, except in a few accidental instances like the present, a universal fact, that the bread corns are *nowhere indigenous*.

almost of divine, honour; it was an offering to the deified king of the country, and its figure was stamped upon the coins of Cyrene (*Pliny*, xix., 3; xxii., 22; *Theophrastus*, iv., 3; *Arrian, Hist. Ind.*, xliii.; *Exp. Alex.*, iii., 28, &c.) It does not, however, appear to differ essentially from other soporific plants of the same family. (*Beechy*, 409–420; *Pacho*, 247–255.) Thus, though not very varied, the productions of Barca are sufficiently abundant, and nothing but industry seems requisite to restore this country to the state in which Herodotus beheld it, when three successive harvests, on the coast, on the sides, and on the summits of the mountains, occupied the Greek inhabitants eight months in every year. (*Beechy*, 261, 339, 367, *et pass.*; *Pacho*, 59, 99, 153, 225, *et pass.*; *Herod. Melp.*, 199.)

The domestic animals, camels, horses, oxen, asses, sheep, and goats, are extremely numerous, and form the riches of the present wandering, as of the ancient settled, population. The hog, forbidden by the Mohammedan law to the faithful, is found only in his savage state; but in this state he exists in great numbers, maintaining his ground against the jackals, hyenas, and other beasts of prey that infest the same locality. From the silence of travellers it may be inferred that birds are scarce; and though several kinds of venomous serpents are unquestionably met with, it seems, also, as if both the number and power of the reptile tribe had been greatly exaggerated. Insects are exceedingly numerous; and even the locust, which is a frequent visiter, is scarcely more terrible (to strangers at least) than the myriads of flies, beetles, fleas, lice, and other noxious vermin, which the heat of the climate and the filthy negligence of the inhabitants preserve in constant strength and activity. (*Pacho*, 61–64, 235–246, &c.; *Beechy*, 107, 211, 286, 301, *et pass.*)

The inhabitants are exclusively Bedouin Arabs, with the exception of a few Jews in the towns. The Arabs differ in nothing from their countrymen in other parts, except in being dirtier, less active, and exhibiting the worst parts of their national character in a more exaggerated form. The country is governed by a bey, subject to the pacha of Tripoli; and the pop., notwithstanding the resources of the country, is thin. Its amount can only be guessed at; but it probably does not exceed 1,000,000. (*Beechy*, and *Pacho*, *passim*.)

The original inhabitants of this district are called by Herodotus (*Melpom.*, *pass.*) Africans (Λιβυων), a term which he seems always to distinguish carefully from Egyptians (Αιγυπτιων), but which certainly did not mean a black race of men. According to Strabo, it would appear that, even from the earliest times, they were Arabs following the wandering pastoral life, which prevails among them to the present day. (xvii., 835.) The Phœnicians appear to have traded with them at a very early period; and from their description of the country probably arose the first fanciful idea of the Hesperian gardens, which, as already observed, were supposed to have their seat in this country. It is probable that the report of this luxuriance of the district was one inducement to the Greek settlement in Cyrene; but the immediate cause seems to have been the pressure of population in Lacedemon, consequent to the expulsion of the descendants of the Argonauts from Lemnos by the Pelasgian population of Attica. After a troubled residence of some years, these exiles threw off a large body of emigrants, who, under the command of Battus, and by order of the Delphic oracle, established the first Greek colony in Africa of which there is any record. The pressure of population continuing in Lacedemon, and the oracle urging the Greeks to follow their countrymen, a general propensity to emigrate was at last excited, and, about 60 years after the first adventurers had landed, a movement, that might also be called national, was made towards the African shores. The natives and the Egyptians seem to have been equally alarmed at this irruption; they combined to expel the intruders, but received so decisive a defeat that few of the Egyptians returned to their own country. In the succeeding generation the town of Barca, which subsequently gave name to the whole country, was built. This once famous city has now vanished, and even its site is a matter of dispute. For a generation or two, there were now two Greek kingdoms in Africa, that of Cyrene and that of Barca; both, however, shared the fate of their Egyptian neighbour, and, under Cambyses, became a part of the Persian empire, and so remained, till the conquests of Alexander changed the aspect of Eastern affairs. Under his successors they formed a part of the Greco-Egyptian kingdom; but before its fall they passed into the hands of Rome. With the irruption of the northern nations, Africa fell for a while beneath the power of the Vandals; but the rapid conquests of the early Mohammedans quickly added this country to their dominions. This was the last important revolution. During the many centuries that the Greek and Roman ruled in Barca, civilization, arts, and sciences, flourished; the remains of aqueducts, temples, and other mighty works, sufficiently attest this fact; but the refinement was entirely foreign, and vanished with the exotic population which introduced it. The Arab is again the sole possessor of the soil; and the description of the shepherd, who held it before the Greek arrived, would, in every important particular, apply to him at this day. The cities of this country, especially those of Berenice (*Bengazi*), Arsinoe, Barca, Appolonia, and Cyrene, which gave name to the district called Pentapolis (Πεντανολις), are very famous in antiquity. These towns, however, frequently changed their names, so that it is sometimes difficult to follow the ancient writers; and in the barbarous names bestowed upon them by the present occupiers, it is as impossible to recognise them as it is to identify the heaps of filth and ruins which they now exhibit, with the splendour and luxury that distinguished them in antiquity. The name Barca has, however, undergone no change, and the W. division of the country is still called Cyrenaica. The E. portion is called Marmorica, which is also an ancient denomination. (*Herodotus*, *Pliny*, *Strabo*, *Arrian*, *Polybius*, *Abul Feda*, *An. Mus.*; *Edreisi*, *Beechy*, *and Pacho*, *pass.*)

BARCELONA, a city and sea-port of Spain, on the Mediterranean, cap. prov. Catalonia, on the margin of a fruitful plain, between the rivers Besos and Llobregat, at the foot of Monjouich (*Mons Jovis*), 315 m. E.N.E. Madrid, 194 m. N.E. Valencia; lat. 41° 22′ 58″ N., long. 2° 8′ 11″ E. Pop. in 1826, 120,000 (*Miñano*). It is strongly fortified, being surrounded with strong walls, fosses, and batteries. The citadel to the N.E. of the city is a regular octagon on the system of Vauban, with accommodation for 7000 men. The citadel communicates with the fort of San Carlos on the sea by a double covered way which surrounds the city as far as Barcelonetta. The fortress of Monjouich, on the mountain of that name is looked upon, if properly garrisoned, as impregnable, it commands the town on the S.W.

The city is divided by the promenade, called La Rambla, into two pretty equal parts; that to the N.W. being called the new, and that to the N.E. the old city. The streets in the latter are narrower and more crooked than in the former. The houses, which are mostly of brick, are generally from four to five stories high, with numerous windows and balconies. Mr. Townsend says that the old Roman town may still be distinctly traced, occupying a small eminence in the centre of the city, with one of its gates and some of its towers well preserved. With the exception of the cathedral and custom-house, the old palace of the kings of Aragon, &c., few of the public buildings are worth any special notice. The cathedral is a noble structure, in the later Gothic style, with finely painted windows, and a choir of good workmanship and singular delicacy. With the exception of that of the Dominicans, the convents are destitute of any attractions; and the records and pictures of the heretics who had suffered in the city from 1489 to 1726, decribed by Mr. Townsend as existing in the latter, are no longer to be met with.

Barcelona has a royal junta of government, and is the seat of the provincial authorities. A *Junta de Comercio*, or board of trade, supports public professorships of navigation, architecture, painting, sculpture, perspective landscape, and ornamental flower-drawing, engraving, chemistry, experimental philosophy, agriculture, and botany; short-hand writing, commerce, and accounts; mechanics, and the English, French, and Italian languages. It has a large cabinet of coins, and awards pensions and rewards for superior attainments and useful inventions. It also maintains some of its students in foreign parts, to perfect themselves in their studies; and has expended large sums in drawing plans and taking levels of the ground for canals and other public works in the province. Mr. Townsend says he counted 500 boys, most of them intended for trades, attending the academy of fine arts, provided with materials, models, and living subjects at the public expense. It has also four public libraries, an ecclesiastical seminary, eight colleges, a college of surgeons, and professorship of practical medicine, a college of pharmacy, academies of arts and sciences, and of *belles lettres*, &c., a school for deaf and dumb, house of industry (*Real Casa de Caridad*), numerous hospitals, a foundling institution, and several other charities. Mr. Townsend says that the general hospital of this city was the best managed institution of the kind he had ever seen. The population of the city has not an exclusively Spanish appearance. Spanish hats are scarcely to be seen, and the mantilla is not indispensable. According to Mr. Inglis, the features of the females are more regular, their forms slighter, and their complexions clearer, and their hair less coarse than that of the Andalusian ladies; but their eyes have less expression. The dress of the peasantry is peculiar, their red caps hanging a foot down their backs; crimson girdles, and gaudy-coloured plaids, give them a highly grotesque appearance. Barcelona has some fine public walks: the *Rambla*, already referred to, is always crowded, and is inferior to the Boulevards of Paris. There is also a charming walk round the ramparts, with delightful views, particularly towards the sea.

The opera here enjoys a considerable reputation; the interior of the theatre is large and handsome; almost all the boxes are private, and cost from £50 to £60 for the season. Seats in the pit let at 40 dollars for the season. The principal singers are paid from 2000 to 2500 dollars, with a benefit night. There are here several valuable libraries and collections of MSS.; especially the royal archives of the kingdom of Aragon, containing 20,000 loose MSS., 8,000 in folio volumes, and 900 papal bulls. The principal manufactures are those of silk, leather, lace, wool, cotton, &c., but none of them are flourishing. Miñano says of the cotton manufacture, that its progress has been *de mal en peor!*—from bad to worse!—a consequence of oppressive and absurd political and commercial regulations. Mr. Townsend speaks in high terms of the foundry for brass cannon that existed in the city at the epoch of his visit. We are not aware whether it has been abandoned; but it is unlikely that such an establishment should be kept up in the present wretched state of the monarchy.

The trade of Barcelona has greatly declined since the emancipation of Spanish America; but it is still far from inconsiderable. The principal imports are cotton, sugar, fish, hides, cocoa, iron hoops, cinnamon, dye-woods, indigo, staves, cheese, bees' wax, coffee, horns, and specie, mostly from America, Cuba, and Porto Rico. The exports consist of wrought silk, soap, fire-arms, paper, hats, laces, ribands, and steel. The export of shoes, in the manufacture of which about 2000 hands used to be employed, has entirely ceased. In 1831, 18 English and 110 other vessels, being, in all, of 15,130 tons burthen, entered the port. The harbour is formed by a mole running to a considerable distance in a S. direction, having a light-house and battery at its extremity. The depth of water within the mole is from 18 to 20 feet; but there is a bar outside, which has frequently not more than 10 ft. water. When in the harbour, vessels are pretty well protected; they are, however, exposed to the S. winds, and great damage was done by a dreadful storm in 1821. Large vessels are obliged to anchor outside the mole.

The Barcelonese used to evince more superstition and ignorance than might have been expected in a city having so much intercourse with foreigners. Money is collected to the sound of little bells, at executions, to buy masses for the soul of the criminal; and large processions of masked penitents accompany him to the scaffold. In 1779, most of the insurance companies were ruined by underwriting the French West Indiamen, relying on their partnership with various saints, when nobody else would take the risk at any price! (*Townsend*, i., 153.) And it would seem, from the statements of Mr. Inglis, that matters continue, in this respect, nearly on their old footing.

Barcelona is supposed to have been founded about 200 years before the Christian æra, and 300 after the establishment of the Carthaginians in Spain, and to have been named after its founder, Hamilcar Barcino. After the Romans and the Goths, it was subjugated by the Arabs, in the beginning of the eighth century; and was reconquered from them by the Catalonians, aided by Charlemagne and Ludovico Pio, in 801. It was then governed by counts, who were independent sovereigns, till the end of the 12th century, when it was ceded, by marriage, to the crown of Aragon. Barcelona is distinguished in the history of the middle ages for the zeal, skill, and success with which her citizens prosecuted commercial undertakings. She singly rivalled the maritime towns of Italy in the commerce of the Levant; and was one of the first to establish consuls and factories in distant countries, for the protection and security of trade. She would seem also to be entitled to the honour of having compiled and promulgated the famous code of maritime law, known by the name of the *Consolato del Mare;* and the earliest authentic notices of the practice of marine insurance, and of the negotiation of bills of exchange, are to be found in her annals. She has been more celebrated as a commercial than as a manufacturing town; though in this, also, her progress has been very respectable.

Barcelona has sustained seven regular sieges since its recovery from the Arabs. During the greater part of the war of the succession, it adhered firmly to the party of Charles; but, after a desperate resistance, it was taken, in 1714, by the forces of Philip V., commanded by the Duc de Berwick. The French got possession of it in 1808, and kept it all through the Peninsular war. In 1821 it was attacked by the yellow fever, which is said to have carried off a fifth part of the population. Thirteen councils have been held here, and above twenty-four assemblies of the Cortes, down to the last, in 1706. It has had, also, many visits from the Spanish monarchs, as they were obliged by the laws of Catalonia to appear here in person to be crowned and take the oaths as sovereigns of this principality and of Aragon; which ceremony was observed down to the time of Philip V. (*Miñano, Diccionario Geografico*, ii., 390–396, and *Suppl.*, art. *Barcelona; Inglis, Spain in* 1820, ii., 364–391; *Townsend*, i., 114–138; *Dict. of Com.*, p. 119.)

Barcelona (New), a town of Colombia, cap. prov., on the left bank of the Neveri, about 3 m. from the sea, and 40 m. S.W. Cumana; lat. 10° 6′ 52″ N., long. 64° 47′ W. Its pop., in 1807, was 15,000, half of whom were whites; and at the beginning of the present century, it had a considerable trade with the W. India islands. It is still a place of some commerce, being well situated for the exportation of the cattle and other produce of the *llanos* to the W. India islands. Speaking generally, it is badly built; the houses being of mud, and ill furnished. The streets are unpaved, which makes them filthy during the rains, while in dry weather the dust is intolerable. It is said to be one of the most unhealthy places in S. America. It was founded in 1634; previously to which, the cap. of the distr. was Çumanagoto, 2 leagues higher up the river. (*Mod. Trav.*, xxvii., 102–104.)

Barcelonetta, a suburb of Barcelona, on the S.E. side of the river, often considered as a separate town. It was built in 1754, on a uniform plan; the houses are all of red brick. Pop. 5000. (*Miñano*, i., 392.)

Barcelonette, a town of France, dep. Basses Alpes, cap. arrond., on the Ubaye, 30 m. N.E. Digne. Pop. 2154. It is beautifully situated in a fine valley at the foot of the Alps, above 3800 feet above the level of the sea. It consists principally of two main streets, which intersect each other at right angles; the houses are neat and good; and, altogether, this is perhaps the handsomest town of the French Alps. It has a court of original jurisdiction, a college, a primary normal school, and an agricultural society. Above 200 silk-looms have recently been established here, and it has also some manufactures of cloth, and fulling-mills.

Barcelonette is believed to occupy the site of a Roman town. Being on the frontier of two states frequently at war, it has been repeatedly taken and retaken; but was definitively ceded to France by the treaty of Utrecht. It was the native place of Manuel, the liberal deputy, to whose memory a monument has been constructed in the principal square. It consists of a fountain, surmounted by a funeral urn, and having on one of its sides a bust of Manuel, with the inscription, taken from Beranger, "*Bras, tête et cœur, tout était peuple en lui.*" (*Hugo, France Pittoresque*, art. *Basses Alpes.*)

Barcelos, a town of Portugal, prov. Minho, on the Cavado, 28 m. N. Oporto. Pop. 3892. It is surrounded by walls flanked with towers; streets broad and straight, houses well built: it has a fine bridge over the river, a grammar school, a hospital, and a work-house. It is very ancient.

Bardsey, a small island of N. Wales, in the Irish sea, near the N. point of Cardigan bay, co. Caernarvon: lat. 52° 45′ N., long. 4° 46′ W. Pop., in 1831, 84. Length about 2 m.; breadth 1 m. It contains 370 acres, one third of which is a mountain ridge, feeding a few sheep and rabbits; the rest a tolerably fertile clay soil, growing good wheat and barley. Its rental does not exceed £100 a year, in three distinct holdings. It is accessible only on the S.E. side, where there is a small, well-sheltered harbour for vessels of thirty or forty tons. On the N. and N.E. it is sheltered by the promontory of Braich-y-Pwll, 2½ m. distant. In the channel between them is a very rapid current, rendering it unsafe, except to experienced hands. The perpendicular and projecting cliffs are a great resort of puffins and other migratory birds in the breeding season, and their eggs form a considerable trade, being gathered by men suspended from the summits of the promontory. There is a light-house on the island (with fixed and revolving lights), established in 1821, under the Trinity House, having the lantern elevated 141 ft. above the sea. It is said to owe its present name to its forming a refuge for the last Welsh bards. It had an ancient and celebrated abbey, the annual revenue of which, at the general suppression, was £46 1*s.* 4½*d.* The site is traceable only from numerous walled graves, and a building called the Abbot's Lodge. In a ruined antique oratory, with an insulated stone altar at the E. end, the church service is read on Sundays by one of the inhab. to the rest, when the weather does not permit them to resort to the pa. church of Aberdavon, on the promontory.

Bareily, an inl. distr. of Hindostan, prov. Delhi, mostly between 28° and 29° N. lat.; having N. the distr. of Pillibheet, E. and S.E. Shahjehanpore, and W. and S.W. Salswan and Moradabad: area 6900 sq. m.; surface generally level, and well cultivated: the Ganges bounds it W., and the Ramgunga and many small streams intersect it. In summer the heat is intense, but during winter, with N. winds, the thermometer falls below 30° Fahr., and water freezes in the tents. A few years ago there were said to be 4,458,380 kucha begas of land in cultivation, assessed with a land-tax of 2,266,280 rupees, or a little more than eight annas per bega, most of which is realized; though the gov., not resorting to sales of land for arrears of taxation, as in the lower provinces, it has always been difficult to collect, and much depends upon the decision and judgment of the collector: 3,362,022 begas are fit for culture, but not in actual tillage; and 3,558,899 begas are reported as waste. To

the N. there is much jungle, and between Bareily city and Anopsher extensive wastes prevail, consisting of lands which were formerly cultivated, but are now covered with long grass, which parches and inflames in summer, and swarms with foxes, jackals, hogs, and game. Bishop Heber says, that the soil and climate generally are very fine; in most parts date-palms and plantains are common, as well as walnut, apple, and pear-trees, vines, &c. This district is noted for a fine species of rice, called *barmati* (pregnant with perfume), superior to the best of Patna. Husbandry, in general, is superior to that of Oude, and the articles produced of a better quality; the sugar, rice, and cotton, are the highest priced in India. The roads and bridges are better than in most parts of the British provinces; and the cart commonly in use is a larger and more convenient vehicle than that of Bengal; formerly a great deal of salt, called *kurrah salt*, was made collaterally with nitre, in this distr., and exported in large quantities. The imports from the lower prov. are chiefly chintzes, gudjoes, salt, coarse sugar, and cutlery, cottons, cheap trinkets, coral, beads, and slave-girls: articles from the hill region, and even from Tibet, were formerly imported thither on the backs of goats. The inhab. are pretty equally divided into Hindoos and Mohammedans: the tribe of Banjarees (carriers and bullock drivers), estimated at 14,000, have been all converted from the former to the latter faith. Not long since Bareily district was overrun by clans of Mohammedan warriors, or, rather, banditti, ready to join any leader who chose to hire them, and many thousands of whom served under Holcar, Jeswunt Row, &c.; they were disaffected to the British gov., and for many years disturbed the country by robberies and other crimes: they have at length mostly either dispersed or settled down into more quiet lives; but Bareily is still a district from which judicial appeals to the supreme courts are very frequent. In 1827 there were 108 Persian and 105 Hindoo schools in this district, entirely supported by the pupils. Hindoos and Mussulmans have no scruples as to mixing together in these establishments: reading, writing, arithmetic, and Persian, constitute the principal branches of tuition. The original Sanscrit name of this territory was Kuttair, till incorporated with Rohilcund; with which it was ceded, in 1774, to the nabob of Oude: since 1801 it has been under the British presid. of Bengal. (*Hamilton's E. I. Gazetteer*, p. 137, 138; *Reports on the Affairs of the E. I. Comp.*, 1830–32.)

Bareily, a city of Hindostan, cap. of the above distr., seat of a court of circuit and appeal, head of a judicial division, and one of the six chief provincial cities in the Bengal presidency; on the banks of the united Jooah and Sunkrah, lat. 28° 23′ N., long. 79° 16′ E., 42 m. N.W. of the Ganges, and 700 m. N.W. Calcutta. Pop. (1822) 66,000. The principal street is nearly 2 m. long, and tolerably well built, but the houses are only one story high. There are several mosques, and an old fort, crumbling to ruin; the British civil station and cantonments, consisting of a quadrangular citadel, surrounded by a ditch, stand S. of the town. The chief manufactures are brazen water-pots, decorated with varnish and a remarkable imitation of gilding; other household articles; with saddlery, cutlery, carpets, embroidery, hookahs, &c. There are 131 Persian and Hindoo schools in Bareily, 300 seminaries, attended by about 3000 pupils, and an established English college with 60 students; eleven persons teach Arabic, and two others medicine, and in the vicinity there are nine Hindoo and thirteen Persian schools. In 1816 an alarming insurrection broke out in this city, occasioned by an attempt to impose a police tax, which was not quelled without much difficulty and bloodshed. The lands in the vicinity are but 8 feet above the waters of the Ramgunga, and are annually inundated.

BARENTON, a town of France, dep. La Manche, cap. cant., 7 m. S.E. Morlaix. Pop. 3047.

BARFLEUR, a sea-port town of France, dep. La Manche, 16 m. E. Cherbourg. Pop. 1158. Its harbour, which was once considerable, is now choked up with sand.

BARGA, a town of Tuscany, cap. vicariat, near the Serchio, 16 m. N. Lucca. Pop. 1800. There are fine jasper quarries in its environs.

Barga, a town of the Sardinian states, div. Coni, 28 m. S.S.W. Turin. Pop. 3700. It is situated at the foot of the Alps, near the left bank of the Grandon. It has a manufactory of arms, and a pretty active commerce. There are slate quarries in its vicinity.

BARGEMONT, a town of France, dep. Var, 7 m. N.N.E. Draguignan. Pop. 1944. It stands on a hill covered with vines and olives, and sheltered by mountains. Moreri, the original author of the famous historical and biographical dictionary (*Le Grand Dictionnaire Historique*), was born here in 1643. At his death the dictionary was comprised in one vol; whereas, in consequence of successive enlargements, the last and best edition, in 1759, is in 10 vols. folio. Moreri can, therefore, be looked upon merely as the projector of the existing work.

BARI (an. *Barium*), a sea-port and city of Naples, cap. prov. Terra di Bari, on the Adriatic, 50 m. N.N.W. Tarentum; lat. 41° 7′ 52″ N., long. 16° 53′ 2″ E. Pop. 19,000. It occupies a tongue of land of a triangular form, and is defended by double walls and a citadel. The views from the rampart above the harbour are extremely fine. Streets narrow, crooked, and filthy; houses mostly mean; water brackish and bad. Principal public buildings—cathedral, with a steeple 263 feet high; the old priory of St. Nicholas, founded in 1087, resorted to by thousands of pilgrims; the college, founded in 1817 for the education of nobles; the lyceum, the new theatre, and the vast building of the diocesan seminary, which admits 120 scholars from four provinces, who are fed, lodged, clothed, and instructed for eight ducats a month each. It is the seat of an archbishopric, and of a civil and criminal court. Besides the cathedral, it has several parish churches, and convents for both sexes, an orphan asylum, two hospitals, and a large arsenal, including within it corn magazines and a *mont de piété*. It has fabrics of cotton, cloth, silk, hats, soap, glass, &c. The *acqua stomachica*, a liquor made of herbs and spices, and used all over Naples as *chasse caffé*, is prepared here in great perfection. The port, which is encumbered with sand, only admits small vessels; but in the roads there is good anchorage in from 16 to 18 fathoms. Nearer the shore, in from 10 to 12 fathoms, the ground is foul and rocky.

This is a very ancient city. It is referred to by Horace, *Bari mœnia piscosi*. (Sat., i., 5.) In more modern times it fell successively into the possession of the Saracens and Normans. It has been three times nearly destroyed, and as often rebuilt on the same place. (*Swinburne's Two Sicilies*, i., p. 191, 4to.; *Craven's Naples*, p. 109; *Diction. Géographique, &c.*)

BARILE, a town of Naples, prov. Basilicata, 4 m. S.S.E. Melfi. Pop. 3000. It stands on an agreeable hill, and has three churches. It was founded by a Greek colony of the Lower empire.

BARING, p. t., Washington co., Me., 201 m. E.N.E. Augusta, 871 W. Bounded N. by St. Croix river. A rail-road, 4 miles long, connects it with Calais. It contains one store, one grist-mill, seven saw-mills, two schools, 162 scholars. Pop. 376.

BARJAC, a town of France, dep. Gard, cap. cant., 19 m. E. Alais. Pop. 2186.

BARJOLS, a town of France, dep. Var, cap. cant., 12 m. N.N.W. Brignolles. Pop. 3470. It has a filature of silk, with fabrics of paper and earthenware, distilleries and tanneries. The subterranean chapel of the *ci-devant* convent of the barefooted Carmelites has some very curious stalactites.

BARKER, t., Broome co., N.Y., 12 m. N. Binghamton, 135 m. W. Albany. Watered by Tougherioga creek. It contains three stores, one fulling-mill, one grist-mill, seven saw-mills, fourteen schools, 419 scholars. Pop. 1259.

BARKHAMSTEAD, p. t., Litchfield co., Ct., 24 m. N.W. Hartford, 360 W. Watered by branches of Farmington river. Incorporated in 1769. It contains three churches, one Congregational, one Methodist, and one Universalist; four stores, one grist-mill, nine saw-mills, eight schools, 308 scholars. Pop. 1571.

BARKING, a town and par. of England, co. Essex, hund. Beacontra, on the Roding, 8 m. E. London. Pop. of the town, in 1821, 2580; in 1831, 3404: houses at the latter date, 652. Pop. of the entire par., in 1831, 8036; houses, 1587. The town is situated at the head of Barking creek (as the Roding, below the town, is usually called), where it widens and receives the tide of the Thames, 2 m. above its influx into that river. The Roding contracts much immediately above the town, but has been made navigable for small craft to Ilford. The church was formerly attached to the celebrated abbey, and has many curious monuments. The living is a vicarage, with two chapels (one at Ilford, the other at Epping forest) annexed: it is in the patronage of All Souls' Coll., Oxford. There is a free school and market-house: a court is held by the lord of the manor every third week, where causes of trespass, and of debts under 40*s.*, are tried. The inhabitants are chiefly fishermen, or engaged as bargemen, and market carriers to London, &c. The parish contains 10,170 acres, about 1500 of which are occupied by the forest of Hainault, where is the famous Fairlop Oak, round which an annual fair is held on the first Friday in July. Another portion, called the Level, is so low that high tides are only kept out by an embankment; and it has been subject, in former times, to frequent inundations. The last serious one occurred in 1707, when 1000 acres of rich land were lost, and a sand-bank formed at the breach, 1 m. long, stretching half across the river. After an unsuccessful attempt by the proprietors, Parliament took it up, as a national concern, and a fresh embankment was made, which cost £40,000. This has been since kept in repair under commissioners appointed for the purpose. The bank is from 8 to 14 ft. high, and has a pathway on its sum-

salt. Great quantities of vegetables are supplied, from this parish, to the London markets. Under the Poor Law Amendment Act, the whole parish is placed in the Romford union, and has eight guardians; its average rates are £4817.

The abbey was one of the richest and most ancient in the kingdom; it was founded about 677, for nuns of the Benedictine order, and several of its abbesses were canonized. In 870 it was destroyed by the Danes, and in the 10th century rebuilt and restored to its former splendour by Edgar. Subsequent to the Conquest, its government was frequently assumed by the English queens. Its abbess was one of the four who held baronial rank, and lived in great state. At the general suppression, its annual rev. was, according to Speed, £1084 6s. 2½d.; according to Dugdale, 862£ 12s. 3½d. The abbess and 30 nuns were pensioned off. There is scarcely a trace left of the building.

BAR-LE-DUC, or BAR-SUR-ORNAIN, a town of France, cap. dep. Meuse, on the Ornain, 128 m. E. Paris. Pop. 12,383. It stands partly on the summit and declivity, and partly at the foot, of a hill. Its castle, of which only the ruins now remain, was burned down in 1649, and its fortifications were dismantled in 1670. The lower town, traversed by the Ornain, over which there are three stone bridges, is the best built, and is the seat of manufactures and trade. Among the public buildings are the hotel of the prefect, the town-house, college, and theatre. In one of the churches is the celebrated monument of Réne de Chalons, prince of Orange, by Richier, pupil of Michael Angelo. Besides the college, the town has a nunnery, a normal school, a society of agriculture and of arts, and a public library; it is also the seat of tribunals of original jurisdiction and commerce, and of a council of *prudes hommes*. The establishments for spinning cotton produced, in 1834, 500,000 kilogs. yarn; and there are fabrics of cotton stuffs, handkerchiefs, hosiery, hats, and jewellery, with tanneries, works for dyeing Turkey-red, &c. The Ornain being navigable from the town, it has a considerable trade in forwarding, timber, wine, and other articles, for the supply of Paris. Its *confitures de groseilles* are highly esteemed. (*Hugo*, art. *Meuse*, &c.)

BARLETTA, a sea-port town of Naples, prov. Terra di Bari, on the Adriatic, 34 m. N.W. Bari; lat. 41° 19′ 26″ N., long. 16° 18′ 10″ E. Pop. 18,000. It is encompassed by walls, and defended by a citadel; streets wide and well paved, but slippery; houses large and lofty, built with hewn stone, which, from age, has acquired a polish little inferior to that of marble. Principal public building—the cathedral, a Gothic structure, remarkable for its high steeple, elegant exterior, and the antique granite columns in its interior; there are also several other churches and convents for both sexes; an orphan asylum; a college, founded by Ferdinand IV.; and a handsome theatre. Near the church of St. Stephen, in one of the principal streets, is a colossal bronze statue, 17 feet 3 inches high, representing, as is supposed, the Emperor Heraclius. Barletta is the residence of a subintendant, a *juge d'instruction*, and an inspector-general of the adjoining salt works. A magnificent gateway communicates from the town to the harbour. This is formed by a mole running out from the shore with a breakwater lying before it. On the latter is a low light-house. The harbour only admits small vessels; but there is good anchorage in the roads, with off-shore winds, at from 1 to 3 m. N. by W. of the light-house, in from 8 to 13 fathoms, soft muddy bottom. It carries on a considerable trade with other ports of the Adriatic, and the Ionian islands. Principal exports—wine, oil, salt, corn, wool, lamb and kid skins, almonds, and liquorice. Mr. Keppel Craven says that Barletta appeared to him infinitely superior to most Neapolitan towns. In winter the climate is exceedingly mild; but, during part of the hot months, it is unhealthy. There are very productive salt springs about 7 m. N. from the town, managed on account of government. (*Swinburne's Two Sicilies*, i., 176, 4to ed.; *Craven's Naples*, p. 86; *Purdy's Sailing Directory for the Adriatic*, &c., p. 4, &c.)

BARMEN. See ELBERFELDT.

BARMOUTH, or ABERMAW, a town and sea-port of N. Wales, co. Merioneth, hund. Edernion, par. Corwen, 55 m. W. Shrewsbury; lat. 52° 40′ N., long. 4° 13′ W. Pop. of par., in 1821, 1742; in 1831, 1980. It is situated on the N. side of the entrance of the Maw, in Cardigan bay, where that river opens to an estuary (of about 1 m. in breadth at high water), which forms its harbour. The houses are built in successive ranges up the steep acclivity of a bare rocky mountain, from the base to about the summit, and are sheltered on the N. and E. by other mountains. The whole has a singularly romantic appearance. There is a chapel of the established worship (with 470 sittings, half of them free), built in 1831. The Independents, Calvinists, and Wesleyans, have each a chapel. It ranks high, as a favourite place of resort, among the watering towns of this coast. There is an excellent hotel, with sea-water baths, billiard and assembly-rooms, &c., and numerous respectable lodging-houses. The entrance to the harbour is partially closed by the small island of Ynys-y-Brawd, or Friar's island, and by a gravel beach, on the S. There are shifting sands, called the N. and S. bars, which make the entrance difficult; and it is accessible only to vessels of any great burden at spring tides. In 1802 it was greatly improved by building a small pier, on which there is a beacon. There are weekly markets on Tuesdays and Fridays, and four fairs, held on Shrove-Monday, Whit-Monday, October 7, November 21. Ship-building and tanning are carried on to some extent in the port. Previously to the last French war, it traded with Ireland and the Mediterranean, but the coasting trade is now the only one. It exports timber, bark, copper, lead, and manganese ores, and slates; and imports corn and flour, coals, limestone, hides, and groceries. The river is navigable for barges of 20 tons to within 2 m. of Dolgelly. There is a large turbary in the vicinity, through which a walled canal is formed, and by it and the Maw fuel is conveyed to both towns. Barmouth is a creek of the port of Aberystwith: *Abermaw* is the Welsh name, indicative of its locality: the English one was adopted at a meeting of masters of vessels, in 1768. From the harbour to where the Astro joins the sea, there is a smooth sandy beach, the view from which is magnificent. On the W. are the opposite shores of Caernarvon; on the N. high mountains protrude into the sea; above which, in the distance, Snowdon may be seen in clear weather. The line of road to Dolgelly, 10 m. E. of Barmouth, comprises, perhaps, the most magnificent scenery in Wales.

BARNARD CASTLE, a market-town of England, co. Durham, on the Tees, 227 m. N.N.W. London, and 25 m. S.W. Durham. Pop., in 1821, 3581; 1831, 4430. It derives its name from its founder, Barnard, an ancestor of John Baliol, and a native of the place, who erected a strong castle, which afterward became the property of Richard III. when Duke of Gloucester, in right of his wife, Anne Neville. During a rebellion in the time of Elizabeth it was taken by the insurgents, after a stubborn defence. The town, situated on a steep acclivity over the Tees, consists principally of one street, nearly a mile long, well paved, and supplied with water, and of a very cheerful appearance, from the houses being built of a white freestone. St. Mary's Church is an ancient structure, with a square embattled tower. The Wesleyan and Primitive Methodists and the Independents have places of worship. It has, also, a national school, formed and supported by voluntary subscriptions; a hospital for widows, founded by John Baliol; and a mechanic's institute, with a library. A jury, chosen at the court baron, of Darlington manor, which has jurisdiction for debts under 40s., together with the steward of the manor, have the government of the town. It is a station for receiving votes at elections for members for the S. division of the county. The manufacture of Scotch camlets, which was carried on to a considerable extent, has lately declined; but the manufacture of carpets, hats, and thread, for spinning which there are several mills on the river, is in a thriving state. N. of the town was Marwood, once a considerable town, and giving name to an extensive tract of country, but now to be traced only in the ruins of the church, which is converted into a barn. About 2 m. distant there is a chalybeate spring. The corn market, which is one of the largest in the N. of England, is held on Wednesdays, that for cattle on alternate Wednesdays; fairs on the Wednesdays in Easter and Whitsun weeks, and on St. Magdalen's day. Branches of the National Provincial Bank of England, and of the Yorkshire Banking Co., two private banking houses, and a saving's bank, are established here. (*Surtees' Hist. Durham; Hutchinson's Hist. Durham.*)

BARNARD, t., Piscatiquis co., Me., 108 m. N.N.E. Augusta. It has two schools, 80 scholars. Pop. 153.

BARNARD, p. t., Windsor co., Vt., 10 m. N. Woodstock, 42 m. S. Montpelier, 491 W. Watered by tributaries of White and Queechee rivers. It contains three churches, one Methodist, one Congregational, and one Universalist; three stores, one grist-mill, three saw-mills, three tanneries, fifteen schools, 628 scholars. Pop. 1774.

BARLOW, p. t., Washington co., O., 10 m. W. Marietta, 98 m. S. by E. Columbus, 310 W. It has thirteen schools, 632 scholars. Pop. 1011.

BARNAUL, a mining town of Siberia, gov. Tobolsk, circ. Tomsk, near the Altai mountains, lat. 53° 20′ N., long., 83° 26′ E. Pop. 8000. It is the seat of a board for the administration of the mines, and large quantities of lead and silver ore are smelted here. Considerable quantities of gold are obtained from the latter.

BARNEGAT BAY, Monmouth co., N. J., is separated from the Atlantic by Island beach and Squam beach, and extends from Barnegat inlet N. 20 miles, with a breadth of from 1 to 4 miles.

BARNET (CHIPPING), a par. and town of England, co.

Hertford, hund. Cashio, 11 m. N.N.W. London. Pop., 1821, 1755; 1831, 2369. It crowns a hill on the line of the great N. road from the metropolis; and, being a considerable thoroughfare, has usually a bustling appearance. The church is ancient, with an embattled tower. There is also an Independent chapel; a free grammar school, founded by Elizabeth; another free school, founded 1725; and two sets of almshouses, each for six poor women. A weekly market is held on Monday, and annual fairs April 8, and September 4: the latter a cattle fair. The annual value of real prop. in 1815 was £6797. It is the central town of a poor law union of nine parishes; its own rates average £618. The enclosure of Barnet Common, subsequent to 1821, is the chief cause of the increased pop.

On the 14th April, 1471, the decisive battle took place between Edward IV. and the Earl of Warwick, on Gladsmuir Heath, in the vicinity of this town; when the latter, at the head of the Lancastrian forces, was totally defeated and slain. An obelisk was erected, in 1740, in commemoration of the event.

BARNET, p. t., Caledonia co., Vt., 10 m. S. by E. Danville, 48 m. E. Montpelier, 535 W. Situated on Connecticut river at the 15 mile falls. Watered by Pasumsic and Stevens' rivers. The latter, though only a small stream, falls 100 feet in 10 rods, affording good water power. The lower village in this town at M'Indoes falls, constitutes the head of boat navigation on Connecticut river. The town contains eight stores, four woollen-factories, three grist-mills, ten saw-mills, fourteen schools, 607 scholars. Pop. 2030.

BARNEVELD, a town of the Netherlands, prov. Guelderland, 18 m. N.W. Arnheim. Pop. 5000.

BARNSLEY, a market-town of England, W. riding co. York, on the Dearne, 145 m. N.W. by N. London, 34 m. S.S.W. York, and 9 m. S. Wakefield. Pop., in 1811, 1821, 1831, 5014, 8284, and 10,330. The town (in Domesday Book called *Bernesleye*) is situated on the side of a hill. Streets generally narrow, and houses old, but latterly it has been much improved, and is paved, lighted with gas, and well supplied with water. It has two Episcopal places of worship, with a Rom. Cath. and several dissenting chapels. A free grammar school was founded in 1665; there is also a national school, a subscription library, and a scientific institution. A court baron is held annually, under the Duke of Leeds, lord of the manor; a court leet, for the honour of Pontefract, with jurisdiction to the amount of £5, every third Saturday; and petty sessions on Wednesday. The meetings are held in the new town-hall. This is one of the places for receiving votes at general elections for the riding. Linen is extensively manufactured, as is also excellent steel wire for needles. There are three foundries, in which steam engines are made, and bleaching and dyeing are carried on. The place is surrounded with coal pits. Markets are held on Wednesday and Saturday; fairs on the last Wednesday in February, 13th May, and 11th October. A canal, connecting the Calder and Don, passes by the town. (*Allen's Hist. of Yorks.; Baine's Hist. and Direct. of Yorks.*)

BARNSTABLE, county, Mass., situated in the S.E. part of the state and includes the whole of Cape Cod, which is 65 miles long, and, on an average, 5 miles broad. The soil is generally dry, sandy, and unproductive, and the inhabitants depend chiefly upon the cod, mackerel, and other fisheries. Secluded in a great measure from intercourse with other parts of the country, the inhabitants are generally characterized by a primitive simplicity of manners. Most of the male inhabitants are sailors, and owing to the dangers of the sea, an unusual number of the females are widows. Much salt is manufactured, by the solar evaporation of sea water. There were, in 1840, 6797 neat cattle, 6207 sheep, 4158 swine, and there were produced 3107 bushels of wheat, 13,256 of rye, 59,558 of Indian corn, 10,281 of oats, 75,759 of potatoes, 314,326 of domestic salt. It contained 186 stores, with a capital of $303,925; capital employed in the fisheries $739,445; three fulling-mills, one woollen-factory, one glass-factory, one pottery, one ropewalk, nine tanneries, sixty-one grist-mills, one saw-mill, two printing-offices, two weekly-newspapers: total capital in manufactures $441,220: eleven academies, 557 students, 167 schools, 10,359 scholars. Pop. 32,548. Capital, Barnstable.

BARNSTABLE, p. t., capital of Barnstable co., Mass., 74 m. S.E. Boston, 475 W. The township extends across Cape Cod. The soil is more fertile than that of most other parts of the cape. It contains seven churches, two Congregational, one Unitarian, two Methodist, one Baptist, and one Universalist. There are twenty-nine stores, a capital of $57,000 employed in the fisheries, and there were produced in 1840, 22,585 bushels of salt. It had one fulling-mill, nine grist-mills, one pottery, one printing-office, one weekly newspaper, two academies, 87 students, twenty-two schools, 1193 scholars. Pop. 4301. The principal village is situated on the S. side of Barnstable bay, which opens N. into Cape Cod bay. The mouth of the bay has a bar with 6 or 7 feet water. The tide rises from 10 to 14 feet. Fifty or sixty fishing or coasting vessels are owned here. The tonnage of the port, in 1840, was 56,556. It contains a court-house, jail, one Methodist, and one Unitarian church. The village of Hyannis in the S.E. part of the town, has a good harbour, with an expensive breakwater, erected by the government of the United States, and contains one Baptist and one Universalist church.

BARNSTAPLE, a port of entry, bor., and town of England, co. Devon, hund. Braunton, on the E. bank of the Taw, where it is joined by the Yeo, and at the point where it begins to expand into an estuary, 166 m. W. by S. London; lat. 51° 12′ N., long., 4° 4′ W. Pop., in 1821, 5079; in 1831, 6840: houses at the latter date, 1156. The town is situated in a vale, sheltered on the E. by a semicircle of hills, and contains many good open streets, and well-built houses; it is adequately supplied with water, and paved and lighted under a local act. The communication with the opposite side of the river is kept up by means of an ancient bridge of 16 arches, which has recently been much improved. Besides the Established church (a spacious old structure with a spire), the Baptists, Independents, and Methodists have each a chapel. The guildhall is a handsome modern building, the under part of which is occupied as a market-place. There is a good theatre and billiard and assembly rooms; a free grammar school (endowed in 1649) in which 47 boys are educated; two other endowed charity schools: in one 50 boys and 20 girls are clothed and instructed, in the other 20 girls are taught to read and knit; and a national school (supported by subscription), for 150 children. There are three sets of almshouses in the town for aged poor: Paige's, founded in 1553; Litchdon's, in 1634; and Hornwood's: they provide for about 60 individuals. The N. Devon Infirmary is near Barnstaple: it is an extensive establishment, supported by subscription, for the medical relief of the district. The town has a weekly market on Friday; monthly cattle-markets on the same day, which are numerously attended; two great markets on the Friday preceding April 21, and the second Friday in December; and a large annual fair for horses, cattle, and sheep, held on the 19th of September and two following days. In the town are manufactories of serge, inferior broadcloths, and lace, which employ about 800 hands; and in the immediate vicinity six or seven tan-yards, a paper-mill, and an iron-foundry: considerable quantities of earthenware, tiles, and bricks, are also made in the neighbourhood. The quay is only approachable by the smaller classes of vessels, and the only deep water within the bar, for vessels to ride in, is at the Pool of Appledore: this bar, which is at the outer entrance to the estuary of the Taw (7½ m. W. of Barnstaple), has, at low water springs, not above 2 feet; at high water do., 27 feet; and at high water neaps, about 14 feet; so that the passage is somewhat dangerous, and should not be attempted, except in cases of necessity, by vessels drawing more than 12 feet. The imports of the town consist chiefly of timber and deals from Canada and the Baltic, coals and culm from Wales and Bristol, and groceries. The exports consist of the manufactured and agricultural produce of the town and district. The amount of customs, in 1835, was £13,663 16*s.* 8*d.*; in 1836, £12,005 18*s.* 7*d.* In January, 1836 there belonged to the town 37 vessels, of the burden of 2063 tons. The new borough comprises the whole parish of Barnstaple, and portions of that of Pilton, on the N., and Bishop's Tawton, on the S.; it is divided into two wards, and governed by a mayor, six aldermen, and eighteen councillors. Courts of pleas, and sessions, are held quarterly in the guildhall, but neither has much business. The average annual revenue of the corporation, arising from lands, town dues, &c., amounts to £650. In conjunction with other feoffees, they are trustees of a considerable estate, for the support of the bridge. Barnstaple has returned two mem. to the H. of C. since the 23d of Edward I.; the right of election, previously to the Reform Act, having been in the corporation and common burgesses of the old borough, which was coextensive with the parish. At present there are within the limits of the new borough 421 houses of the annual value of £10 and upwards. The number of registered electors in 1838 was 813.

Barnstaple is of great antiquity, having been a burgh in the reign of Athelstan. It had a castle, built in the reign of William I.; at the Domesday survey there were 40 burgesses within, and 9 without, the borough. It furnished three ships against the Spanish armada, and in the latter part of Elizabeth's reign, it is mentioned as a considerable depôt for wool, and as trading largely with France and Spain. It had a monastery of Cluniac monks, founded soon after the Conquest, which continued till the general suppression. The present living is a vicarage, in private patronage. Barnstaple is the central town of a union, under the Poor Law Amendment Act. The poor-rates levied in the borough in 1836 were £1901.

BARNSTEAD, p. t., Belknap co., N. H., 18 m. N.E. Concord, 499 W. Incorporated in 1767. Watered by Suncook

river and its branches. It contains two churches, one Congregational and one Baptist; seven stores, three grist-mills, eleven saw-mills, seventeen schools, 702 scholars. Pop. 1945.

BARNWELL, district, S. C., situated in the S.W. part of the state, and contains 1680 sq. m. Bounded S.W. by Savannah river, and N.E. by North Edisto river. Drained by Salkahatchie river. The Charleston and Hamburg railroad passes through it. It contained, in 1840, 28,117 neat cattle, 6201 sheep, 47,724 swine; and produced 15,889 bushels of wheat, 4525 of rye, 670,581 of Indian corn, 45,952 of potatoes, 18,000 pounds of rice, 2,804,067 of cotton. It had thirty-eight stores, with a capital of $196,450, one cotton-factory, with 1308 spindles, seven flouring-mills, sixty-six grist-mills, seventy-five saw-mills; total capital employed in manufactures, $183,475; four academies, 95 students, twenty schools, 481 scholars. Pop.: whites, 10,533; slaves, 10,503; free coloured, 435: total, 21,471. Capital, Barnwell C. H.

BARNWELL, p. v., capital of Barnwell district, S. C., 100 m. S. by W. Columbia, 604 W. Situated on the E. side of Turkey creek, near its entrance into Salkahatchie river. It contains a court-house, jail, market-house, an academy, three churches, one Methodist, one Baptist, and one Roman Catholic; seven stores, thirty-five dwellings, and about 400 inhabitants.

BAROACH, or BROACH (*Barigosha*), a maritime British distr. of Hindostan, prov. Gujrat, presid. Bombay, chiefly between lat. 21° 25′ and 22° 20′ N., and long. 72° 50′ and 73° 23′ E.; having N. Kairah distr., E. Baroda, S. Surat, and W. the gulf of Cambay: area 1600 sq. m. Pop. (1828) 220,500. It is one of the best-cultivated and most populous tracts in the W. of India; its aspect is, however, rendered rather unpleasant from the absence of trees, and the ill-built villages of unburned bricks. Cotton is one of its chief products. The people are in a tranquil state, and free from any heavy burdens; the revenue of 1829-30 was £157,060 sterl. Three fourths of the pop. are Hindoos; the rest Mohammedans. It has formed, since 1803, part of the British dominions.

BAROACH (an. *Barygaza, water of wealth*), cap. of the above distr., on the N. bank of the Nerbudda, 25 m. from its mouth; lat. 21° 46′ N., long. 73° 14′ E. Pop. (1812) 32,716, but now probably much less, as it has greatly declined. Town poor and mean; streets narrow and dirty; climate hot, and considered unhealthy. The Nerbudda is here 2 m. across, is very shallow, and abounds with carp and other fish. Baroach maintains a considerable trade in cotton, grain, and seeds, with Bombay and Surat. Two thirds of the inhab. are Hindoos. The Brahmins have a hospital for sick and infirm animals, supported by voluntary gifts, taxes on marriages, &c. The vicinity of Baroach is very fertile. It was taken by storm by the British in 1772. (*Hamilton's E. I. Gaz.*, i., 289, 290.)

BARODA, or BRODERA, an inl. dist. of Hindostan, prov. Gujrat, between lat. 21° 23′ and 22° 46′ N., and long. 73° 12′ and 74° 8′ E.; belonging to the Guicowar's dominions, but almost wholly enclosed by the British territory, except N.E., where it joins Scindia's dominions. Area about 12,000 sq. m. Mr. Forbes observes, "If I were to decide upon the most delightful part of that province (Gujrat), I should without hesitation prefer the pergunnahs of Brodera and Neriad." It is fertile, generally well cultivated, and, down to 1821, was decidedly one of the most flourishing tracts in India. "The crops in other districts," says Mr. Forbes, "may be equal in variety and abundance; but the number of trees which adorn the roads, the richness of the mango-topes round the villages, the size and verdure of the tamarind trees, clothe the country with uncommon beauty." The sugar-cane, tobacco, indigo, corn, oil, pulse, opium, flax, hemp, and cotton are grown; the latter being the staple commodity. Provisions are abundant and cheap; deer, hares, partridges, quails, and water-fowl extremely cheap and plentiful. The fields are divided by high green hedges. The numerous villages look more in the European than the Indian style; and large stacks of hay are piled up and thatched; a custom which increases a resemblance to European scenery, and is not found in E. India.

More than half the inhab. are Coolies; the wilder tracts are peopled by Bheels: the remainder of the pop. are a race of Rajpoots, Hindoo Banyans, and a few Mohammedans around Baroda city. Agriculture is the prevailing occupation, especially of the Coolies; who, though a turbulent race, ranging themselves under different chiefs, yet, when properly restrained, are not bad tenants. They wear a petticoat, like the Bheels, round the waist, a cotton cloth round the head and shoulders, and a quilted kirtle, or lebada, which they cover with a shirt of mail; they are armed with sword, buckler, bow and arrows, and the horsemen with a spear and battle-axe: they often undertake secret nocturnal marauding expeditions. They are but little subject to the laws; and the magistrates are obliged to oppose force to force, by maintaining large bodies of armed men in their employ. The local administration of justice and the collection of the revenue in Baroda, are in the hands of *mamlutdars*, or head farmers, subject to the control of the prince or his ministers. Both person and property are more secure, and the cultivation in a better state in the adjacent districts, which have been ceded to the British. Of late years the produce of this district has greatly diminished, the land lost a third part of its former value, and the revenues been considerably depressed, through the misgovernment and rapacity of the reigning prince, Syajee Row Guicowar. In 1802 the turbulence of the Arab soldiery, and the involved state of the finances, induced Anund Row to beg the assistance of the British gov. of Bombay. It continued under British protection, and in a comparatively flourishing state, till 1820, when Syajee ascended the throne. (*Report on the Affairs of the E. I. Comp., 6th Polit. Divis.*, part i., 16-19, 53-56; ii., 160, 189, 190, 349, &c.; *Med. Trav.*, x., 124-126, 132, 133.)

BARODA, an inl. city of Hindostan, cap. of the above distr. and of the Guicowar dominions, and the seat of a British resident, with a body of troops; lat. 22° 21′ N. long. 73° 23′ E.; 45 m. N.N.W. Baroach, and 230 m. Bombay. The pop., in 1818, was estimated at 100,000. It stands in a marshy situation, on the left bank of the Viswamitra river, and is surrounded (says Tieffenthaler, who calls it a handsome city) by a double wall, the inner existing under the Mogul dynasty, the outer built by the Maharattas when they took the city, in 1725. The walls are low, of mud, have round towers at intervals, and several double gates. It is divided into four equal parts, by two spacious streets, which, intersecting it at right angles, meet in the centre in the market-place, which contains a square pavilion, with three arches on each side, and a flat roof, adorned with seats and fountains. This is a Mogul building, and, like some others of that kind, not devoid of beauty; but the Maharatta structures are all very poor. In the reign of Aurungzebe this was a large and wealthy city, and still enjoys a considerable trade. In its vicinity are many gardens and groves, the latter adorned with the remains of Mohammedan mosques and tombs. In the vicinity is a stone bridge, over the Viswamitra, remarkable as being the only one in Gujrat; and some celebrated wells, with handsome flights of steps and balustrades in the environs: the largest of these, Soliman's well, is famed for the purity of its water, though that obtained within the city is said to be unfit for use. (*Hamilton's E. I. Gazetteer*, i., 139, 140; *Med. Trav.*, x., 124, 125.)

BARQUESIMETO, an inland town of Colombia, prov. Venezuela, at the extremity of a table-land enclosed by still higher eminences, 92 m. W.S.W. Valencia, and 90 m. N.E. Truxillo; lat. 9° 55′ N., long. 69° 25′ W. In 1807 it contained 15,000 persons; but it suffered severely from the terrible earthquake of 1812, which scarcely left a house entire, and buried 1500 individuals in the ruins. The pop. of the town and its environs is now perhaps 10,000 or 12,000; but we have seen no recent account on which much reliance can be placed. (*Med. Trav.*, xxvii., 249.)

BARRA, an island of Scotland, one of the Hebrides, being the most S. of the outer Hebrides, or group forming what is called the Long island. (See HEBRIDES.)

BARRA, a village of Naples, 3 or 4 m. E. from the city of that name. It has many country houses belonging to inhabitants of the metropolis.

BARRACKPOOR, a seat of the British gov. gen. of India, and a military cantonment, in a beautiful and healthy spot on the E. bank of the Hooghly river, 16 m. N. Calcutta. Bishop Heber observes, "It has what is here unexampled, a park of about 250 acres of fine turf, with spreading, scattered trees, of a character so European that, if I had not been on an elephant, and had not from time to time seen a great cocoa-tree towering above all the rest, I could have fancied myself on the banks of the Thames instead of the Ganges." The park grounds are four miles in circumference, contain an aviary, menagerie, &c. The cantonment is a large military village, with superior bungalows for the officers.

BARRAMAHL, a subdiv. of the prov. of Salem, Hindostan, presid. of Madras. (See SALEM.)

BARRE, p. t., Washington co., Vt., 7 m. S. Montpelier, 48 m. N. by W. Windsor, 320 W. Drained by branches of Onion or Winooski river, which affords water-power. It contains fine granite, of which the state-house in Montpelier was built. It has three churches, one Methodist, one Congregational, and one Universalist; six stores, four fulling mills, two flouring-mills, four grist-mills, eight saw-mills, two tanneries, fifteen schools, 610 scholars. Pop. 2126.

BARRE, t., Huntingdon co., Pa., 13 m. N.E. Huntingdon borough. Watered by branches of Susquehanna river. It contains eight stores, one furnace, four fulling-mills, one woollen-factory, three grist-mills, nineteen saw-mills, three distilleries, ten schools, 331 scholars. Pop. 2225.

BARRE, p. t., Worcester co., Mass., 65 m. W. Boston, 409

W. Ware river and its branches afford good water-power. It contains one woollen-factory, one cotton-factory, with 2500 spindles, one powder-mill, three grist-mills, six saw-mills, one academy, 40 students, thirteen schools, 712 scholars. Pop. 2751.

BARRE, p. t., Orleans co., N.Y., 252 m. W. Albany, 390 W. The Erie canal passes through it. It contains twenty-six stores, two furnaces, one flouring-mill, two grist-mills, five saw-mills, two printing-offices, two weekly newspapers, two academies, 344 students, thirty-four schools, 1746 scholars. Pop. 5539.

BARREAH, an inl. town of Hindostan, prov. Gujrat, cap. of a small indep. principality, 75 m. E.N.E. Cambay; lat. 22° 44′ N., long. 74° E. It stands near the right bank of a tributary of the Maye, and is neatly built; many houses are of brick. Its territory is wild, covered with jungle, and inhabited by only a few wandering and predatory Bheels: the revenues of the rajah are almost entirely derived from compensations from his neighbours to abstain from plundering, together with certain moderate duties on trade.

BARREGES, a watering-place in France, dep. Hautes Pyrénées, 12 m. S.S.W. Bagneres-de-Bigorre. It is situated in the narrow valley of the Bastan, in the centre of the Pyrenees, about 4200 ft. above the level of the sea. The valley is gloomy and desolate, being annually devastated by the torrent, or Gave of Bastan, which frequently threatens destruction to the town. This consists of a single street of about sixty houses, mostly temporary fabrics of timber. It is frequented only on account of its hot baths, the most celebrated in Europe for the cure of scrofula, gout, rheumatism, and the effect of wounds. In consequence of this latter property, Barreges is much resorted to by the military, and a hospital is provided for their use capable of accommodating 500 officers and men. The baths did not attain to celebrity till the reign of Louis XIV., when they were visited by Madame de Maintenon and the Duc de Maine. The springs, like those in the other Pyrenean deps., are under the control of government. The supply of water being sometimes insufficient for the demand, it is distributed with the strictest impartiality. The temperature of the water reaches 10° Reaumur: it has a disagreeable smell and taste. The season begins at the end of May, and ends at the beginning of October. The town is then entirely, or all but entirely, deserted; the wooden houses are taken down; and sometimes, indeed, it is buried 15 ft. deep under the snow! Government incurs a considerable expense in the annual repairs of the roads and baths. (*Hugo, France Pittoresque*, art. *Hautes Pyrénées; Inglis's Switzerland, &c.*, p. 254.)

BARREN, county, Ky. Situated in the S. part of the state, and contains 540 sq. miles. Drained by Little Barren river, and Beaver branch of Big Barren river. It contained in 1840, 18,472 neat cattle, 24,916 sheep, and 60,932 swine; and produced 80,346 bushels of wheat, 5087 of rye, 697,578 of Indian corn, 229,403 of oats, 28,109 of potatoes, 2,321,228 pounds of tobacco, 50,040 of cotton, 22,390 of sugar, 9000 bushels of salt. It had twenty-four stores, with a capital of $106,400; seventeen tanneries, forty-three distilleries, two flouring-mills, fifty-five grist-mills, twenty-two saw-mills, two academies, 32 students, thirty-three schools, 739 scholars. Pop.: whites, 13,147; slaves, 4065; free coloured, 76; total, 17,288. Capital, Glasgow.

BARREN, Big, river, Ky., passes through Warren co., and enters Green river.

BARRINGTON, p. t., Strafford co., N.H., 20 m. N.W. Portsmouth, 35 m. E. Concord, 505 W. It has several ponds, the largest of which is 650 rods long and 400 wide. The outlets of some of them afford good water-power. Incorporated in 1722. It contains three churches, two stores, two grist-mills, four saw-mills, twelve schools, 535 scholars. Pop. 1844.

BARRINGTON, p. t., Bristol co., R.I., 8 m. E.S.E. Providence, 408 W. Bounded S.W. by Narragansett bay, and E. by Warren river, across which a bridge connects it with Warren. Incorporated in 1771. It has one store, one grist-mill, three schools, 90 scholars. Pop. 549.

BARRINGTON, p. t., Yates co., N.Y., 8 m. S. Penn Yan, 201 m. W. Albany, 322 W. Bounded W. by Crooked lake. It contains one store, one woollen-factory, one brewery, three flouring-mills, two grist-mills, eleven saw-mills, two printing-offices, two weekly newspapers, twelve schools, 578 scholars. Pop. 1868.

BARROW, a river of Ireland, being, next to the Shannon, the most important in that island. It rises in the Sliebhbloom mountains, barony of Tinnehinch, Queen's co.: its course is first N.E. to Portarlington, then E. to Monastereven, and thence nearly due S., past Athy, Carlow, Graig, and New-Ross; about 8 m. below which it falls into the æstuary of Waterford harbour, of which it forms the right arm. Considering its moderate magnitude, the Barrow is navigable to a great distance; large ships ascending it as far as New-Ross, which is its port, and barges as far as Athy (above 60 m. in a direct line from the sea), where it is joined by a branch from the Grand canal. This length of navigation has been partly effected by artificial means, that is, by removing obstructions and deepening the bed of the river; and, notwithstanding it is occasionally liable to impediment, it has been of singular advantage to Kildare, Queen's co., Carlow, and Kilkenny, by giving them access not only to the important markets of New-Ross and Waterford, but also to those of Dublin.

BARROW'S STRAITS, in N.W. America, the SIR JAMES LANCASTER'S SOUND of Baffin, is the connecting channel between Baffin's bay on the E., and the Polar sea on the W. It lies, in a direction parallel to the equator, between the lats. of 73° 45′ and 74° 40′ N., and is considered by Parry to terminate at Wellington channel, in long. 91° 47′ W., the mouth, in Baffin's bay, being nearly on the 80th meridian. It is therefore about 200 m. in length from E. to W., and between 60 and 70 m. in average width. Both shores are broken by a great number of inlets, and that of the Prince Regent, on the S., is of very considerable extent. It was found by Ross to terminate in a great gulf, called by him Boothia. Wellington channel is even wider at its mouth than Prince Regent's inlet. It divides a large tract of land (North Devon), the W. continuation of Greenland, from Cornwallis island, the first of a succession of islands terminating at Melville island. The coasts are generally rugged, consisting of high mountains and sometimes table-lands, with bold bluff headlands, but in all cases extremely sterile. The stratification is horizontal: the composition generally limestone, but mixed with older formations, as clayslate, hornblende, granite, &c. The water of this strait is exceedingly deep, the soundings frequently giving upwards of 200 fathoms, and very often no bottom can be found. The tide upon the shore rises about three or four feet, but of current there is very little appearance in any direction, and what there is does not seem to be uniform in its set. Perhaps the most remarkable circumstance connected with this strait is the sluggishness of the compass in its waters. This is so great that, after advancing a short distance W., no alteration of course produces a change of more than three or four points in the direction of the needle; a fact, the observation of which led first to the conclusion that the magnetic pole would be found in its neighbourhood. Whales and other natives of the northern seas are very abundant; but in this respect, and also in general productions, the strait does not differ from Baffin's bay, which see. (*Parry's First Voy.*, 29–52, 264–269; *Baffin; Purchas' Pilgrimes*, iii., 847.)

BARRY, county, Mich. Situated in the W. part of the peninsula, and contains 576 sq. m. Drained by Thornapple river. It contained in 1840, 991 neat cattle, 1307 swine; and produced 12,884 bushels of wheat, 9435 of Indian corn, 13,775 of oats, 13,255 of potatoes, 10,950 pounds of sugar. It had three saw-mills, twelve schools, 240 scholars. Pop. 1078. Capital, Hastings.

BARRY, county, Mo. Situated in the S.W. part of the state, and contains 830 sq. m. Drained by White river and branches of Osage river. It contained in 1840, 6490 neat cattle, 2918 sheep, 18,672 swine; and produced 13,157 bushels of wheat, 280,140 of Indian corn, 17,735 of oats, 8585 of potatoes, 10,001 pounds of cotton. It had nine stores, with a capital of $52,210; two tanneries, five distilleries, four grist-mills, two saw-mills, ten schools, 278 scholars. Pop.: whites, 4515; slaves, 269; free coloured, 8; total, 4792. Capital, M'Donald.

BARRY, p. t., Schuylkill co., Pa., 76 m. N.E. Harrisburg, 186 W. Watered by branches of Susquehanna river, and by the W. branch of Schuylkill river, which has a cascade of 50 ft. fall on the S. line of the town. It contains two stores, one forge, three grist-mills, twenty-three saw-mills. Pop. 639.

BARRY, t., Barry co., Mich. It has one saw-mill, three schools, 70 scholars. Pop. 343.

BARSAC, a village of France, dep. Gironde, on the Garonne, 21 m. S.E. Bordeaux. Pop. 3846. It is famous for its white wines: they are of the same class, and sell for about the same price, as those of Sauternes. "Ils en diffèrent," says Jullien, "par une peu moins de finesse, de sève, et de bouquet; mais ils sont plus spiritueux." (*Topographie de Vignobles*, p. 214.)

BAR-SUR-AUBE, a town of France, dep. Aube, cap. arrond., on the right bank of the Aube, 28 m. E. Troyes. Pop. 3940. It is agreeably situated at the foot of a mountain, in a fine valley; but it is generally ill laid out and ill built. It was formerly much more considerable than at present, as is evinced by the numerous remains of thick walls, and fosses not yet entirely filled up. There is a fine promenade along the river. It has a tribunal of original jurisdiction; manufactures of cotton, cotton hosiery, and serges; with nail-works, tanneries, distilleries, &c. The vineyards in its neighbourhood produce white and red wines in considerable estimation. An obstinate conflict

took place here on the 24th of May, 1814, between the French, under Mortier, and the allied forces under Prince Schwartzenberg, when the latter were repulsed. (*Hugo*, art. *Aube*.)

BAR-SUR-SEINE, a town of France, dep. Aube, cap. arrond., on the Seine, 19 m. S.E. Troyes. Pop. 2350. It is situated in the middle of rich vineyards, at the extremity of a narrow valley; is well built and well laid out, and has some fine promenades on the banks of the Seine, which is here crossed by a handsome stone bridge. It has a court of original jurisdiction; and has fabrics of paper, cotton, hosiery, cutlery; with tanneries, &c. Its principal trade consists in the corn and wine of the neighbourhood.

This town was formerly fortified, and was, in consequence, repeatedly taken and retaken in the Burgundian wars. In 1596 the inhabitants destroyed the fortifications, and it has since enjoyed comparative tranquillity. (*Hugo*, art. *Aube*)

BART, p. t., Lancaster co., Pa., 14 m. S.E. Lancaster, 55 m. E. Harrisburg, 112 W. Watered by Octarara creek. It contains 7 stores, three flouring-mills, four grist-mills, four saw-mills, one oil-mill, one furnace, one distillery, seven schools, 245 scholars. Pop. 1859.

BARTEN, a town of the Prussian states, prov. E. Prussia, 10 m. N. Rastenburg. Pop. 1600. It is well built, and is defended by a fort.

BARTENSTEIN, a town of the Prussian states, prov. E. Prussia, on the Alle, 34 m. S.E. Königsberg. Pop. 3700. It is the seat of a court of justice and of domains, and of an ecclesiastical inspection; has three churches, a college, an hospital, tanneries, and fabrics of cloth, linen, and pottery.

BARTFA, or BARTFELD, a free town of Hungary, co. Saroseh, on the Tope, at the foot of the Carpathian mountains; 15 m. N.N.E. Zeben; lat. 49° 16′ 10″ N., long. 21° 18′ 51″ E. Pop. 6000. It is well built, has several Catholic churches, and the Lutherans have a church and a school. It formerly enjoyed considerable distinction as a seat of learning; and in the 16th century several esteemed works proceeded from its presses. It has a valuable collection of old records, and is the residence of several noble families. It has some trade in wine, linen, and woollen yarn. In its vicinity are two chalybeate springs much resorted to, and the waters of which are carried to other parts, like those of Seltz.

BARTH, a sea-port town of the Prussian states, prov. Pomerania, reg. Stralsund, on the Binnen-Zee, which communicates with the Baltic, 17 m. W.N.W. Stralsund. Pop. 4000. It has a chapter for ladies, founded in 1733, and three hospitals. It carries on some trade in corn, wool, &c., and in ship building.

BARTHELEMY DE GRONIN (ST.), a village of France, dep. Isère, 15 m. S.S.W. Grenoble. Near this is the "*burning fountain*," one of the seven wonders of the *cidevant* Dauphine. It is a spring issuing from a calcareous plateau, about 8 ft. long by 4 in breadth. The water, though at the temperature of the atmosphere, is always bubbling and boiling; and when it is stirred, or a burning body is approached to it, it takes fire, as it sometimes does spontaneously after summer rains. This phenomenon is supposed to be produced by the escape of hydrogen gas, generated by the decomposition of iron. The gas is easily collected, and is at first very inflammable, but speedily loses this quality. There are no volcanic phenomena in the vicinity. Of late years, spontaneous combustions are said to be rarer than formerly. (*Dict. Géographique*, *Hugo*, art. *Isère*, &c.)

BARTHOLOMEW (ST.), one of the lesser N. Carribee islands, belonging to Sweden, 30 m. N. St. Christophers; lat. 17° 53′ 35″ N., long. 62° 50′ W. It is of an oblong shape, its greatest length being from E. to W., and contains about 25 sq. m. Pop. from 8000 to 9000, of whom two thirds are blacks. It is abundantly fertile, producing sugar, tobacco, cotton, and indigo; but it has no springs, nor fresh water of any sort, except such as is supplied by the rain. Being surrounded by rocks and shoals, it is difficult of access; but its harbour, Le Carenage, on the W. side of the island, is safe and commodious. Contiguous to the harbour is the principal town, Gustavia. This island was settled by the French in 1648, and was ceded by them to the Swedes in 1784.

BARTHOLOMEW, county, Ia. Situated a little S. of the centre of the state, and contains 480 sq. m. Watered by Driftwood fork of White river and its branches. It contained in 1840, 7324 neat cattle, 7061 sheep, 25,244 swine; and produced 37,149 bushels of wheat, 2127 of rye, 470,630 of Indian corn, 53,277 of oats, 10,861 of potatoes, 1454 pounds of tobacco, 20,758 of sugar. It had twenty stores, with a capital of $42,500; two flouring-mills, ten grist-mills, eleven saw-mills, four distilleries, four tanneries, one printing-office, one weekly newspaper, twenty-eight schools, 943 scholars. Pop. 10,042. Capital, Columbus.

BARTIN, a town of Asiatic Turkey, Anatolia, near the mouth of the river of the same name (the an. *Parthenius*), in the Black sea; lat. 41° 33′ 52″ N., long. 32° 14′ E. It is surrounded by a ruinous wall, has twelve mosques, five khans, and four baths. There is deep water in the bay at the river's mouth; but there being no more than 7 ft. water over the bar, small vessels only can come up to the town: these load with timber, fruit, eggs, &c., for Constantinople. The principal import is salt. (*Purdy*, p. 221, &c.)

BARTLETT, p. t., Coos, co., N.H., 80 m. N.N.E. Concord, 566 W. Incorporated in 1790. Watered by Saco river. A spur of the White mountains passes through its N.W. part. It contains one store, three grist-mills, five saw-mills, four schools, 258 scholars. Pop. 706.

BARTON, p. t., Orleans co., Vt., 42 m. N.E. Montpelier, 558 W. Watered by Barton river, which flows into lake Memphremagog, and affords good water-power. It contains two stores, one fulling-mill, one woollen-factory, one grist-mill, two saw-mills, six schools, 135 scholars. Pop. 892.

BARTON, p. t., Tioga co., N.Y., 174 m. S.W. Albany, 269 W. Bounded S. by Susquehanna river. It contains seven stores, one fulling-mill, one woollen-factory, four grist-mills, twenty-eight saw-mills, 847 scholars in schools. Pop. 2325. The village contains one Methodist church, three stores, and about twenty dwellings.

BARTOLOMÉO IN GALDO (ST.), a town of Naples, prov. Capitanata, cap. canton, 27 m. W.S.W. Foggia. Pop. 4800. It is situated on an elevated hill to the E. of the Fotore; has a collegiate and some other churches, and a diocesan seminary.

BARTON-ON-HUMBER, a market-town of England, co. Lincoln, N. div. wap. of Yarborough, on the S. side of the Humber. It includes the parishes of St. Peter and St. Mary: area, 6710 acres. Pop. 3233. The main body of the town is about 1 m. from the river, but a portion, called "Barton water-side," is quite contiguous to it. Formerly it was a place of very considerable importance, and was surrounded by a rampart and fosse; but at present it is principally known by the well-frequented ferry on one of the great N. roads, leading hence across the Humber to Hull. It has some pretty good streets and inns, and two churches, St. Peter's and St. Mary's; the former being very ancient. It has some trade in corn, and a considerable portion of the inhabitants are engaged in the making of bricks and tiles, ropes and sacking. The weekly market is held on Monday, and another for cattle is held once a fortnight.

BARWALDE, a town of the Prussian states, province of Brandenburg, on a lake, 32 m. N. Frankfort, on the Oder. Pop. 2650. Gustavus Adolphus signed here, in 1631, a secret treaty with France.

BASELICE, a town of Naples, prov. Sannio, cap. cant., 21 m. S.E. Campobasso. Pop. 3500. It is situated on the declivity of a mountain, has an hospital, and two *monts de piété*, established to portion and marry poor girls.

BAS-EN-BASSET, a town of France, dep. Haute Loire, cap. cant., on the Loire, 12 m. N. Issengaux. Pop. 5418. It has manufactures of blond lace, ribands, and earthenware.

BASHEE ISLANDS, a cluster belonging to the E. Archipelago, 5th division (*Crawfurd*), lying due N. of Luzon (Philippines), between lat. 20° and 21° N. They are rocky, and five in number, with four smaller islets. Dampier visited them, and called the largest Grafton isle: it is about 13 leagues in circuit, and has good anchorage on the W. side. It produces fine yams, sugar-cane, plantains, and vegetables, besides hogs and goats in plenty. Good water close to the beach is found in abundance. Gold in considerable quantities is washed down by the torrents in the Bashee islands, which the inhabitants work into a thick wire, and wear as an ornament: iron is the favourite medium of exchange. The natives are civil, inoffensive, and social. These islands belong to Spain; the governor resides on Grafton island, with about 100 soldiers, some artillery, and a few priests.

BASIL, or BASLE, a canton in the N.W. of Switzerland, the 11th in the Confederation, between 47° 25′ and 47° 37′ N. lat.; having N. France and the g. d. of Baden, W. France and Solothurn, S. the latter canton and Berne, and E. Argovia; the shape very irregular; the greatest length is 24 m., and the greatest breadth from 13 to 17 m.: area 8 G., or 169·6 E., sq. m. The Jura chain runs through the country, its surface displaying, of course, mountains and valleys, with a level tract in the vicinity of the city of Basil. The mountains reach an elevation of from 2000 to 3000 ft. above the level of the sea. The most elevated is the Hauenstein, over which there is a much-frequented excellent new road, leading from Basil to Aarau and Zurich. The Rhine flows through the N. part of the canton, separating a small district from its main body. Near the city of Basil the Birse, which rises in the canton of Berne, falls into the Rhine; it is not navigable, but teems with fish. Besides this, there are various rivulets descending

from the Jura chain to the Rhine. Climate mild. Since 1831, when the country population revolted successfully against the aristocratic rule of the city, the canton has been divided into Basil city and Basil country. Pop.: cant. of Basil city, 24,321; Basil country, 41,103. The territory of the former comprises, besides the city of Basil, that portion of the canton lying on the right bank of the Rhine. The valleys and the plain near the city are well cultivated, and the country produces corn enough for its consumption. There are 32,560 acres of arable land, 16,817 do. meadows, 3410 do. vineyards, and 15,520 do. of wood. Wine is made of pretty good quality, the best being that of St. Jacob, called *Schweitzerblut* (Swiss blood). The live stock amounted, in 1829, to 9540 head of black cattle, 1814 horses, 6920 sheep, 6400 swine, and 1740 goats. Manufactures form the principal employment of the people. Riband making had, so early as the commencement of the 17th century, become an important business in Basil. After the revocation of the edict of Nantes, great numbers of French emigrants settled in the town, who gave a fresh impulse to the manufacture. In 1836 the number of looms amounted to about 4000; and at present (1838) there are not less than 15,000 persons, principally in the city of Basil, but partly also in other cantons, engaged in this department, on account of the Basil manufacturers. In addition to the riband manufacture, silk thread, taffetas, with satins and cotton ribands, are made on a small scale. Patterns were formerly introduced from France, but now fourteen or fifteen pattern-drawers are kept to provide designs for the manufacturers. The value of the exports of ribands amounts to about £400,000, nearly half of which goes to the U. States, and the other half to Germany, France, Holland, Denmark, and Sweden. Salt-springs were discovered in 1838 in Basil country, and salt-works either have been, or are to be, established. Each of the two divisions of the canton has half a vote in the Swiss diet; and each has its independent government, consisting in both of a grand council and a petty council, the former with a president, and the latter, in Basil city, with a burgomaster, and in Basil country, with a president, at the head. About nine tenths of the inhab. are Prot., and one tenth Cath. Primary and secondary schools have been generally established. Previously to 1832, the only university of Switzerland was in Basil. It was founded in 1459 by Pope Pius II.; but at present it has no great reputation. The budget of Basil city was, for 1836—income, £19,810 sterl.: expenditure, £20,110. The public debt amounts to £95,070. The canton contributes 22,950 Sw. fr. to the treasury of the confederacy, and furnishes 918 men to the federal army. The communes are obliged to provide for those poor persons who have the right of citizenship; but, as charitable institutions and private subscriptions commonly suffice for this purpose, a poor-rate is seldom necessary. The inhab. of Basil city are aristocratical, and attached to their ancient laws, customs, and manners; those of Basil country, on the other hand, have democratical tendencies, and instead of being averse from, are prone to, innovations: violent animosities have existed between the two divisions.

The country which forms the canton of Basil belonged, in the times of the Romans, to the territory of the *Rauraci*. In the middle ages it formed part of the Burgundian empire, till 1026, when it came into possession of the German emperor, Conrad II. Basil was subsequently governed by an imperial bailiff; but the bishop of Basil shared with the citizens in the government. By degrees the city acquired the same immunities as a free city of the empire. Basil assisted the Swiss in the Burgundian war, and was admitted a member of the confederacy in 1501. (See *Helvetick Almanack; Lutz's Description of Basil;* and *Dr. Bowring's Report on the Manufactures of Switzerland.*)

Basil (city of), one of the principal in Switzerland, cap. of the above canton; lat. 47° 30′ 36″ N., long. 7° 35′ E.; 35 m. N.N.W. Berne; on both sides the Rhine, where its course turns N., near the French frontier. The portion on the S. side the river is called Great, and that on the N. Little Basil, the communication between them being kept up by a bridge 600 ft. long. Pop. of city only 20,450; of city and cant. 24,321, of whom 20,518 are Protestants. This city presents to the visiter a peculiar mixture of the gayety of a French, with the sombre Gothic air of a German town: "It looks," says Dr. Beattie, "like a stranger lately arrived in a new colony, who, although he may have copied the dress and manner of those with whom he has come to reside, wears still too much of his old costume to pass for a native, and too little to be received as a stranger." It is surrounded by some unimportant fortifications, and is tolerably well built. The cathedral, built 1319, on the spot where the Roman emp. Valentinian originally erected the strong fortress called *Basilia*, contains the tombs of Œcolampadius, Erasmus, and the empress Anne, consort of Rodolph of Hapsburg. The other public buildings are, the arsenal, the town-house, with some fine stained glass windows, the hall where the Council of Basil was held, &c. There is a university (see preceding article), a gymnasium, and numerous other public schools; a pub. library, with 53,000 printed vols., and many valuable MSS., medals, and paintings by Holbein; a botanic garden; museums of natural hist. and anatomy; literary and philanthropic societies, &c. Basil is the richest town in Switzerland; its inhab. are industrious and well instructed. About 1–3th part of the state revenues are applied to pub. education. Its trade is flourishing: manufactures consist chiefly of ribands and other silks; those of leather, paper, gloves, and stockings, are comparatively inconsiderable. The taxes are heavy, owing to the considerable public debt: the annual cost of the executive gov. is about £2000. Basil was a distinguished city throughout the middle ages: near it, in 1444, a few hundred Swiss made a heroic resistance to an army of 40,000 French. It was the birthplace of Holbein, Erasmus, Bernouilli, &c. (See *Le Nouvel Ebel.; Lutz's Descr. of Basil; Bowring's Rep.*, p. 54–56.)

BASILICATA, a prov. of the kingdom of Naples, which see.

BASINGSTOKE, a par., bor., and town of England, co. Hants. div. and hund. Basingstoke, 45 m. W.S.W. London. Area 3970 acres. Pop. par., in 1821, 3165; 1831, 3581. It is a neat, respectable town, in the midst of a fertile, well-wooded district, at the junction of five roads, one of which is the great W. line from the metropolis. The line of the London and Southampton railway also passes close to the N. of the town, and will have a station there; so that it usually wears the appearance of much bustle and activity; it is well paved and lighted, and has had many new houses added to it within the last few years. A stream, called the Town-brook, flows past it to join the Loddon, of which it is a principal branch; a canal, formed in 1796, at an expense of £180,000, extends from the town to the Wey: which river communicates with the Thames, and so completes the water-line betwixt Basingstoke and London. The church is a spacious structure of the reign of Henry VIII. The Friends, Independents, Wesleyans, and followers of Whitfield, have chapels in the town. There is a free grammar school, in which twelve boys are educated; a blue-coat school for the same number, supported by the Skinner's Company of London; and a national school for 200 boys and girls: there are also almshouses for eleven poor people, and several charitable benefactions; the principal being an estate left by Sir James Lancaster, the annual proceeds of which amount to £250 a year. Near the town is a tract of 108 acres, on which every householder has a right of pasture from May to Christmas. There is a good town-hall, built in 1829; at which period the market-place was enlarged. The weekly market is held on Wednesday, and four annual fairs on Easter Tuesday, Whit Wednesday, 23d Sept., and 10th Oct., chiefly for cattle. On the first introduction of the woollen trade into the kingdom, this town obtained a good share of it, and was for a long period noted for druggets and shalloons; but at present there are no manufactures. The malting and corn trades constitute its chief business; and being the centre of a rich agricultural district, its markets are very well attended, and its retail trade considerable. Under the Municipal Reform Act there are four aldermen and twelve councillors, and the boundaries of the borough, which were previously co-extensive with the parish, are restricted to the area on which the town stands. It was incorporated by a charter in the 20th James I., confirmed by another in 17 Charles I. Courts of petty and of quarter sessions for the bor. are held, and there is a court of pleas, which has now scarcely any business. The revenues of the corporation are derived from lands and tenements in the parish, and average above £1000 a year. Under a local assessment for paving, lighting, &c., about £350 are annually collected. The poor-rates of the town, in 1836, were £1365 10*s*. It is the central town of a poor law union of thirty-seven parishes, and a polling town for the northern division of Hampshire.

The town is mentioned in Domesday as having a market. From 23 Edward I. to 4 Edward II. it sent two mem. to the H. of C., but thenceforth the privileges ceased to be exercised. John de Basingstoke, a distinguished scholar of the 13th century; Sir James Lancaster, the navigator; and Joseph and Thomas Warton were born in the town. (*Beauties of England and Wales; Warner's Coll. for a Hist. of Hampshire; Camden's Brit.*)

BASON HARBOR, v., Ferrisburg t., Addison co., V. An important landing place, on the E. side of Lake Champlain.

BASKINGRIDGE, p. v., Bernard t., Somerset co., N. J. 46 m. N. by E. Trenton, 216 W. Situated on a branch of Passaic river, on elevated ground, and contains a Presbyterian church, an academy, a boarding school for boys, and about 400 inhabitants.

BASQUEVILLE, a town of France, dep. Seine Inférieure, on the Vienne; 10 m. S.S.W. Dieppe. Pop. 2810. It has fabrics of linen and serge.

BASRAH. See Bussora.

BASS, a rocky islet of Scotland, frith of Forth, about three m. from Tantallon castle, coast of Haddingtonshire. It is of a circular form, about 300 ft. in diameter, and nearly 400 ft. high. Some parts not less than from 200 to 300 ft. in height, project in lofty, terrific precipices over the sea: the summit resembles an obtuse cone. The continual beating of the waves has opened vast excavations all round the lower sides. The sea is of great depth on the N., E., and W., but shallow on the S.; towards which also the rock declines, and is accessible in calm weather. It is perforated by a cavern, running N.W. and S.E.; it is quite dark in the centre, where there is a deep pool of water, whence it widens towards both apertures; that to the S.E. being the highest. There is a spring of water near the centre, high on the rock, and grass for a few sheep kept on it. Various corallines and fuci are produced in the surrounding sea. Vast quantities of solan geese resort to the Bass in March, for the purpose of breeding, and depart in September. There was here formerly a castle, afterward converted into a state prison, where various individuals have been confined. After the Revolution, a party of the adherents of James VII. having obtained possession of the castle, held out after the rest of the kingdom had surrendered. But their boats being at length seized or lost, and not receiving any supply of provisions, they were compelled to capitulate, when the fortifications were destroyed. This islet is a very conspicuous object, and is visible from a considerable distance.

BASS'S STRAITS, the name given to the strait separating New Holland from Van Diemen's Land. It is so called from Mr. Bass, a surgeon, by whom it was explored in 1798, while on a sealing voyage from Port Jackson in an open boat. Where narrowest, it is about 105 m. across, and and is much encumbered with islands and coral reefs, so that its navigation requires great attention. The prevailing winds are from the W. The tide rises from 8 to 12 ft., running at from 1½ m. to 3½ m. an hour.

BASSAIN, a marit. town of the Birman empire, cap. of a prov., and resid. of its governor; on the left bank of the Birman river (the right branch of the Irrawadi); lat. 16° 49′ N., long. 94° 45′ E.; 100 m. W. Rangoon, and 360 m. S.S.W. Ava. Pop. (1826) 3000. It is one of the three principal ports of the Birman empire.

BASSANO, a town of Austrian Italy, prov. Vicenza, on the left bank of the Brenta, 17 m. N.N.E. Vicenza, 21 m. N. by W. Padua. Pop. 12,000. It is situated in a salubrious, hilly country, suitable for the culture of the vine and the olive; is surrounded by walls, and is well built of stone: it is joined to a suburb on the opposite side of the river by a fine bridge, 180 ft. in length. Some of its churches are handsome, and adorned with pictures by Giacomo da Ponti and his son, natives of the town. There are here four convents for nuns, a hospital, a *mont de piété*, and barracks. The mineralogical cabinet and botanical garden of M. Parolini deserve the traveller's attention. Bassano has manufactures of cloth, straw hats, and copper utensils, with extensive silk filatures, tanneries, &c. But the printing establishment of Remondini is not merely the most important work in the town, but is one of the most extensive establishments of the kind anywhere to be met with. It employs fifty presses and about 1000 hands, and has attached to it paper-mills and an engraving department, which has produced Volpato and other distinguished artists. The town carries on an extensive trade in silk, the produce of its territory, cloth, wood, iron, corn, wine, cattle, &c. A great deal of charcoal is shipped here for Venice. There is a great deficiency of spring water, and that of the Brenta is not good.

BASSE'E (LA), a town of France, dep. du Nord, cap. cant., 14 m. W. Lille, on the canal of the same name. Pop. 2485. It has establishments for spinning cotton, combing wool, with soap-works, distilleries, and potteries. Owing to its position, it is the entrepôt of the arrondissements of Bethune and St. Pol, and has, in consequence, a considerable trade. It was formerly fortified; but Louis XIV. having taken it from the Spaniards, made the works be dismantled.

BASSEIN, a marit. town of Hindostan, prov. Aurungabad, distr. N. Concan; separated from Salsette by a narrow channel, and about 20 m. N. Bombay; lat. 19° 20′ N., long. 72° 56′ E. It was taken possession of by the Portuguese in 1531, who fortified it with ramparts and bastions, and supplied it with no fewer than seven churches. It was captured by the Maharattas in 1750; and it was here that the peace with the peishwa, which annihilated their federal empire, was signed. Dec. 31st, 1802, since which it has belonged to the British.

BASSE-TERRE, the cap. of St. Christophers, in the W. Indies, which see.

BASSE-TERRE, the cap. of Guadaloupe, in the W. Indies, which see.

BASTIA, a sea-port town of Corsica, cap. arrond., on its E. coast, within 23 m. of its N.E. extremity; lat. 42° 43′ N., long. 9° 26′ E. Pop. 12,846. This town, which was formerly the cap. of the island, is built amphitheatre-wise on a rising ground, and has a fine appearance from the sea. But on entering, it is found to be ill built, and the streets narrow and crooked. It is defended by a citadel, and by walls and bastions; but these are of no use, except for the defence of the port, being commanded by the heights, at the foot of which the town is built. The harbour, formed by a mole, is fit only for small vessels; its entrance is narrow and difficult, and vessels are exposed to the land winds, which sometimes blow violently from the N.W. There is anchorage outside the mole in 10 or 11 fathoms. It is the seat of a royal court for the island, and of tribunals of commerce and of primary jurisdiction; and has a communal college, a model school, a society of public instruction, and a theatre. It produces soap, leather, liqueurs, and wax; and exports oil, wine, goat-skins, coral, wood, and hides. It was taken by the English in 1794, but was soon after recovered by the French, in whose possession it has ever since remained. At the entrance to the port is an insulated rock, called *Il Leone*, from the striking resemblance it bears to a *lion couchant*. (*Dict. Géog.*; *Hugo*, art. *Corse*; *Norris's Mediterranean*.)

BASTIDE DE CLERENCE (LA), a town of France, dep. Basses Pyrénées, cap. cant., near the N. bank of the Joyeuse, 13 m. E.S.E. Bayonne. Pop. 2209.

BASTIDE DE SEROU (LA), a town of France, dep. Ariége, cap. cant., 9 m. W.N.W. Foix. Pop. 2858. Bastide is the name of several other small towns in different parts of France.

BATAVIA, a sea-port and city of Java, cap. of that noble isl.; seat of the gov. of the Dutch possessions in the E., and the principal emporium of the E. Archipelago, on an extensive bay on the N.W. coast of the isl.; lat. 6° 12′ S. long. 106° 54′ E. The pop., according to a census taken in 1824, consisted of 3025 Europeans and their descendants, 23,108 natives, 14,708 Chinese, 601 Arabs, and 12,419 slaves; in all, 53,861, exclusive of the garrison. As the pop. has increased since, it may now be estimated at from 60,000 to 70,000. Batavia is built in a marshy situation, at the mouth of the Jaccatra river; several of its streets being intersected by canals, crossed by numerous bridges, and their banks lined with trees in the Dutch fashion. But these canals being receptacles for the filth of the city, contributed, together with the nature of the ground, to render it very unhealthy. In this respect, however, it has been materially improved since 1815, partly by building a new town on the heights, a little more inland, where the government functionaries and principal merchants have their residences; and partly by the demolition of useless fortifications, the filling up of some of the canals, and the cleaning of others, and the widening of several of the old streets. The older parts of the town are now, in fact, principally occupied by Chinese and natives, and, though intermittent fevers are still said to be prevalent, we doubt whether it be much more unhealthy than most other places on the island. The existing fortifications consist only of a few small batteries and redoubts in and about the city. The houses, of brick, and stuccoed, are spacious and neat; the ground floors in the principal houses are formed of marble flags; the chief street lies along both sides of the river, and consists of the offices and warehouses of the principal merchants, none of whom, as already stated, pass the night in Batavia. The Stadthaus, in which the courts of law are held, is on the S. side of the city; at the opposite quarter is the citadel, a square fortress with a bastion at each angle, containing the residence of the gov. and some warehouses; there are three churches and a theatre. The Jaccatra is navigable for two m. inland for vessels of 40 tons burden; the harbour, or, rather, road, which is very extensive, is protected by a range of small islands, and affords good anchorage for ships of from 300 to 500 tons, about 1½ m. from the shore. Batavia is the depôt for the produce of all the Dutch possessions in the E. Archipelago; as spices from the Molucca islands; coffee and pepper from Celebes and Sumatra; gold-dust and diamonds from Borneo; tin from Banca; tortoise-shell, bees' wax, dye-woods, &c., from Timor and Tumbawa, &c. Originally no Dutch ship was suffered to proceed homeward without first touching here. Many junks from China and Siam formerly traded thither; but since the establishment of the British at Singapore, their trade with Batavia has greatly decreased. The manufactures, as those of leather, lime, earthenware, sugar, and arrack, are mostly in the hands of the Chinese; their *campong*, or peculiar quarter, is the chief seat of bustle and activity: and the trade of the town, except in the articles monopolised by Europeans, is wholly in their hands. Many of them are wealthy; they are governed by their own laws and magistrates. The British, according to Mr. Earl, form an important body of merchants here, and possess about 2000 sq. m. of land on the island, much of which is cultivated with sugar:

there are said to be about 200 English subjects in Batavia, including those serving in the Dutch mercantile navy.

Perhaps no colony in the world, not even excepting Cuba, has made so rapid a progress as Java, during the last ten years, in the production of all the great colonial staples, but especially in those of coffee, sugar, and indigo. The trade of Batavia has, in consequence, been very greatly increased; but the recent statements of the imports and exports that we have seen refer to the island generally, and we have no means of specifying exactly how much belongs to Batavia. At an average of three years, ending with 1830, the value of the imports into Batavia amounted to 18,237,600 fl., and that of the exports to 17,694,900 fl. Since then, however, we have little doubt that the trade of the port has been at least doubled. The value of the exports from Java, in 1836, amounted to 42,261,642 fl., or £3,521,803. (See JAVA.)

A large portion of the trade of Java is in the hands of the Netherlands' Trading Company; and the probability seems to be that it would be still greater, were it left wholly to individual competition. But we must be cautious, in the absence of specific information, how we censure a system that has been productive of such striking results.

A bank has been established at Batavia with a capital of 2,000,000 fl., with branches at Samarang and Sourabaya. It seems to be a most advantageous concern, having realized, according to the official statement, a profit of 33½ per cent. during the year ended 31 March, 1838.

Mr. Earl, who is better informed as to the manners and habits than the trade or policy of the Dutch, makes the following statement: "The mode of life pursued by the European residents at Batavia is rather monotonous, but is easily supported by those who have great pecuniary advantages in view. Early rising is generally practised, the morning being by far the most agreeable part of the day. The time before breakfast is spent in riding or gardening, according to the taste of the individual; and after a substantial meal at 8 o'clock, they repair to their town offices. At the conclusion of the business of the day they retire to their country-houses to a 5 o'clock dinner; and a drive round the suburbs occupies the interval between that repast and the closing in of night; when they either return home, or proceed to spend the evening at the Harmonie, an establishment formed upon the same principle as the large clubs of London; the majority of the European residents, Dutch and foreign, being members. The regulations are particularly favourable to strangers; a resident who is not a member, cannot be admitted; but a visiter, after being introduced by a member, may resort to it whenever he pleases during his stay at Batavia. The evenings at the Harmonie are spent in conversation, or in playing at cards and billiards, and it is perhaps the more frequented by the gentlemen from their having little intellectual amusement at home. The greater number of the Dutch females have been born on the island, and are rather deficient in point of education. They are often remarkably fair, owing to their being seldom exposed to the weather; the heat of the climate renders them extremely listless, and they soon attain that embonpoint which we are apt to associate with the idea of Dutch beauty.

"There are few public amusements. On Sunday evenings a military band performs on the Koning's plain, which attracts the residents, who attend in carriages or on horseback; and the community is occasionally enlivened by an amateur play, or a grand ball given by one of the public functionaries. The annual races, which are always well attended, were established, and are principally supported by the English. Some very good half-bred Arabs are occasionally run; but the race between the country horses, ridden by native jockeys, is by far the most amusing, and the riders jockey and are outjockeyed in a style that would not disgrace Newmarket." (*Eastern Seas.*)

Batavia was built by the Dutch, in 1619; in 1811 it was taken by Sir S. Auchmuty, and belonged to the British till 1816, when it was restored to its former possessors.

BATAVIA, p. t., Genesee co., N.Y., 249 m. W. Albany, 374 W. Watered by Tonawanda creek. It contains two foreign commercial houses, with a capital of $12,000, twenty retail stores, with a capital of $114,900, one woollen factory, one furnace, two flouring-mills, three grist-mills, two saw-mills, one brewery, two printing-offices, two weekly newspapers, three academies, 146 students, twenty-two schools, 819 scholars. Pop. 4219. The village, which is the capital of the co., contains a court-house, jail, county clerk's office, a state arsenal, the general land office of the Holland Land Company, a female seminary, two banking houses, five churches, one Presbyterian, one Methodist, one Episcopal, two Baptist; thirty stores and groceries, one flouring-mill, 300 dwellings, and about 2600 inhabitants. Incorporated in 1823. A rail-road extends from Rochester to this place, and is continued to Buffalo, constituting a part of the great western chain from Albany.

BATAVIA, p. t., capital of Clermont co., O., 103 m. S.W. Columbus, 474 W. It contains seven stores, three grist-mills, five saw-mills, two printing-offices, two weekly newspapers, four schools, 187 scholars. Pop. 2187.

BATAVIA, t., Geauga co., O. Drained by branches of Cuyahoga and Grand rivers. It has one store, one grist-mill, two saw-mills, four schools, 130 scholars. Pop. 771.

BATAVIA, p. t., Branch co., Mich., 117 m. S.W. Detroit, 565 W. It has one saw-mill, two schools, 400 scholars. Pop. 400.

BATE ISLE, an island belonging to Hindostan, prov. Gujrat, and off its W. extremity; lat. 22° 27′ N., long. 69° 19′ E. It has a good harbour, and contains about 2000 houses; but is chiefly noted for a celebrated temple dedicated to the god Runchor, and much frequented by pilgrims.

BATES, co., Mo., situated in the S.W. part of the state, and contains 1160 sq. m. Watered by Osage river. Organized since 1840. Capital, Batesville, formerly Harmony missionary station.

BATH, a city of England, N.E. part co. Somerset, 102 m. W. by S. London, on the Avon, along which its buildings extend for upward of 2 m., ascending the acclivities, and crowning some of the summits of the adjoining range of hills. Pop., in 1801, 33,150; in 1831, 50,817. This city is distinguished for its architectural elegance, and the beauty and extent of its public promenades. The fineness of the free-stone, of which its edifices are mostly built, and the noble scale and symmetrical arrangement of the ground plans, fully equal the taste displayed in their elevations. Among the most prominent places are the Circus, in which the Doric, Ionic, and Corinthian orders are combined, and from whence three spacious streets, of corresponding character, diverge; the N. and S. parades, which have noble terraces, raised on arches, and commanding extensive views; Kingston square, and the new streets and fine esplanade formed along the river side, beneath the terraces last named; Queen square, of the Corinthian order, with an obelisk in the centre; the Royal Crescent, with Ionic columns springing from a rustic basement, and crowned by a rich entablature; with Lansdown and Cavendish crescents; Belle Vue, Portland, and two or three other places: Paragon buildings, Belvedere and Marlborough buildings: in the level plain, extending on the N.E. side, are the fine ranges of Kensington, Grosvenor place, and Walcot terrace; lastly, the structures in the new town, on the river. The latter, which winds through, and adds greatly to the beauty of the city, is spanned by two stone bridges (one of ancient, and one of modern construction), a handsome iron bridge, connecting Bathwick with Walcot, and affording a direct access from the London road to the finest parts of the city; another iron bridge, connecting the North parade with the Pulteney road, and three suspension bridges.

The famous thermal springs, on which the prosperity of the place is so dependant, rise in the midst of the limited plain skirted on the E. and S. by the Avon, from three distinct sources, at a small distance from each other. The waters of each are received into four extensive reservoirs, to which suitable baths are attached: that called the King's bath is the principal, and is supplied by a spring rising about 150 ft. S.W. of the abbey. The Queen's bath, which is much smaller, adjoins this, and is supplied from the same source. The Cross bath is supplied from a distinct spring, rising at a short distance S.W. of the former; and the hot bath from another, 120 ft. farther on, in the same direction. The grand pump-room, connected with the King's bath, a very handsome building, erected in 1797, forms the principal centre of attraction during the fashionable season: it has an orchestra, and a fine statue of Nash. Like the King's, the hot bath has a pump-room, on a smaller scale, and each has a public pump connected with its spring, of which the gratuitous use is allowed during the day. Besides the public baths (which are principally used by the hospital patients and the poorer classes of invalids), there are private baths, belonging to the corporation, and others, called the Abbey baths, belonging to Earl Manvers: these are chiefly resorted to by the wealthier classes, and are amply provided with sudatories, and every accommodation. The medicinal waters of these springs, when fresh drawn, are quite transparent, and destitute of colour and smell, the temperatures being—of the King's bath, 116°; of the Cross bath, 112°; of the Hot bath, 117° Fahr. They contain carbonic acid and nitrogen gases, sulphate and muriate of soda, sulphate and carbonate of lime, and siliceous earth, with a minute portion of oxide of iron. Respecting both the gross amount and relative quantities of these, there is much discrepancy in the numerous treatises on the subject, by which occasional variation may be inferred: the impregnation, both chalybeate and saline, is greatest in those of the King's and the Hot bath; the water of the Cross bath has most earthy contents. Large quantities of gas pass up with the water, in bubbles of considerable size. Taken internally, the waters act as stimulants, raising the pulse considerably, and exci-

ing the nervous system: they are considered peculiarly efficacious in cases of gout and of biliary obstructions; as baths, they are used for various chronic and cutaneous disorders; their topical application, by forcing a stream on the diseased part (called dry pumping), is also much in request. The morning is the usual time both for drinking and bathing. The reservoirs are discharged, at regular intervals, through channels connected with the Avon.

The principal buildings devoted to religious purposes are —the abbey church (the latest specimen of the ecclesiastical Gothic in the kingdom), a beautiful structure, once called, from the large size and number of its windows, the lantern of England; it was founded on the site of a more ancient church, A.D. 1495, and was completed in 1606; its tower is 162 ft. in height: St. Michael's church, a Gothic structure, with a handsome spire, erected in 1836; St. James's church, rebuilt in 1768; that of Walcot, a very spacious building, recently much enlarged, with free sittings for the poor; Christ church, a fine structure, erected by subscription in 1798; with other churches and chapels connected with the Established church, and mostly raised within the last century. Catholics, Moravians, Friends, Baptists, Independents, Methodists, and Unitarians, have also places of worship. Of the establishments devoted to charitable purposes, the principal are—Bath Hospital (completed in 1742), for the reception of sick poor from all parts of the kingdom (except the city itself), who come for the benefit of the waters; it is incorporated by a charter, and supported by donations and subscriptions: the Bath United hospital, combining the same objects as the previous dispensary and those of a casualty infirmary; it is supported like the last: Beflot's hospital, endowed in the reign of James II., for the same purpose as the Bath hospital, but for men only; it provides lodging and bathing for about 18: Black Alms, endowed by Edw. VI., for the support of 10 poor persons of the place: St. John's, endowed in Hen. II.'s reign, for the support of six poor men and as many women: Partis's College (a large quadrangular range on the upper road to Bristol), for the support of 30 decayed gentlewomen, 10 of whom must be widows of clergymen; each has a house, garden, and handsome annuity. The chief establishments for education and literature are—a free grammar school, endowed by Edw. VI.; its mastership (which carries with it the rectory of Charlcombe) is in the gift of the corporation: the Blue Coat charity school, founded A.D. 1711, for clothing, and teaching 50 boys and 50 girls reading, writing, and arithmetic; two other free schools for girls only; one, for the instruction of poor children of Bath and Bath-forum; a national school; the Catholic and the Methodist free schools. The Bath and West of England society, established in 1777 for the encouragement of agriculture, arts, manufactures, and commerce, has devoted itself chiefly to the first of these objects, and published several volumes of transactions: the Bath Literary and Philosophical institution, established in 1820; it is a handsome Doric building (occupying the site of the Lower Assembly rooms, which were then burned down), and comprises a library, museum, laboratory, and lecture-room: the Public Subscription library, established in 1800, has an extensive collection of books; and there are many circulating libraries. A mechanics' institute was established in 1828. The public buildings appropriated to business or amusements are—the Guildhall, the seat of the quarter sessions, and the courts of record and request; the two first named by the corporation, the last by commissioners appointed under an act of 45th Geo. III., for recovery of debts under £10; its jurisdiction extends over the city, and several parishes in the hundreds of Bath-forum and Wellow: this court, which sits every Wednesday, has nearly absorbed the business of the court of record. The prison is a spacious building in Bathwick, chiefly occupied by debtors, and by delinquents previously to their being fully committed. Commercial rooms were established in 1839. The market-house is an extensive range of buildings behind the Guildhall; market-days, Wednesdays and Saturdays. The theatre, in the Grecian style, finished in 1805, towers over the surrounding structures, in the central part of the city; the Freemason's lodge (built in 1817) is also conspicuous. The Subscription club-house, and the Bath and West of England Subscription rooms, are establishments similar to the London club-houses. The Upper Assembly rooms are a superb suite of apartments, in which the subscription balls and concerts of the season are held, under the direction of the master of the ceremonies. The city assemblies are occasionally held in the banqueting room of the Guildhall. These concerts and assemblies constitute the chief amusements of the place; besides which, however, there are two spacious riding-schools, for exercise in bad weather: when fine, Lansdown and Claverton Down are the favourite equestrian resorts. There are annual races on the former the week subsequent to those of Ascot, and a spring meeting in April for half-bred mares. Besides the various promenades, and the Sidney gardens previously mentioned, ten acres of the Bath common have, within the last few years, been laid out in public walks and pleasure grounds, named the Royal Victoria park.

Bath no longer boasts its ancient pre-eminence in the gay world as a fashionable resort. It is now surpassed by Brighton, and perhaps, also, by Cheltenham, which attracts a large portion of the company by which it used formerly to be visited. In consequence, its increase has latterly been comparatively slow, and it has become much more a place of permanent residence than formerly; the facilities for education and the numerous *agrémens* which it affords, with its greater cheapness, making it a desirable residence for numerous families whose finances might not bear the greater expenditure of London. It is still, however, much resorted to during its season. It is favourably situated for trade; the Avon being navigable to Bristol on one side, and the Avon and Kennet Canal on the other, enabling it to maintain a water communication with the metropolis and places intermediate; two branches of this canal extend from Bath into the coal district S.W. of the city. But business and pleasure do not often amalgamate; and the only manufacture is the coarse woollen cloth called Bath coating, and kerseymere, made in the immediate neighbourhood. At Twerton, 1½ miles from the city, are three clothing and one brass mill, worked by the Avon. There are two fairs, one held on the 14th Feb., the other July 10th; but they have lost most of their ancient consequence, which was mainly attributable to the woollen manufacture, first introduced here, under the auspices of the monks, in the reign of Edw. I., who granted the charters by which the fairs are held: the line of the Great Western railway passes through Bath, and will, of course, greatly increase its facilities of communication. It stands on the lias and oolite formations; in the latter (which bounds it on the N.E. and a portion of the S.) the noble freestone quarries occur, whence its building materials are derived; both formations also afford lime and fuller's earth, and abound in fossil remains, as well as in fine springs, which rise to within 40 or 50 feet of the summits of the surrounding hills, and furnish an ample supply of water to every part of the city, conducted thither from various reservoirs, by pipes, the greater part of which have been laid by the corporation. The parl. and munic. boundaries of Bath comprise the parishes of St. James, St. Michael, Sts. Peter and Paul, Walcot (the portion S. of Chalcombe), Bathwick, and Lyncombe and Widcombe. Pop., in 1821, 46,700; in 1831, 50,802; of these, at the last census, 591 were employed in manufactures, and 4368 in retail trades and handicraft. The tendency of the city to increase is, at present, chiefly in Walcot, and in Lyncombe and Widcombe: the former constitutes its most extensive and wealthy portion; the latter is the residence of a large portion of the manufacturing population. Bath claims to be a borough by prescription, confirmed by charter: it is now divided into seven wards, and governed by a mayor, fourteen aldermen, and forty-two councillors, under the Municipal Reform Act. It has sent two members to the H. of Com. since the reign of Edward I. It was supposed, in 1831, to have 7300 qualifying tenements, or tenements worth £10 a year and upward; but owing to a large proportion of these being let as furnished lodgings, it had, in 1838, only 3095 registered electors. Previously to the Reform Act, the elective franchise was exclusively vested in the mayor, aldermen, and common council, who were also self-elected. Conjointly with Wells, Bath gives name to a diocese, coextensive (including Bedminster) with the co. of Somerset. The see was fixed at the latter A.D. 905, and has since been transferred, successively, to Bath and to Glastonbury, and again restored to Wells, whose dean and chapter now elect the bishop. (*Gibbon's ed. Camden's Brit.*, p. 186, 187; 6 and 7 W. 4, c. 77.) The bishop's revenues amounted, at an average of the three years ending with 1831, to £5946 a year.

The present city may almost be called a creation of the last and present centuries; for previously it was comprised in an area of about fifty acres (on the limited plain amid which the hot springs rise), and surrounded by walls in the form of an irregular pentagon, its suburbs consisting then merely of a few detached cottages; so that the parishes now forming its most important and populous portions had, at the close of the 17th century, scarcely an inhabitant; while the three small ones within the walls (judging from the church registers) could not have contained a fourth part of their present numbers. Its rapid extension, celebrity, and magnificence, are chiefly attributable to the exertions of two individuals: one, the remarkably adroit and clever person known as *Beau Nash*; the other, Mr. Wood, the architect. The former was elected master of the ceremonies in 1710, and thereafter ruled as *arbiter elegantiarum* for upward of fifty years (the most flourishing period of its fashionable annals); using the influence his peculiar talents gave him in the promotion of objects of permanent importance to the city. The other commenced his architectural

labours with Queen's square, the foundations of which were laid in 1729. This, and the streets diverging from it, as well as the N. and S. parades, he lived to finish, and also to plan and commence the Circus. All these remain as monuments of his genius, unexcelled by any subsequent achievements.

Bath was founded, and its first walls built, by the Romans, in the reign of Claudius: they named it *Aquæ Solis*, and retained the place between three and four centuries. The walls and gates (which remained till the 18th century) were built during the later Saxon period, on the Roman foundations, and partly from the ruins of their temples, arches, &c. Camden gives many inscriptions from fragments thus imbedded (*Brit.*, p. 188, 189); and, in Warner's *History of Bath* (p. 23, 29, 32), the remains of Roman temples, baths, coins, &c., that have been discovered at various times many feet beneath the present surface, are figured and described. Hand-mills of stone, &c., relics of the British; and coffins, coins, &c., of the Saxon period, are also given by these authors. Its first charter, making it a free borough, was granted by Richard I. The manufacture called Bath beaver had attained much repute at the close of the 15th century, at which time three guilds of artificers —weavers, tailors, and shoemakers—existed, to whom Bath owed its then importance. (*Leland's Itin.*, ii., 67.) It was first made a corporate city by a charter of 32d of Eliz. This and the charters of 9th and 34th Geo. III., extending the limits of its jurisdiction, were the governing ones, previously to the late municipal act. The gross revenue of the corporation, in 1832, amounted to £14,554, chiefly derived from the rents and renewals of their estates, water-rents, market-dues, and profits of the baths. (*Municipal Commiss. Report*, 1835, App., pt. ii., p. 1109, *et seq.*) The immense thickness of its walls must have made it a stronghold in the earlier period of its history; but in later times it has never been a station of any military importance. It was fortified and held for the king at the outbreak of the civil wars; and after being taken and retaken several times, was ultimately ceded to the Parliament in 1645. Christopher Anstey, author of the *New Bath Guide*, and John Palmer, author of the plan for conveying mails by coaches, with other distinguished persons, were natives of Bath. (*Solinus, Polyhist.*, c. 22; *Hen. of Huntingdon*, lib. ii.; *Gildas, cap. ult.*; *Leland's Coll.*, v., 2; *Dugdale's Monas.*, tome 1; *Maddox's Hist. Exchcq.*, c. 13, may be referred to for the earlier history and trade of the place. The *Fourth Report*, p. 369, *et seq.*; and the *Eighth*, p. 567, *of Commiss. on Charities*, contain an account of those of Bath.

BATH, p. t. and sea-port, Lincoln co., Me., 37 m. S. Augusta, 14 m. S.W. Wiscasset, 34 m. N.E. Portland, 153 m. N.E. Boston, 577 W. Situated on the W. bank of Kennebec river, 12 miles from the ocean. Pop., in 1810, 2491; in 1820, 3026; in 1830, 3773; in 1840, 5141. Incorporated in 1780. It is one of the principal commercial places in Maine. The river is here a mile wide. The village is built on a declivity, and extends a mile and a half along the river, and three fourths of a mile back from it. It has a good harbour, which is rarely obstructed by ice in the winter season. Vessels of a large class come to its wharves. Ship building is an extensive business, and vessels were built in 1840 to the amount of $220,000. The tonnage of the port, at the same time, amounted to 64,035. It contains two banks, four churches, of which two are Congregational and one Baptist; seventy-five stores, two furnaces, two tanneries, four grist-mills, fifteen saw-mills, one printing-office, one weekly newspaper, five academies, 170 students, twenty schools, 1010 scholars. Steam-boats regularly ply between this place and Portland and Boston three fourths of the year.

BATH, p. t., Grafton co., N.H., 83 m. N.W. Concord, 528 W. Incorporated in 1761. Bounded W. by Connecticut river. Ammonoosuck river affords extensive water-power. It contains a Congregational church, five stores, two grist-mills, five saw-mills, three tanneries, and 500 scholars in schools. Pop. 1595.

BATH, p. t., capital of Steuben co., N.Y., 219 m. W.S.W. Albany, 299 W. It contains fifteen stores, one fulling-mill, one woollen factory, two flouring-mills, four grist-mills, twenty-two saw-mills, one oil-mill, six tanneries, two printing-offices, two weekly-newspapers, twenty-six schools, 1112 scholars. Pop. 4915. The village is situated on the N.E. side of Conhocton river, 216 m. W. Albany. Incorporated in 1836, and contains a court-house, jail, county clerk's office, a bank, five churches, two Presbyterian, one Methodist, one Episcopal, and one African; a female seminary, 200 dwellings, and about 1400 inhabitants.

BATH, p. t., Summit co., O., 129 m. N.E. Columbus, 342 W. It has ten schools, 266 scholars. Pop. 1425.

BATH, county, Va., situated in the central part of the state, and contains 756 sq. m. Drained by head branches of James, Cowpasture, and Jackson rivers. It contained, in 1840, 8707 neat cattle, 10,598 sheep, 8099 swine: and produced 33,954 bushels of wheat, 26,669 of rye, 117,317 of Indian corn, 78,668 of potatoes, 39,137 pounds of sugar. It had eight stores, eight flouring-mills, thirty-one grist-mills, thirty-seven saw-mills, one distillery, nine schools, 196 scholars. Pop.: whites, 3170; slaves, 347; free coloured, 83; total, 4300. Capital, Bath.

BATH, p. v., capital of Bath co., Va., 164 m. W.N.W. Richmond, 201 W. It contains a court-house, jail, and a number of dwellings. It has a medicinal spring, called the *Warm spring*, with a temperature of 96° of Fahrenheit, useful in rheumatic and other cases. The *Hot spring*, 6 miles S.W., has a temperature of 112°.

BATH, county, Ky., situated in the N.E. part of the state, and contains 256 sq. m. Bounded N.E. by Licking river. It contained, in 1840, 9440 neat cattle, 17,237 sheep, 30,674 swine; and produced 71,122 bushels of wheat, 22,624 of rye, 79,942 of oats, 1,029,797 of Indian corn. It had eleven stores, two furnaces, one flouring-mill, ten grist-mills, seven saw-mills, one oil-mill, twenty-two schools, 562 scholars. Pop.: whites, 7708; slaves, 1951; free coloured, 104; total, 9763. Capital, Owingsville.

BATH, t., Allen co., O. It has four schools, 91 scholars. Pop. 1382.

BATH, t., Greene co., O., watered by Mad river. It contains nine stores, five flouring-mills, three grist-mills, five saw-mills, one oil-mill, three distilleries, one brewery. Pop. 1721.

BATHGATE, a town and par. of Scotland, co. Linlithgow. Pop. 3593. The town is situated on the middle road between Edinburgh and Glasgow, 18 m. W.S.W. the former, and 6 m. S. Linlithgow. It stands on the S. declivity of a ridge of hills extending across the co., and comprises an old and a new portion; the former consisting of narrow, crooked lanes, on a steep declivity, and the latter of more modern and better built houses, on more level ground. The streets are well paved and lighted, and it is abundantly supplied with good water, brought from a distance. The church, a clumsy edifice, was erected in 1739; and there are three or four dissenting meeting-houses. Bathgate was created a free burgh of barony in 1824. The inhab. are principally employed in the weaving of cottons for the Glasgow manufacturers, and in the adjacent coal and lime works. It has an excellent academy, liberally endowed by a native of the town, who acquired a fortune in the W. Indies, which furnishes education of the best sort gratis, to all natives of the parish. It has six annual fairs, two of which, at Whitsuntide and Martinmas, are of very considerable importance as cattle fairs. A weekly market is held on Wednesday. The par. is generally in a high state of cultivation.

BATHURST TOWN, a town of W. Africa, on the S. side of the mouth of the river Gambia; cap. of the British possessions on that river, and seat of a civil lieut.-governor; lat. 13° 28′ N., long. 16° 32′ W. It stands on the E. end of St. Mary's island, a fertile, but low and swampy spot, about 4 m. in length, and 3 m. in breadth. Pop. (1836, of the town and island) 2825, of whom 36 only are Europeans; the rest being liberated Africans, Mandingoes, Jolofs, &c. The main street facing the river is occupied with European warehouses and private dwellings; the other streets are laid out in straight lines, but unpaved, and are lined mostly with African huts, inclosed within small gardens. The government-house, like the other European buildings, consists of one floor, raised upon brick pillars, furnished with verandahs, and approached by a long flight of steps. There is a spacious hospital for liberated Africans near the town; there are three Wesleyan chapels and a missionary school; the number of the armed force here, in 1836, was 321. Most of the European settlers are merchants, trading chiefly in gum Senegal, bees' wax, hides, ivory, and gold; the other principal exports are tortoise-shell, rice, cotton, African teak, camwood, palm oil, country cloths, &c.: the import duties, in 1834, amounted to £3016; and 127 vessels, tonnage 11,758 tons, entered the port. This settlement was established in 1816; it was, several years ago, threatened by the neighbouring Barra chieftain, but friendly relations have since been entered into with that nation. (*Alexander's Voyage to the Colonies of W. Africa* in 1835, p. 65-72. *Martin's History and Statistics of the Colonies*, 1839.)

BATINDAH, a large inland town of Hindostan, prov. Rajpootana; lat. 30° 12′ N., long. 74° 48′ E. Its vicinity has been celebrated for its breed of horses.

BATLEY, a town and par. of England, W. R. co. York. The par., which contains 6390 acres and 11,335 inhab., is principally in the wapentake of Agbrig, but partly also in that of Morley; the town, which has 4841 inhab., is in the former. The pop., both in the town and the contiguous district, is principally engaged in the woollen trade, especially in the manufacture of what is called white cloth. The church, built in the reign of Henry VI., has several monuments of the Fitzwilliam, Saville, and other principal families in the vicinity. There is here also a well-endowed free school, founded in the reign of James I.

BATON ROUGE, EAST, parish, La. Situated towards

the S.E. part of the state, and contains 345 sq. m. Bounded W. by Mississippi river. Drained by branches of Amite river. It contains the first land which rises above the overflow in ascending the Mississippi. It contained, in 1840, 9947 neat cattle, 3690 sheep, 29,659 swine; and produced 180,291 bushels of Indian corn, 23,371 of potatoes, 4,016,183 pounds of cotton, 2,466,000 of sugar. It had thirty-four stores, with a capital of $943,500; three grist-mills, two saw-mills, one printing-office, one weekly newspaper, one college, 70 students, five academies, 196 students, seven schools, 168 scholars. Pop.: whites, 3750; slaves, 4206; free coloured, 182; total, 8138. Capital, Baton Rouge.

BATON ROUGE, p. v., cap. of E. Baton Rouge parish, La. Situated on the E. bank of Mississippi river, 120 m. above New-Orleans, and 150 m. below Natchez. It lies chiefly on one street, 30 or 40 ft. above high-water mark, from which the land rises by a gentle and gradual swell on the E. It contains a court-house, jail, penitentiary, the United States barracks, which are fine buildings on elevated ground to the E.; three banks, four churches, one Methodist, one Baptist, one Presbyterian, and one Roman Catholic; twenty-seven stores, one printing-office, three academies, 165 students, three schools, 198 scholars, 500 dwellings, and 2269 inhabitants. It is the seat of Baton Rouge College, founded in 1838, which has a president and three professors, 70 students, and 300 vols. in its libraries. The commencement is in December.

BATON ROUGE, WEST, parish, La. It lies opposite to E. Baton Rouge par., bounded E. by the Mississippi river, and S.W. by Bayou Grosse. Excepting on the margins of the rivers, where the soil is very fertile, it is liable to be overflowed. It contained, in 1840, 2513 neat cattle, 1773 sheep, 2835 swine; and produced 122,97½ bushels of Indian corn, 41·49 of potatoes, 3,180,875 pounds of cotton, 1,947,400 of sugar. It had five stores, with a capital of $18,300; two grist-mills, two saw-mills, two academies, 51 students, four schools, 42 scholars. Pop.: whites, 4371; slaves, 4638; free coloured, 120; total, 9129.

BATOUM, a sea-port town of Turkey in Asia, prov. Trebizond, near the Russian frontier, on the E. shore of the Black sea, 4 m. N. from the mouth of the Tchorok, lat. 41° 38′ 40″ N., long., 41° 38′ 55″ E. Pop. 2000.? It is built in a straggling manner, and is not fortified. The harbour, which is open to the E.N.E. and N., is defended on the W. by a projecting tongue of land, and has deep water, large ships anchoring within a few feet of the shore. The contiguous country is fertile in fruits, corn, and rice; but it has very little trade. (*Klaproth, Tableau du Caucase*, p. 162.)

BATTAGLIA, a village of Venetian Lombardy, prov. Padua, on the canal of Monselice, 10 m. S. by W. Padua. Pop. 3000. It has hot-water baths, which, with commodious buildings and agreeable promenades along the canal, attract a considerable influx of company.

BATTALAH (*Vatala*), a large town of Hindostan, prov. Lahore, considered the healthiest place in the Punjab; in an open plain, 26 m. N.E. Umritsir; lat. 31° 48′ N., long. 75° 6′ E.

BATTECOLLAH (*Batucala*, the round town), a maritime town of some size in Hindostan, prov. Canara; lat. 13° 56′ N., long. 74° 37′ E.

BATTEN KILL, a small river which rises in Vt., and enters the Hudson in Washington co., N.Y. It is about 50 m. long, and affords good water-power.

BATTLE CREEK, p. t., Calhoun co., Mich., 12 m. N.W. Marshall, 117 m. W. Detroit, 582 W. Watered by Kalamazoo river. It contains seven stores, two flouring-mills, three saw-mills, one furnace, one distillery, one academy, 20 students, five schools, 180 scholars. Pop. 903.

BATTERSEA, a par. and town of England, hund. Brixton, co. Surrey, 4 m. S.W. St. Paul's. Pop., 1821, 4092; 1831, 5540: houses at the latter date, 1022. Area, 3020 acres. It comprises a low, level tract on the S. bank of the Thames, and forms one of the suburbs to the metropolis; a wooden bridge connects it with Chelsea: it contains many respectable houses and detached villas. The parish church is a modern brick building, with tower and spire, beside the river; another has been erected within a recent period, by the commissioners appointed for such purposes. There is a free school for twenty boys, and a national school for 150 boys and girls. The Southampton railway passes through the parish; one part of which (on the E. side) is an undivided tract of pasture, the rest chiefly market-gardens, for the supply of vegetables to the metropolis, for which the parish is noted; especially asparagus, said to have been first cultivated here. The place is called Patricery in Domesday, and the manor was given to the abbey of Westminster, in exchange for that of Windsor, by Wm. I.; hence the present name. It was granted by the crown, in 1627, to the St. John family, and the celebrated Lord Bolingbroke was born and died in their mansion (since removed). It is now the property of Earl Spencer.

BATTLE, a par. and town of England, co. Sussex, rape Hastings, hund. Battle, 52 m. S.E. London. Pop., 1821, 2852; 1831, 2999: houses at latter date, 515. The town is pleasantly situated amid woody knolls, which bound it on the S. and S.E., and enclose it in a vale which winds on to the sea, at Hastings. The principal street (about a ½ m. in length) is terminated by the magnificent gateway of the old abbey. There are a few good modern structures, but the greater part of the houses are ancient, and of mean appearance. The church, partly in the Roman and partly in the Gothic style, has many antique devices on the glass of its windows. There is an endowed school for thirty girls and boys, and a charity school for forty boys, supported by subscription. A weekly market is held on Tuesday; a monthly one, on the same day, for cattle; and two annual fairs, on Whit-Monday and Nov. 22. Gunpowder is the only manufacture, for which there are several extensive mills in the vicinity: its excellence is surpassed only by that made at Dartford. Battle is the central town of a poor law union of fourteen parishes. The ancient name of the town was Epiton: its present name is derived from the great battle between Harold and William of Normandy, in 1066, of which it was the arena. In the following year the Conqueror founded the abbey, in commemoration of his victory, the ruins of which still sufficiently attest its ancient magnificence. On the completion of its church, he deposited in it the famous roll in which the names of all the leaders who had accompanied him on the expedition were inscribed. Copies of it are still extant, though not free from the suspicion of being interpolated and falsified. Benedictine monks from Normandy were its first occupants; their abbot was mitred, and a peer of parliament. The abbey was built on a gentle acclivity, overlooking a fine extent of woods and meadows, and was endowed with all the lands for a league round, besides various manors and churches in other counties. Many subsequent royal and private donations were added to the original endowment, and its prerogatives and immunities were placed on the same footing as those of Christ Church, Canterbury. In the reign of Edw. III. leave was obtained to fortify the abbey. At the general suppression, its annual revenue was, according to Speed, £987 0*s.* 10½*d.*: Dugdale makes it £880 14*s.* 7½*d.* Sixty monks were pensioned off. The remains occupy three sides of a large quadrangle. (*Camden's Brit.; Dugdale's Monas.; Pennant's Tour; Gilpin's Coast of Sussex.*)

BATURIN, a town of European Russia, government of Tchernigoff, beautifully situated on the Seim, an affluent of the Desna. Pop. 5000.? It is chiefly remarkable for the castle in its vicinity belonging to Count Rasoumofski, who has established in the town manufactures of cloth and wax candles.

BAVARIA (Germ. *Baiern*, Fr. *Bavière*), a country in the S.W. of Germany, anciently a duchy, afterward an electorate, and now raised to the rank of a kingdom, being one of the principal of the secondary European states. It is composed of two distinct parts, commonly designated the "Territory of the Danube and Maine," and the "Territory of the Rhine." The former, which comprises about seven eighths of the monarchy, extends from 47° 19′ to 50° 41′ N. lat., and from 8° 51′ to 13° 44′ E. long., and is bounded N. by the kingdom of Saxony, the principalities of Reuss, and the states of ducal Saxony; E. and S. by the states of the Austrian empire; and W. by the territories of Electoral Hesse, Hesse-Darmstadt, Baden, and the kingdom of Wurtemberg. The Rhine territory lies on the W. side of that river, by which it is partly bounded, and is completely separated from the rest of the Bavarian dominions by the interposition of the territories of Baden and Hesse-Darmstadt: it extends from 48° 57′ to 49° 50′ N. lat., and from 7° 6′ to 8° 31′ E. long.

Extent. Population.—Considerable discrepancies have prevailed in the statements respecting the superficial extent of Bavaria. According to Hassel, it contains 32,834 British sq. m.; others have reduced it to 28,435 sq. m.; and Berghaus, in his late work estimates it at 1398 German, or 29,537 English sq. m.

In 1837 the total pop. was 4,315,469, as exemplified in the table at the head of the succeeding page.

Surface. Mountains.—Bavaria has on the whole a mountainous character, being not only walled in by lofty mountains on the N. and S., but having extensive chains running through its interior. The loftiest mountains are the Noric Alps, on the S., which separate it from the Tyrol; their most elevated points are the Zugspitz, circle of Isar, 9689 ft. and the Wetterschroffen, 9387. The Allgau Alps, in the prov. of the Upper Danube, extend from Kempten, in a N.E. direction, to near Mindelheim. The Hochvogel in this range is 8476, and the Teufelgsiss, in the same prov., 9283 ft. The high lands on the N. side of the Danube contain the finely-wooded chain of the Spessart, which commences on the Maine, at the place where that river separates it from the chain of the Odenwald, and

BAVARIA.

Population of Bavaria in 1837.

Provinces, and their former Designation.			Area in sq. m	Population. Jan. 1, 1838.	Pop. to sq. m.	Chief Towns and Population.	
Upper Bavaria,	formerly Circle of	Isar	6,614	684,405	103	Munich	75,100
Lower Bavaria	"	Lower Danube	4,113	515,117	125	Passau	9,000
Palatinate	"	Rhine	2,226	565,345	254	Spires	8,700
Upper Palatinate and Ratisbon	"	Regen	4,198	449,608	107	Ratisbon	22,000
Upper Franconia	"	Upper Maine	2,296	480,230	215	Bayreuth	14,000
Middle Franconia	"	Rezat	2,798	507,604	226	Anspach Nuremberg	13,000 40,400
Lower Franconia and Aschaffenburg		Lower Maine	3,604	579,473	160	Würtzburg	22,500
Swabia and Neüburg	"	Upper Danube	3,858	533,687	138	Augsburg	34,000
Total			29,637	4,315,469	145		

Movement of Population.—An average of eleven years from 1824 to 1835 gave the following results—Deaths 116,319; marriages, 27,579; leg. births, 89,190 males, 55,155 females; illeg. births, 14,508 males, 14,995 females; leg. births to the 1st of March, 4. Legit. to illegit. births, 4·4 to 1. Average annual increase of pop. 23,063.

traverses the prov. of Lower Maine from N. to S., covering an area of 147 sq. m. The loftiest summits of this range, such as the Engelsberg and the Geyersberg, rise to the height of about 2000 ft. The most common rocks in the Spessart are granite, gneiss, syenite, and porphyry, which serve as a support for sandstone, argil, and calcareous rocks. S. of the Maine, and along the frontiers of the Lower and Upper Maine and the Rezat, is the range of the Steiger-Wald, which reaches nearly to the chain of the Spessart, and is only separated from it by the course of the Maine. The Rhœne-Gebirge, a bleak and desolate chain of mountains in the circle of Lower Maine, unite on the W. with the chain of the Vogelsberg, and on the E. with the Thuringer-Wald: they are more extensive and more elevated than the range of the Spessart, and are covered half the year with snow. The Fichtel-Gebirge, which connect the Rhœne mountains with the Bœhmer-Wald, lie in the N.E. part of the Upper Maine. They consist chiefly of granite, gneiss, quartz, and clayslate. The highest point in the range is the summit of the Ochsenkopf or Ox's Head (5280 ft.). The chain of the Bœhmer-Wald, which commences at the sources of the Eger, and, running along the E. confines of Bavaria, terminates at the Moravian mountains, throwing out several branches into the circles of the Lower Danube and Regen, may be about 200 m. in length. The most elevated summits are the Asber, 4824 ft.; the Rocher, 4720 ft.; and the Dragell, 4054 ft. The Bavarian mountains are in general well wooded. In the flat country along the Danube there are some very extensive marshes.

Rivers.—Bavaria is watered by the largest rivers of Germany. The most considerable of these is the Danube, which, on entering Bavaria from the Würtemberg dominions, is of sufficient size to be navigable, and afterward flows through the heart of the kingdom, making, with its windings, a course of about 270 Eng. m. In its course through the Bavarian territory, it flows past the towns of Günsburg, Hœchstädt, Donauwœrth, Neuburg, Ingolstadt, Ratisbon, Straubing, Vilshofen, and Passau, and receives no fewer than thirty-eight rivers: the chief of these, on the right bank, are the Iller, the Lech, the Isar, and the Inn, all having their source among the Alps. The Iller, before its junction with the Danube, receives the Bleibach; the Isar is joined by the Loisach, Amper, and Würm, and falls into the Danube below Deggendorf: the Inn, which rises in Switzerland, flows through the Tyrol, and is navigable before it enters Bavaria: it receives the Alz, the large river Salza, &c., and joins the Danube near Passau. The streams on the left or Franconian side, which are by no means so large as those on the opposite bank, are the Wörnitz, the Altmühl, which has its source in the Steiger-Wald and falls into the Danube near Kelheim; the Rohrbach, near Babenheim; the Naab, which descends from the Fichtel-Gebirge and discharges itself into the Danube above Ratisbon; and the Regen, that flows from the Bœhmer-Wald, and, traversing the circle to which it gives name, joins the Danube opposite Ratisbon.

The only considerable river in the N. part of Bavaria is the Maine, formed by the junction of the red and White Maine, the former originating in the vicinity of Neubau, and the latter descending from Ochsenkopf, part of the Fichtel-Gebirge, in the circle of the Upper Danube. These unite near Culmbach, and traverse Franconia in a W. direction, receiving in their progress the Rodach, the Linn, and the Franconian Saale, which flow from the Rhœne-Gebirge, the Regnitz, and many smaller streams. The Rhine forms the E. boundary of the Bavarian province which bears its name.

Lakes.—The lakes are numerous, and some of them large. Besides the lake of Constance, only a small portion of which is situated in Bavaria, the most extensive are the Ammer, about 12 m. long and 27 in circuit; the Würm, 14 m. in length and 4 in breadth; and the Chiem, about 35 m. in circuit. The Staffen or Staffel, the Walchen, the Kochel, and the King's or Bartholomæus lakes, are also of considerable extent. Most of these lakes abound in fish, and several valuable fisheries have been established on them.

Bavaria possesses few complete canals of any great magnitude. A canal was made in 1807 between Rosenheim, 7400 ft. long and 36 ft. broad. Another canal was finished in 1818 between Wörth and Knitlingen, 10,624 ft. long and 62 ft. broad. There is a canal in the W. part of the circle of the Isar 13,000 ft. in length, which saves a distance of 5 m., and avoids the dangerous navigation of the Ammer lake. A grand canal is now in progress for joining the Danube with the Rhine. It is to extend from Dietfurth, on the Altmühl, a navigable affluent of the Danube, to Bamberg on the Maine, a distance of 23½ German, or about 112 Eng. m. It is on a large scale, and is estimated to cost from £800,000 to £900,000. This magnificent undertaking, which appears to be destined to realize the project of Charlemagne for joining the Black sea to the German ocean, is carried on at the instigation and with the assistance of the Bavarian government. It is already far advanced; and will, no doubt, when completed, be of the greatest importance, not to Bavaria only, but to Europe.

Climate.—The climate of Bavaria is in general temperate and salubrious, but the temperature is considerably modified by local differences in the elevation of the soil. In the mountainous regions it is cold and bleak, but milder in the low country: in the plains and valleys the summer heats are sometimes oppressive.

Forests.—The Bavarian forests are very extensive and valuable; a considerable portion of the kingdom being still covered with natural woods. The most common trees are oak and beech in the plains, and pine and fir on the mountains. The most extensive forests are situated on the Spessart and Rhœne mountains, and in the neighbourhood of Kempten, where they cover a surface of 253,143 acres. The annual product of the Bavarian forests is estimated at 2,370,000 klafters: and timber is one of the most important articles of export.

The following table exhibits an approximative view of the extent, in acres, of the forests in the different circles, distributed among the classes to whom they belong:

Circles.	Forests belonging to the State.	To towns, burghs, villages, and foundations.	To individuals.	Total number of acres.
Isar	521,560	101,096	813,543	1,436,209
Regen	258,010	126 661	411,733	796,404
Lower Danube	173,523	793	481,253	655,569
Upper Danube	217,627	160,699	374,849	753,175
Lower Maine	223,611	337,924	190,476	751,701
Upper Maine	416,545	100,542	197,629	714,716
Rezat	224,346	151,243	165,057	541,646
Rhine	366,067	268,550	70,889	704,706
Total	2,419,339	1,246,898	2,704,649	6,368,976

The gross annual value of the woods and forests belonging to the state amounts to nearly £350,000; but, in consequence of the heavy expenses attending their management, the nett produce received by the state amounts only to little more than half that sum.

Minerals.—The mineral products of Bavaria are important and valuable; but, notwithstanding the encouragement held out by government, they have hitherto been comparatively neglected. The principal products are salt, coal, and iron. Salt is a royal monopoly, and produces a considerable revenue. According to Rau, the consumption is about 38,745 tons a year, the retail price being 6 fl. 9 ks., or 10s. per cwt. in the country; whereas about 4200 tons are annually sold to Switzerland, at 2 fl. 29 ks., or about 4s. 6d. per cwt. There are a considerable number of iron-works and coal-mines in operation; but the quantities produced are comparatively inconsiderable, not being a tenth part of what they might easily amount to: they belong partly to the crown and partly to private individuals. Black lead is obtained in some places; and small quantities of copper

and quicksilver are also produced. There are an immense variety of marbles. The porcelain city of Bavaria is probably the finest in Europe.

Cattle, &c.—the pastures of Bavaria are extensive, and generally good. According to Hoeck, the stock of cattle, horses, and sheep, in the different circles, in 1828, was as follows:

	Horses.	Horned Cattle.	Sheep.
Isar	104,883	328,328	159,000
Regen	29,160	212,313	91,123
Upper Danube	65,867	307,010	97,327
Lower Danube	51,102	214,858	135,250
Rezat	31,260	240,000	180,000
Upper Maine	7,296	208,650	131,491
Lower Maine	11,286	260,000	210,000
Rhine	24,998	164,459	133,804
Total	324,991	1,895,657	1,138,100
In 1837	330,620	2,350,386	1,484,080

This, however, would seem to be a most inadequate stock compared with the extent and capacities of the country. Generally speaking, too, the quality of the stock used to be very inferior. A good deal of improvement has, however, been effected in this respect within the last ten years by the establishment of veterinary schools, the institution of prizes, &c., and, more than all, in so far at least as sheep are concerned, by the high price of wool of late years, and the advantages seen to accrue from the improvement of the breed, to the woolgrowers of Saxony, Silesia, and other German countries. Although, therefore, neither the stock of cattle, horses, nor sheep, be at present so extensive or good as in some of the contiguous countries, it is satisfactory to know that it is in a progressive state of improvement; and the extensive market that the accession of Bavaria to the Germans Customs' Union has opened to her products will most probably lead to new efforts for the improvement of this among other branches of industry. The stock of hogs is estimated at 870,000. Poultry and wild fowl are plentiful; and in the circles of Rezat and Upper Danube the peasantry carry on a profitable trade in honey. The wolves, that formerly infested the Bavarian forests, are now nearly extinct.

Agriculture.—The soil of Bavaria, where it is not covered by morasses or mountains, is generally good; and, in the plains and valleys it is deep, fertile, and capable of producing all kinds of crops. Owing to the ignorance and prejudices of the peasantry, agriculture is still, in most parts, in a very backward state, and large tracts of arable land continue uncultivated. It was recently, and probably still continues to be customary, in cases of sickness or disease among cattle, for the husbandman, instead of applying to a veterinary surgeon, or administering remedies, to drive them to the shrine of some saint! But, thanks to the spread of education, the confiscation and sale of the greater part of the church lands, and the introduction of a more liberal system of government, the prejudices of the people are rapidly relaxing; a great deal of waste land has been reclaimed; and an improved system of cultivation has been introduced into various districts, and is diffusing itself over the whole country. Government has zealously exerted itself to promote improvement, not merely by the reforms it has effected in the systems of administration and education, but by the drainage of extensive marshes, and by its efforts to improve the breed of sheep, &c.

Agriculture is most improved in the valley of the Danube, the circles of Rezat, and of the Upper and Lower Maine. The plain laying to the S. of Munich has, on account of its productiveness, been styled the granary of Germany. Principal crops—rye, wheat, oats, and barley; but rice, maize, and buckwheat, are also partially cultivated. No accurate estimate can be formed of the productiveness of the crops, varying, as they must necessarily do, not only according to the quality of the soil, but also according to the skill with which it is cultivated, and the nature of the seasons.* But Englishmen who have been in Bavaria state, that under proper culture, the produce of corn and turnips is equal to what it is in the best cultivated districts of England; and, notwithstanding the vast consumption of corn in the breweries, Bavaria has invariably a large surplus for exportation.

Circles.	Wheat.		Rye.		Barley.		Oats.	
	s.	d.	s.	d.	s.	d.	s.	d.
Isar	29	0	21	10	17	1	10	8
Lower Danube	25	9	19	4	14	2	9	6
Regen	25	0	19	6	15	3	9	8
Upper Danube	29	6	23	1	16	11	10	4
Rezat	27	1	20	10	17	6	10	2
Upper Maine	28	1	21	9	17	4	8	4
Lower Maine	27	6	21	3	17	4	10	8
Whole kingdom	27	7	20	11	16	6	9	11

* It is stated in a very good article on Bavaria, in the Penny Cyclopædia, that the average produce of the Bavarian crops is about 5 3-4ths bushels an English acre! But a crop of this sort would do little more than replace the seed: 28 bushels an acre would be nearer to, but probably under, the mark.

The foregoing table exhibits the prices of the four principal sorts of grain within each of the circles of Bavaria, at an average of the six years ending with 1836, in shillings and pence sterling per imperial quarter.

The hop-plant is cultivated to a considerable extent, particularly in the circles of Rezat and the Upper Danube: the quantity raised varies from 30,000 to 40,000 cwt. a year, of which about a half is exported. The culture of the vine is well understood in Bavaria. The best vineyards are in the circles of the Lower Maine and the Rhine. The former produces the wines of Franconia, known by the names of the Maine, Were, Saale, and Tauber wines. The famous Steinwein and Liestenwein are produced on the banks of the Leiste, not far from Steinberg, in the mark of Würzburg. The best wines in the circle of the Rhine are those produced near Deidesheim, and Wachenheim. The average yearly produce is estimated at about 700,000 eimers. Hemp and flax are grown in some districts, but the supply is not sufficient for home consumption. Madder and liquorice are very extensively produced, and form considerable articles of export. The culture of the potato has rapidly increased during late years, particularly in the N. provinces, and its produce is now estimated at above 11,280,000 scheffels. Beetroot is raised in considerable quantities, and there are several factories for its conversion into sugar. Tobacco is grown in considerable quantities in the circles of Rezat and Rhine. Silk has been raised of late years, but not to any great extent. Considerable portions of ground have been laid out in nurseries and flower-gardens, and large quantities of fruit are exported from the territories of Maine and the Rhine.

According to Berghaus the average annual amount of the principal articles of agricultural produce in Bavaria, is

Rye	2,962,500 scheffel		Wine	798,751 eimer.	
Wheat	1,209,367	—	Hops	34,902 cntnr.	
— (spelt)	1,373,400	—	Hemp and flax	337,801	—
Barley	1,927,363	—			
Oats	2,750,518	—	Tobacco	52,537	—
			Rapeseed	59,329 scheffel	
Total grain	16,275,848	—	Poppies	8,435	—
Potatoes	11,282,149	—	Madder	47,365 cntnr.	
Peas	55,210	—	Fodder	38,511,131	—
Lentils	74,392	—	Timber	2,469,046 fathoms	

It has been estimated that 53 per cent. of the entire surface of the kingdom is occupied by tillage and pasture lands, 29 per cent. by forests, and that 18 per cent. is waste. But it is needless to say that these estimates are but little to be depended on; and that at best they are never more than rude approximations.

Bavaria is mostly divided into very small properties. In the circles of Isar, Regen, Lower and Upper Danube, Rezat, and Upper Maine, there are 2,254,603 estates, possessed by 606,989 proprietors; but in the first three circles the land is not so much subdivided as in the others. The property possessed by the state amounts to about a sixth part of the entire value of the landed property of the kingdom. In consequence of this great subdivision of the land, there are but few hired farms and few hired labourers; where, however, the latter are hired, their wages may amount, at an average to about 8*d.* a day, with provisions in harvest In towns wages vary from 8*d.* to 16*d.* a day, according to the trade and the skill of the workman. Throughout Bavaria all sorts of field labour are performed indiscriminately by men and women.

Manufactures are generally in a backward state, and manufacturing establishments mostly on a small scale. The beer manufacture, and breweries, must, however, be excepted from this remark. Bavaria would certainly appear to be the paradise of beer-drinkers. "No individual in the world," says Mr. Strang, "not excepting a London coal-heaver, drinks so much beer as a Bavarian. I am credibly informed that the majority of the mechanics of Munich are rarely satisfied with less than 10 or 12 tankards daily. There are two kinds of beer, the brown and the white: it is neither so strong nor so sweet as our Scotch ale, but its hop flavour is more delicate. It is not only a pleasant, but a very wholesome beverage; and from its universal use, you may easily believe that, with the exception of the English metropolis, there is no city where so much beer is brewed as in Munich. The establishment of Herr Pschorr, built like a citadel, almost rivals the works of our Meux's, and Barclay and Perkins'. In every corner of the city you find beer-houses; and when you see a Bavarian peasant not working, you are sure to find him with a can of beer in his hand." (*Germany in* 1831, ii., 377.) According to Mr. Murray, the "amount and quality of the annual brewing" is a subject of as earnest discussion among the Bavarians as the vintage or harvest in other countries! We therefore need not be surprised to hear that it is estimated that there are in all about 5500 breweries in the kingdom; that they consume annually from 750,000 to 800,000 quarters of malt; and that their produce amounts to about 90,000,000 gallons! If this estimate be at all ac-

curate, it gives, supposing 20,000,000 gallons to be exported, an average supply of 17 gallons a year to every individual, young and old, male and female, in the kingdom; and as there is comparatively little beer drunk in the Rhine province, the consumption of Bavaria Proper will be really greater than it appears to be, even on the face of this statement! It may be supposed, perhaps, that this enormous consumption of beer must be injurious to the labouring population; but this does not seem to be the case. The desire to possess this luxury stimulates their industry; and, notwithstanding their indulgence in it, they are well clothed and well fed; there is no appearance of abject poverty among them, and beggars are never seen.

Next to beer, the staple products of manufacturing industry are coarse linens, woollens, cottons, leather, paper, glass, earthenware, jewellery, iron-ware, basket-ware, and wooden articles. Coarse linens are manufactured to a considerable extent; but the supply of woollen stuffs, worsted hose, and cotton goods, is inadequate to the consumption. The leather manufacture is extensive and important, and leather is largely exported. There are above 130 paper-mills, about fifty glass-houses, 2000 saw-mills, many establishments for the manufacture of wooden clocks, toys, &c., and of porcelain and earthenware. Iron ware, especially nails and needles, is extensively manufactured, and the exports are considerable. The optical, mathematical, surgical, and musical instruments, made at Munich, are highly prized on the continent, especially the telescopes of Fraunhofer, which are superior to those made anywhere else. There are also foundries for cannon, and manufactories of muskets and other small arms, &c.; and considerable quantities of jewellery are exported to most European markets. The principal manufacturing towns are Augsburg, Nuremberg, Furth, Schwabach, Hof, Bayreuth, &c.

Commerce.—The central situation of Bavaria renders her well suited for the transit and carrying trade; and to this Augsburg, Nuremberg, Ratisbon, and Spires, owed the greater part of their wealth and celebrity during the middle ages. But in modern times the means of profiting by the natural advantages of the country in this way have been comparatively neglected. Within these few years, however, they have begun to attract the attention they so justly deserve. Besides the great canal already alluded to, for uniting the Danube with the Rhine, a joint stock company established in 1838 a regular steam communication between Ratisbon and Linz, in Austria, which was extended in the present year (1839) to Donauwerth and Ulm. The first railroad with steam carriages introduced upon the continent was that between Nuremberg and Furth, opened in 1835; but notwithstanding that the decided success of this undertaking called forth many similar projects in many parts of the kingdom, this line continues to be the only one of the kind. Bavaria has a great resource for commercial undertakings, in the credit enjoyed by the bankers of Augsburg, which is still one of the principal places of the continent for the negotiation of bills. A banking company for the issue of notes, the discounting of bills of exchange, and the advance of loans on mortgage, has been established at Munich. Though sanctioned by government, the latter is not responsible for its engagements.

The exports consist chiefly of corn, timber, wine, cattle, sheep and hogs, butter, salt, iron, leather, glass, hops, fruit, beer, wool, optical and mathematical instruments, wooden toys, jewellery, maps, &c. Their value is estimated by Hohn at about 14,000,000 fl. (£1,225,000) a year. According to the same authority, the quantities of the principal articles exported are at an average:

Horned cattle	190,000 to 200,000	head
Horses	12,000 13,000	—
Sheep	225,000	—
Hogs	565,000	—
Cheese and butter	100,000	cwts
Wool	19,000	—
Hops	22,000	—
Dried fruit	23,000	—
Wheat	200,000	qrs.
Wine (value)	1,250,000	fl.
Timber (value)	2,500,000	—

The imports consist principally of sugar, coffee, and other colonial products; spices and dye stuffs; cotton stuffs, silks, woollens, and fine manufactures of all kinds; drugs, hemp, and flax, &c. The imports of cattle are also extensive, and those of horses exceed the exports. The total value of the imports is estimated at 10,000,000 fl. (£875,000); but every one acquainted with the merest elements of political economy knows, that if the value of the exports amounts to 14,000,000 fl., that of the imports, instead of being less, must, in ordinary years, be considerably greater. Were this not the case, commerce would be a means of impoverishing the country. The duties on goods imported into Bavaria are, with few exceptions, those of the Prussian Customs' Union, of which it forms a part. (*See* PRUSSIA.) Its proportion of the joint revenue of the league is 16·94 or 17 per cent.

Until the formation of the Prussian league, which has opened a vast extent of country to the products of Bavaria, its natural facilities for commercial intercourse were defeated by its own prohibitory regulations, and those of most of its neighbours. Sounder and more enlightened views as to commerce, are now, however, beginning to prevail all over Germany; and it is but justice to add, that the Bavarian government has given a powerful impulse to industry by establishing mechanics' schools, annual exhibitions, and prizes; and still more by the abolition of the pernicious privileges of guilds and corporations. But a vast deal still remains to be effected before industry can make any real progress in this and most other German states. The English reader will be surprised to learn that here the number of labourers permitted to reside in towns, the number and distribution of trades, the prices of bread and meat, and even the introduction of new machinery, are all determined by artificial arrangements, dependent on the calculations and estimates of the minister of the interior, and enforced by the institution of passports and of a preventive police! The wonder is not, where such regulations prevail, that industry should be in a depressed condition, but that it should exist at all. And, in point of fact, the progress it has made is principally ascribable to the fact of Bavaria having within her limits Augsburg, Nuremberg, and other towns that, being formerly free imperial cities, have been but little injured by these preposterous regulations. The roads in Bavaria are generally bad; and, we agree with Mr. Murray in thinking, that how laudable soever the encouragemnet given by the king to the fine arts, he would confer a much more solid and important benefit on his dominions were he to apply his energies, and divert a portion of his expenditure to their improvement. The public roads, such as they are, extend upwards of 5500 miles.

The Bavarian florin is equivalent to 21*d.* sterling; the eimer, or measure of wine, to 9¾ gallons; and the scheffel, or measure of corn, to ·761 imp. quart.

Laws as to Marriage, &c.—Considering the lengthened period of tranquillity that Bavaria has enjoyed, and the stimulus given to industry by the secularization of the property of monasteries, and the abolition of guilds and corporations, the progress of population has been slower than might have been expected. This slow progress would seem to be, in part at least, accounted for by the law which enacts, that "*no marriage between people without capital shall be allowed without the previous permission of the poor institutions;*" that is, of the principal persons in each provincial district elected to superintend the management of the poor, who are bound to refuse such permission, unless they see a reasonable prospect of the parties being able to provide for the children that may be expected to spring from the proposed union. To insure their vigilance, it is enacted, that the members of poor institutions neglecting to enforce this law "*are to answer for the maintenance of the said families,* should they not be able to maintain themselves." Undoubtedly, a law of this sort must tend powerfully to prevent improvident unions; and we are assured that it has retarded the increase of population, and had a most salutary effect in averting extreme poverty and consequent misery. (See *Appendix F. to Poor Inquiry Returns*, p. 22.)

In Bavaria all destitute persons have a legal claim to relief; and no doubt it was the wish to prevent the abuse of this right that led to the institution of the above law. That it has been effectual to this end, is universally admitted; but different opinions are entertained as to its influence on public morals. We are not sure, however, that it can be successfully impeached on this ground. At Munich, indeed, half the births are illegitimate; but the residence of the court, and of a numerous garrison, and the great influx of strangers, seem sufficiently to account for this. In the country, we believe, the morals of the Bavarians are, in this respect, quite on a level with those of the other German states. The proportion of illegitimate to legitimate births is, however, very high, being as 1 to 4·4.

Notwithstanding their immoderate consumption of beer, and in some degree also of spirits, the Bavarians are really sober and industrious; and, though ignorance, superstition, and vice still prevail in some districts, they are fast disappearing, and the Bavarian character is most respectable.

Character, &c.—The Bavarians, though all Germans, differ essentially in character, according to their descent from the different tribes of that people, and the different circumstances under which they have been placed. The inhab. of the Rhenish prov. are the most lively, active, gay, and enterprising. The Swabians are remarkable for a certain good-natured indolence, which has exposed them to much undeserved ridicule. The Franconians are diligent, intelligent, and steady, but vary in their social habits according

to the influence which Protestantism has exercised upon the inhab. of the Upper Maine, or the dominion which the Catholic prelates of the empire have had upon their brethren in the fertile valley of the lower portion of that river. The population of the provs. S. of the Danube retain more characteristic peculiarities; and the Bavarians, though equally brave and well disposed with the rest, are heavier, more superstitious, and less active, though not less industrious. In the valleys of the Alps, the dress and manners of the Bavarians and Swabians bear a great resemblance to those of the Tyrolese; and the climate inclines them to prefer pasture to arable husbandry. The women are here more in the fields and partake more of the out-door labour of the men than is the case in the N. provs. They drive the cattle up to the hills in summer; and their robust health manifests itself in the zeal with which they join in the waltz, and in their peculiar manner of singing, called "*Iodels*." The character of their songs is not unfrequently rather free; but the indispensable requisites of a favoured lover, according to the "*Schnaderhüpfel*," are superior agility and skill as a sportsman and wrestler, which must be proved by the possession of sundry trophies of the chase, such as chamois' beards or feathers of the rarer birds, which, when worn on his pointed hat, form a challenge to rival heroes, who not unfrequently attempt to wrest them from their owner by force, according to the laws of village chivalry. The wealth of the large towns on the navigable rivers in the middle ages, and the expensive habits which it produced, may yet be traced in the costumes of the wives and daughters of the burghers. The hood of rich gold lace, and the boddice ornamented with gold or silver chains, from which a number of medals hang, form the common dress of the richer portion of this class, and are ambitiously displayed by servants and the poorer tradespeople on Sundays and holydays.

According to Hassel, the taxed houses in the kingdom amount to 652,000; but Rudhart computed them, in 1836, at 619,482. Of these, 484,000, and 447,000 buildings connected with them, were insured against fire, in 1834, for 38,573,235 florins. The number of buildings of all descriptions amounted, in 1833, to 1,271,567; and the number insured against fire was 1,136,977; the estimated value of which was 551,026,798 florins.

Constitution and Government.—According to the constitutional act promulgated in 1818, Bavaria is declared an integral part of the Germanic confederation; the domains of the state inalienable, and the crown hereditary. The executive power is in the hands of the king, whose person is inviolable. The legislature consists of two chambers; one of senators, and one of deputies. The former is composed of princes of the royal family, the great officers of state, the two archbishops, the barons, or heads of certain noble families, a bishop nominated by the king, the president of the Protestant consistory, and any other members whom the king may create hereditary peers or members for life; but the latter cannot exceed one third part of the hereditary senators. The lower house consists of a variable number of members, there being 1 deputy to every 7000 families, or 35,000 persons. At its last meeting it had 123 members, distributed in 5 classes: the first consisted of 14 representatives of knights, or proprietors possessed of territorial jurisdiction, and of all the rights of nobility: the second class consisted of 3 representatives of the universities; 1 for each: the third class consisted of 11 representatives of the Catholic, and 5 of the Protestant clergy: the fourth class comprised the representatives of cities and burghs; Munich sending 2, Augsburg 1, Nuremberg 1, and the others 26 in all: and the fifth class consisted of 60 representatives of landed proprietors, without jurisdiction.

The elections are very complicated, and far from popular. All candidates must be free and independent citizens; have completed their thirtieth year; be members of the Romish or Reformed Church; and pay taxes on a property of 8000 fl. (£700) a year at least. Owing to the extreme subdivision of property in most districts, this last condition narrows the number of candidates extremely.

The members are chosen every six years, unless the king choose to dissolve the chambers in the interim. They are generally convened once a year, and must be assembled at least once in three years. The session usually lasts two months, but it may be extended or adjourned. In case of a dissolution, a new election must take place within three months. No taxes can be levied or augmented, and no law be passed or repealed without the sanction of the legislature. But the accession of Bavaria to the Prussian customs' league is understood to have exempted the regulation of the customs, duties, and other indirect taxes from the control of the chambers. The king has also (in 1837) denied their right to inquire into the *appropriation* of grants; and the authority to be given to ordinances issued by the king is not well defined.

The cabinet is composed of five members—the presidents of the departments of foreign affairs, justice, home affairs, finance, and the army. The ministers are not necessarily members of the chambers, but they have a right to be present at their deliberations. At the commencement of each session, they must lay before parliament an account of the appropriation of the public revenue; and the national debt cannot be increased without its consent. The privy council, which is at the head of public affairs, consists of the king, certain princes of the royal family, the ministers of state, the field marshal, and six counsellors appointed by the king. The king has power to grant pardons and mitigate punishments, but in no case to stop the progress of a civil suit or criminal inquiry. The code Napoleon is in force in Rhenish Bavaria; but in other parts of the kingdom there is an extreme difference in the procedure as to civil matters; and a new, improved, and uniform code, is much wanted. The penal code, introduced in 1813, might be much improved both in its regulations and in the form of its procedure. There is a high court of appeal and cassation at Munich; and in each of the provs. an inferior tribunal, to which an appeal lies from the courts of primary jurisdiction in the towns, and the seignorial and cantonal courts of the country districts. A law has been passed providing for the purchase of the seignorial jurisdictions on paying an equivalent to their proprietors.

Each of the eight circles into which Bavaria is divided is under the superintendence of two provincial boards; one for the management of the police, schools, &c.; the other takes charge of all financial matters. Each circle is subdivided into districts, which have assemblies, whose duties are to decide all local questions respecting public burdens and district rates.

According to the fundamental principles of the constitution, all citizens are eligible to the different offices of the state, without any regard to birth or rank in society; all are liable to personal service in the national defence; religious liberty and freedom of opinion are practically granted to all; and no one can be imprisoned or condemned but by the sentence of a judge. Personal slavery is also abolished, and all religious and charitable endowments are placed under the superintendence of the state. It may also be mentioned that every considerable provincial town has one or more journals; and the *Augsburg Gazette* has the most extensive circulation of all the German newspapers. But unhappily the real palladium of a free government—an unfettered press—is unknown in Bavaria; a rigid and jealous censorship is established; and political discussion, literature, and education feel its emasculating and destructive influence.

Religion.—The classification of the inhabitants, in 1838, according to their religions, gives, for the number of the different sects—Roman Catholics very near 3,000,000 Lutherans about 1,250,000, the remainder being Calvinists, Jews, Moravians, Anabaptists, &c. The small number of Calvinists is explained by the fact of the Calvinists of the Palatinate, where they were most numerous, having united with the Lutherans in 1818, so that they now form one religious community under the designation of "The Protestant, Evangelical, Christian Church." The Catholic is the religion of the court and the state; but the constitution guarantees the perfect equality of the three Christian confessions of Catholics, Lutherans, and Calvinists.

According to the last concordat, Bavaria is divided into the two archbishoprics of Munich and Bamberg, and into six dioceses: Augsburg, Ratisbon, Passau, Würzburg, Eichstädt, and Spires. There are also 111 deaneries, and 2756 cures of souls belonging to the Romish Church. The incomes of the clergy arise principally from estates and endowments. The archbishop of Munich receives 20,000 florins (£1700), and the archbishop of Bamberg, 15,000 florins (£1345). The bishops of Augsburg, Ratisbon, and Würzburg, 10,000 florins (£875) each. The dean of Munich has 4000; of Bamberg, 3500; in the first set of bishoprics, 3000; and in the second, 2500 florins a year. The incomes of the canons vary from 1400 to 2000 florins. An annual grant of about 1,000,000 florins is made by the state, for the support of the inferior clergy. It is to be regretted that the present sovereign has allowed a very considerable number of convents and monasteries, which had been wholly suppressed, to be re-established: luckily, however, they are deprived of the greater portion of the wealth they once possessed. By the concordat above mentioned the right of nominating all the higher orders of the clergy is ceded to the king.

The highest ecclesiastical court among the Lutherans is the general consistory at Munich; the president of which has a seat in the chamber of senators; and they have also consistories at Anspach, Bayreuth, and Spires. The Protestant Church has 86 deaconships and 990 parishes. In the Palatinate, which was left in possession of many valuable privileges at the peace, the Protestant Church is a completely organized body with presbyteries and synods, as in Scotland. It will be seen from the subjoined accounts that

the support of the Protestant clergy costs the state above 295,000 florins (£25,812) a year.

Education.—Of late years the Bavarian government has made the most praiseworthy efforts to diffuse knowledge among the mass of the people. The system pursued is similar to that of Prussia. A school has been established in every parish, under the superintendence of the ministers and elders. Over these are the inspectors of district schools, who are subordinate to the chambers of the interior, in the several provincial governments. The superintendence of all the educational institutions in the kingdom is committed to a board attached to the ministry of the interior, entitled, "The Superior Board of Education and Ecclesiastical Affairs." Attendance at school is imperative on all children who have not received permission to be instructed by private tutors. Bavaria has 1 lyceum, 25 gymnasiums, 34 grammar schools, 7 seminaries for the education of teachers, 31 local school commissions, and about 5000 primary schools. There are 9 seminaries for educating Catholics for the ministry.

Bavaria has three universities; those of Munich, Würzburg, and Erlangen: the two former are Roman Catholic, the latter Protestant. The university of Munich is attended by above 1300 students, the others, respectively, by about 400 and 300 each. In 1828 a new and improved system of study was adopted in the Bavarian universities, and a number of injurious regulations were suppressed. Besides these seminaries, there are in Munich numerous literary associations: such as the Royal Institute; an academy of arts and sciences; another of the fine arts; an agricultural society; a military and veterinary school, &c.: and there are a number of literary and scientific institutions in Würzburg, Erlangen, Nuremberg, Ratisbon, Augsburg, &c. The National Library in Munich, formed chiefly of those belonging to the suppressed monastic establishments, contains 540,000 volumes, including an extensive collection of curious manuscripts, pamphlets, &c.; and the university library contains 160,000 volumes. In this city there is also an extensive Sunday school, in which there are upwards of 1600 scholars, with 16 masters, who teach their pupils morals, the principles of physics, geography, natural history, chemistry, and geometry. The whole sum voted annually by the Bavarian legislature for the support of education is 767,811 florins (about £73,600). Munich, as is well known, has recently become a principal seat of the fine arts.

Prison System.—The system pursued in the prison of Munich is peculiarly worthy of attention. The principle of the establishment is, that every one in prison shall support himself. Every prisoner, therefore, is obliged to work at his own trade; and those who have not learned a trade are permitted to make choice of one, which is taught to them. Whatever the criminal earns by his labour more than is sufficient for his maintenance, is kept until the term of his imprisonment expires, and is then given to him, deducting a quota for the expenses of the establishment. The surplus thus preserved for the benefit of the prisoners themselves, after the expenses of the establishment have been defrayed, usually amounts to nearly 50,000 florins (£4370) per annum. Instances have been known of persons at the expiry of their term of punishment receiving no less than 800 florins (£70) upon leaving the prison. The number of persons confined in the prison is generally between 600 and 700. It is gratifying to learn that the system has produced the most satisfactory results. In but few cases are offenders committed a second time, and those who have been dismissed with the largest sums have in no instance returned. Many of the young, who have been taught trades in the prison, have afterwards become respectable handicraftsmen and tradesmen, and crime is yearly on the decrease. The proportion of capital punishments in Bavaria is as 1 to 20,000 persons.

Revenue and Expenditure.—At the conclusion of the war in 1815 the financial affairs of Bavaria were in a very embarrassed state; but through the judicious economy and measures of the sovereign and the legislature, they are now greatly improved. In 1819, the excess of the expenditure over the income was 2,007,800 florins; but in 1831–39, the revenue amounted to 29,217,000 florins, while the expenditure was only 27,095,883 florins. The gross annual revenue for the period, from 1831 to 1837, was fixed at 28,185,139 florins. The national debt amounts to about 130,000,000 florins.

Taxation.—The direct taxes are levied as follows: for the land tax, estates are selected for valuation in every district by royal commissioners and tax assessors, named by the district itself. The estates thus chosen are supposed to represent the *mean* of the surrounding lands, and according to their produce the tax is levied. Land of all kinds is divided into classes, differing from each other in their ascertained production, by about 1 bushel per acre, and one third being deducted for fallow, a rate called a *simplum*, of 1 kreutzer in the florin, or 1⅔ per cent. is calculated on the remainder. Rents, rent charges, services, and tithes, are considered as part of the produce of the land, and the rate is apportioned between the holders of these charges, and the cultivator of the land, who pays a smaller share in proportion to the heaviness of his burdens. The value of houses is estimated according to existing contracts of rent: where no such contracts exist, the value of a house is found by appraisement, in the same way as the land. The total rate at present levied on land and houses is 5 *simpla*, or 8⅓th per cent. on the produce. The family, or, rather, capitation tax, is paid by the whole pop. in 12 classes. The first class embraces the widows of labourers living on their labour, who are rated at 10 kr., or about 4*d.*, annually; labourers paying 8*d.*: the highest class pays £1 per annum. The industry tax is paid by every individual or company carrying on trade or manufactures, according to 5 classes, each with five subdivisions. The classes are fixed according to the number of inhab. in the place where the trade is carried on. The lowest rate is 1*s.* per ann. for common labour in villages; the highest is £15 per ann., paid by bankers, merchants, wholesale dealers, and innkeepers, in towns containing more than 2000 families. The direct taxes are less heavy in Bavaria than in most of the other German states. For the indirect taxes we refer to the article GERMANY, in which the various customs' duties are treated of.

The expenses of collection are heavy, amounting to about 26 per cent. on the gross revenue. The expenditure nearly corresponds with the income.

Subjoined is an account, from the official returns, of the yearly revenue and expenditure of Bavaria, as fixed by the budget for 1837–43.

Receipts.	Fl.	£.
Direct Taxes.		
Land tax	4,220,342	
House, window tax, &c.	484,907	
Rent-charge tax	321,723	
Industry tax	713,011	
Family and personal taxes	343,481	
Contribution for widows, &c.	53,418	6,136,882
Indirect Taxes.		
Customs	3,094,772	
Excise	4,653,612	
Stamps and registry fees	2,793,032	10,541,416
Salt monopoly and mines	2,184,026	
Lottery	1,380,569	
Post and government undertakings	456,724	4,021,319
Domains, &c.	. .	8,100,692
Special rate	. .	77,100
Accidental sums	. .	145,628
Levied on the circles for special purposes	. .	689,435
Arrears from the former period	. .	300,000
		30,012,473

Disbursements.	Fl.	£.
Public debt	. .	8,746,294
Civil list	. .	3,188,000
Council of state	. .	72,000
Parliamentary expenses	. .	46,500
Foreign affairs	. .	480,000
Justice	. .	1,158,944
Home department	. .	756,460
Provincial administration	. .	1,269,986
Finances	. .	770,000
Religion—Catholics	1,059,544	
Protestants	295,672	
		1,355,217
Health	184,504	
Charitable institutions	209,812	
Police	484,150	
Instruction, &c.	791,191	
Public works	2,397,640	
Sundry expenses	470,733	4,538,030
Army and military pensions	. .	6,794,976
Agriculture	. .	531,440
Pensions	. .	276,000
		29,983,827

In addition to this, the county rates or special provincial disbursements amount to upwards of 4,500,000 fl.

Army.—The army consists of 16 regiments of infantry, in 2 battalions each, and 4 battalions of sharp-shooters, making in all a force of about 43,000 men. The cavalry consists of 2 regiments of cuirassiers, and 6 of light cavalry, in 6 squadrons each; making a total of 8750. The artillery corps consists of 2 regiments, in 2 battalions each, and 2 companies of sappers, 1 of miners, 1 of pontoon men, and 1 of artificers; in all about 4500. The full war complement of the Bavarian army is, therefore, about 57,000; but of these a large proportion is generally absent on furlough.

The contingent which Bavaria furnishes to the Germanic confederation, has been fixed at 35,800 men.

The army is raised by conscription; every male (the clergy and nobility only excepted) being liable to bear arms in defence of his country. The period of military service is limited to six years. Permission is given to serve by substitute, and certain exceptions are usually granted to students and persons indispensable to the maintenance of their families: a curious regulation, which, however, squares well with the law as to marriage already alluded to, provides that all individuals drawn for the military service shall neither marry nor obtain a settlement for a certain number of years. Besides the permanent army, there is a reserve destined to reinforce it. There is also the *landwehr*, or militia, composed of all Bavarians (excepting noblemen and clergymen), between the ages of 19 and 60, who have not been drafted into the army or into the reserve. In cases of emergency, they may be called upon to reinforce the army, but only in the interior. There is a corps of gens d'armes, composed of nine companies, making in all about 1700 men.

The military establishment would seem to be disproportioned to the number of inhabitants and the means of the country; but we have not heard that it is complained of. In fact, not more than a third part of the troops are permanently embodied, the rest being disbanded after the drills in spring, return home to their families. The pay of a cavalry soldier is 10½ kr., about 4*d.* a day, with rations; that of an infantry soldier is 9½ kr., also with rations. The total cost of the war department amounts to about 7,000,000 fl. a year.

Principal fortresses: Landau, circle of the Rhine; Passau, on the Danube; Würzburg, with the citadel of Marienberg; and Ingolstadt, at the confluence of the Schütter and the Danube. (*Communication from Munich.*)

History.—The earliest inhabitants of Bavaria of whom tradition has preserved any account were the Boii, a tribe of Celtic origin: from them its old Latin name Boiaria, and the German name Baiern, are derived. About the reign of Augustus it was subdued by the Romans, and formed part of what they termed Rhœtia, Vindelicia, and Noricum. After the downfall of the Roman empire, the Bavarians fell under the dominion of the Ostrogoths and Franks, and after a protracted resistance, it acknowledged the sovereignty of Charlemagne. After the death of that monarch, the kings of the Franks and Germans governed Bavaria by their lieutenants, who bore the title of margrave, till 920, when the ruling margrave was raised to the title of duke. His successors continued to bear this title till 1623, when they were raised to the electoral dignity. In 1070 Bavaria passed into the possession of the family of the Guelphs, and in 1180 it was transferred by imperial grant to Otho, Count of Wittelsbach, whose descendants branched out into two families, the Palatine or Rodolphine, and the Bavarian or Ludovician; the former inheriting the palatine of the Rhine, the latter the duchy of Bavaria. During the war of the Spanish succession, Bavaria suffered severely from following the adverse fortunes of France; but it received a great accession in 1777, when, upon the extinction of the younger line of Wittelsbach, the palatinate, after a short contest with Austria, was added to the Bavarian territory. During the late war with France, Bavaria, being long the firm ally of Napoleon, was rewarded with large accessions of territory from the spoils of Austria and Prussia; and the Bavarian monarchy having contrived to change sides at a critical moment, when the fortunes of Napoleon were still doubtful, was confirmed in his extensive acquisitions by the treaties of 1814 and 1815; for though Austria recovered her ancient possessions in the Tyrol and the districts of the Inn and Hansruck, Bavaria received equivalents in Franconia and the vicinity of the Rhine.

BAVAY (an. *Bagacum*), a town of France, dep. du Nord, cap. cant., 13 m. E.S.E. Valenciennes. Pop. 1650. The streets are neat and clean; and it has fabrics of iron plates, agricultural implements, with tanneries, &c. This is a very ancient town, having been made the cap. of a prov. by Augustus, and destroyed by the Huns in 385. It was formerly surrounded by walls; and in the middle of the market-place is an obelisk with seven faces, indicating the direction of the Roman roads that terminated at this point. This obelisk is modern, but replaces a Roman column, which is said to have existed in the 17th century. The remains of a circus and an aqueduct are still discoverable. (*Hugo*, art. *Nord.*)

BAUD, a town of France, dep. Morbihan, cap. cant., 14 m. S. by W. Pontivy. Pop. 5310.

BAUGÉ, a town of France, dep. Maine et Loire, cap. arrond., on the Couanon, or Couernon, 23 m. E.N.E. Angers. Pop. 3400. It is agreeably situated in a fine valley, and has some good houses, but it is built with the greatest irregularity. The bridge over the Couanon is new and handsome. It has a tribunal of original jurisdiction, a college, or high school, and manufactures of cloth and coarse linen. The English forces, under the Duke of Clarence, were totally defeated in the neighbourhood of this town in 1421, and the duke killed.

Not far from Baugé is the village of Baugé-le-Vieil, with the ruins of an old castle that formerly belonged to the dukes of Anjou.

BAUGMAN, t., Wayne co., O. Drained by Newman's creek. It contains two stores, two saw-mills, four schools, 152 scholars. Pop. 1741.

BAULEAH, an inland town of Hindostan, prov. Bengal; on the N. side of the main trunk of the Ganges, 20 m. N.E. Moorshedabad. It is large, populous, has considerable trade, and is the seat of a commercial resident on the part of the E. I. Company.

BAUMANSHÖHLE, a celebrated cavern in the duchy of Brunswick, near Blankenburg. It abounds with stalactites, and is interesting to the geologist from the variety of fossil bones found in it; among which are those of the great cave bear, now extinct.

BAUMEEAN, or BAUMIAN, a town of Caubul, the Thebes of the E., country of the Hazanrehs, on the face of the Koh-i-Baba range of mountains; lat. 34° 34′ N., long. 68° 8′ E., 56 m. W.N.W. Caubul. The valley, on one declivity of which it stands, contains many caves, dug in a soil of indurated clay and pebbles, and in which rings and relics, coins, &c., bearing Cufic inscriptions, are found; but Baumeean is chiefly celebrated for two gigantic male and female figures, cut in *alto relievo*, on the face of the mountain. The male figure is the largest, and about 120 feet high; it is without much symmetry or elegance, and is considerably mutilated, the Mohammedans that pass that way always firing a shot or two at it. The lips are large, the ears long and pendant, and there appears to have been the resemblance of a tiara on the head; the body is covered by the remains of a mantle, which has been formed of a kind of plaster, and fixed on with wooden pins. The female figure is more perfect than the other, and has been dressed in the same manner; it is about half the size, and cut in the same hill, 200 yards from the former. The niches in which both are situated have been at one time plastered and ornamented with paintings of human figures, but these have nearly disappeared. These images are supposed to be Buddhic. Sir A. Burnes says the head of the large one is not unlike that of the great trifaced idol of Elephanta, and near the celebrated tope of Manikyala (Punjab) he found an antique exactly resembling this head. Another antiquary, from an inscription above the head of one of them, has believed them to have been cut about the 3d century of our æra, while the Sassanides filled the throne of Persia. They are not mentioned by any of the historians of Alexander the Great; but both the idols and excavations of Baumeean are referred to by those of Timour or Tamerlane. (*Elphinstone's Caubul, Introd.; Burnes's Trav.*, ii., 157–162; *Journal of the Asiatic Society of Bengal.*)

BAUME-LES-DAMES, a town of France, dep. Doubs, cap. arrond., on the Doubs, 18 m. N.E. Besançon. Pop. 2519. It is a handsome little town, finely situated in a basin formed by hills planted with vines; has a court of original jurisdiction, a college, and a small public library, with paper-mills and tanneries. It derives its name from a rich and celebrated convent for nuns, founded in it during the 5th century, and destroyed at the Revolution.

BAUTZEN, a town of Saxony, cap. Upper Lusatia, on a height at the foot of which is the Spree, 33 m. E.N.E. Dresden; lat. 51° 10′ N., long. 14° 30′ E. Pop. 12,000. It is surrounded by walls, except one of its suburbs on the left of the Spree, and is well built, with straight, broad, and well-paved streets. Its cathedral, founded in 1213, is appropriated partly to Catholics and partly to Protestants: there are four other churches. The *Ortenburg*, formerly a royal palace, is now used for public offices; it has also a fine town-hall, a *landhäuser* or house of assembly for the states, an orphan asylum, and four other hospitals, a house of correction, theatre, &c., with a gymnasium, a Catholic chapter-house, a normal school, a mechanics' school, and other establishments for the purpose of education, and two public libraries. There are considerable manufactures of woollen, linen, and cotton stuffs, tobacco, wax, paper, &c.; a brass work, with breweries and distilleries, tanneries, &c. The town is the centre of a considerable commerce, particularly in woollen and linen articles.

Near Bautzen, on the 21st and 22d May, 1813, was fought the battle which bears its name, between the French army under Napoleon, and the army of the allies. The French were victorious; the carnage on both sides was great, and the allies effected their retreat in good order. Duroc, the intimate friend of Napoleon, was killed by his side in this engagement. About 7 m. E. by S. from Bautzen, is Hochkirch, the scene of one of the great battles of the seven-years' war.

BAUX, a small town of France, dep. Bouches du Rhone, 10 m. N.E. Arles. It stands on the summit of a steep hill, and is remarkable only for the ruins of its castle, formerly the residence of the counts of Baux, who contested the sovereignty of Provence with the counts of Barcelona.

BAWTRY, an inl. town of England, W. R. co. York, on the border of Nottinghamshire, 9 m. S.E. Doncaster. Pop. 1149. It is situated on a declivity, sloping to the Idle, which is navigable for barges, and is traversed by the great N. road from London to York. It has a national school. Market day, Thursday.

BAY, t., Ottawa co., O., bounded S.E. by Mud-creek bay, a branch of Sandusky bay. It has one school, 26 scholars. Pop. 231.

BAYAZID, a city of Armenia, cap. sanjiack, 65 m. N.N.E Van, and 32 m. S.S.W. mount Ararat; lat. 39° 24′ N., long. 44° 26′ E. It stands on the declivity of a high hill, at the top of which is the citadel, containing a well-built mosque, and the palace of the pacha. It is surrounded by a wall and ramparts; and besides three mosques and two churches, has the monastery of Karu Kileesea, celebrated for the beauty of its architecture, antiquity, and grandeur. Messrs. Smith and Dwight, the American missionaries, by whom it was visited in 1832, represent the town as being in a miserably ruinous state, and without one decent house except the pacha's. "Most of them were constructed like the underground cabins of the villages; the streets were obstructed by every species of filth; and nearly all the shops in the bazar, originally very few, were deserted." (p. 415.) Kinneir estimates the pop. at 30,000 (*Mem. Pers. Empire*, p. 327), but this, doubtless, is now greatly beyond the mark. The missionaries previously referred to estimate the Moslem inhabitants at 300 or 400 families, and the Armenians at 190 families; and if so, the pop. must be considerably under 5000. Large numbers of the Armenians have emigrated to the territories now occupied by Russia.

BAYERSDORF, a town of Bavaria, circ. Rezat, near the Regnitz, 14 m. N. Nuremberg. Pop. 1200. It is well built. In its vicinity are considerable copper-works.

BAYEUX, a town of France, dep. Calvados, cap. arrond., 17 m. W. by N. Caen; lat. 49° 17′ N., long. 0° 44′ W. Pop. 9676. This is a very ancient city, and, with the exception of the principal street, is meanly built, with narrow and crooked streets. The fortifications by which it was formerly surrounded have almost entirely disappeared; and it has been enlarged by the junction of several suburbs. Principal public building—the cathedral, a large and venerable Gothic edifice in the form of a cross. In the ancient Episcopal palace, now the Hôtel de Ville, is preserved the famous *tapisserie da Bayeux*, representing the principal incidents in the history of the conquest of England by William the Conqueror. It is supposed to have been executed by Matilda, the conqueror's wife, or by the Empress Matilda, daughter of Henry I. It consists of a linen web 214 feet in length and 20 inches broad; and is divided into 72 compartments, each having an inscription indicating its subject. The figures are all executed by the needle; and it is valuable alike as a work of art of the period referred to, and as correctly representing the costume of the time. This remarkable monument narrowly escaped destruction during the phrensy of the Revolution. (See an excellent article on the Bayeux Tapestry in the *Penny Cyclopædia*.) Bayeux is the seat of a bishopric, and has tribunals of original jurisdiction and commerce, a college, and a public library containing 7000 volumes. The lace manufactures in the town and neighbourhood employ a large number of females; and there are also manufactures of table linen, calicoes, serges, hats, earthenware, &c., with establishments for cotton spinning. The country round is undulating, and affords good pasture: large quantities of excellent butter are made in the vicinity, sent partly to Paris, and partly shipped for the French colonies.

Bayeux existed previously to the invasion of Gaul by the Romans. Under their sway it was successively called *Aragenus*, *Bajoca*, and *Civitas Bajocassium*, whence its modern name. It belonged for a considerable period to the English, and was twice burned down in the contests of the latter with the French; it also suffered severely during the religious wars. (*Hugo, France Pittoresque*, art. *Calvados; Diction. Géographique, &c.*)

BAYLEN, a town of Spain, prov. Jaen, at the foot of the Sierra Morena, 22 m. N. Jaen. Pop. 4000. It is surrounded by old walls; commands the road leading from Castile into Andalusia; has a parish church, a palace belonging to Count Baylen, and a hospital. It has also numerous oil-mills, with manufactures of coarse cloth, glass, bricks, soap, &c.

Baylen derives its principal celebrity from the events which took place in its vicinity, and which led to the *capitulation of Baylen*, signed the 20th June, 1808, by which General Dupont, and about 16,000 French troops under his command, surrendered to the Spaniards on condition of their being conveyed to France by the Spanish government; but the latter part of the capitulation was not carried into effect. The incapacity of Dupont was mainly instrumental in bringing about this result, which inspired the Spaniards with confidence, and was always regarded by Napoleon as the principal source of his disasters in the Peninsula.

BAYONNE, a sea-port town of France, dep. Basses Pyrénées, cap. arrond., at the confluence of the Neve with the Adour, about 4 m. from the embouchure of the latter; lat. 43° 29′ 15″ N., long. 1° 28′ 28″ W. It is divided into three nearly equal parts, which communicate by bridges. On the left bank of the Neve is the great Bayonne; on the right bank of that river, and the left bank of the Adour, is the little Bayonne; and on the right bank of the Adour, in the dep. Landes, is the suburb of St. Esprit, joined by a long wooden drawbridge to the rest of the town. The pop. of the two former is 15,912, and of the latter 5997, making in all, 21,909. It is strongly fortified; the citadel, one of the finest works of Vauban, in the suburb of St. Esprit, commands the town and harbour; and recently the fortifications have been still farther augmented and strengthened. It is well built; the streets, without being regular, are broad, and set off with good houses. There are some fine public places, of which that called de Grammont is the best. Its quays are superb, and though a little interrupted in parts by the new fortifications, afford the finest promenade in France. Principal public buildings—cathedral and mint. Bayonne is the seat of a bishopric, of tribunals of original jurisdiction and of commerce; it has also a chamber of commerce; a diocesan seminary, schools of navigation and design, a public library, theatre, &c. A mint is established here, the coins issued from which are marked L. This mint had coined, from the introduction of the decimal system to the 1st of January, 1832, 90,576,291 fr.; attached to the mint is an assay office. About two thirds of the population of the suburb of St. Esprit consist of Jews, most of whose ancestors had been, at different times, expelled from Spain. They have three synagogues, and there is one in the body of the town. There are here yards for the building of ships of war and merchantmen, with distilleries, sugar refineries, glass works, and fabrics of cream of tartar, chocolate, liqueurs, &c. Exclusive of these articles, the Adour brings down supplies of timber, masts, pitch and tar, cork, and other articles, from the Pyrenees, many of which are largely exported. The hams of Bayonne have long enjoyed a high celebrity, and its wines and brandies are also much esteemed. It used formerly to fit out a considerable number of ships for the cod and whale fisheries, but these sorts of enterprises, though not abandoned, have latterly fallen off. It is the seat of an extensive contraband trade with Spain.

The river is rather dangerous, at least in rough weather, or when there is a strong current of fresh water. It can only be entered at high water, when there is from 13 to 15 feet over the bar at springs, and from 9 to 11 at neaps. The sea without is usually rough; and as the bar is liable to shift, a pilot is always required.

The military weapon called the bayonet takes its name from this city, where it is said to have been first invented, and brought into use during the siege of 1523. Though often besieged, Bayonne has never been taken; and hence the motto, *nunquam polluta*. It was invested by the British in 1814; who sustained considerble loss from a *sortie* made by the garrison. At the castle of Merac, in the vicinity, the transactions took place between Napoleon and Charles IV. and Ferdinand VII. of Spain, that led to the invasion of the Peninsula by the latter. Mr. Inglis was highly pleased with Bayonne, which, he says, he should prefer as a residence to almost any place in the south of France. (*Hugo*, arts. *Basses Pyrénées* and *Landes; Dict. Géographique, &c.*)

BAYPOOR (*Vaypoora*), a maritime town of Hindostan, prov. Malabar, 7 m. S. Calicut; lat. 11° 10′ N., long. 75° 52′ E. Teak ships of 400 tons are built here.

BAYREUTH, a town of Bavaria, cap. circ. upper Mayne, on the Red-Mayne, 26 m. E. Bamberg; lat. 49° 57′ N., long. 11° 40′ E. Pop. 14,000. It is partially surrounded by old walls, and has six gates and two bridges; is well built, with broad well-paved streets, fountains, and promenades: but it has, notwithstanding, a "cheerless, deserted character" (*Murray*), the absence of the court, on which it formerly depended, not being sufficiently compensated by manufactures or commerce. It has two palaces; the oldest, burned down in 1753, but again rebuilt, is now converted into pub-

its offices; the new palace, a handsome edifice, the residence of Duke Pia of Bavaria, has a gallery of indifferent pictures; in the square before it is an equestrian statue of the Margrave Christian Ernest, and behind it is a public garden. Among the other public buildings is the opera house, the *manége* or riding school, the gymnasium, founded in 1664, &c. It has several churches, and a synagogue; with a public library, hospitals, a lunatic asylum, &c. In its suburb, called the Georgam See, now a dried lake, is a penitentiary, where a great variety of marbles from the Fichtelgebirge are polished and wrought up. Besides being the seat of the administration, and tribunals for the circ., it has a Protestant consistory. The geological cabinet and collection of fossils belonging to Count Munster, in Bayreuth, is one of the finest in Germany. There is here an extensive manufactory of porcelain, and tobacco-pipe heads; parchment, linen, cottons, &c., are also produced, and there are breweries and tanneries. About 2 m. to the E. is the Hermitage, a fanciful building erected in the early part of the last century, at an immense cost, with gardens containing temples, terraces, statues, fountains, &c.; and a fine park, now much out of order. The Margravine, sister to Frederick the Great, wrote her memoirs in the Hermitage.

Bayreuth formerly constituted the cap. of an independent principality, the margraviat of Bayreuth. On the death of the last margrave without issue, in 1791, his possessions devolved on the King of Prussia, who ceded them to France in 1807. In 1810, Napoleon transferred them to Bavaria; and their possession has been confirmed by subsequent treaties. (*Murray's Handbook; Reichard, Guide des Voyageurs, &c.*)

BAZA, a town of Spain, Granada, near the Guadalquiton, in an extensive, well-watered, and fertile valley, 54 m. E. by N. Granada; lat. 37° 30′ N., long. 2° 50′ W. Pop. (including two cants. in its jurisdiction) 9817. (*Miñano.*) It has a cathedral, three parish churches, six convents, an ecclesiastical seminary, a hospital, &c. The inhab. are entirely dependant on agriculture, and consequently experience, in bad years, *una estremada miseria*. Baza is either on the site of the *Basti* of the Romans, or very near it, and vases and other interesting Roman remains are dug up in its vicinity. It was taken from the Moors after a long siege, in 1489.

BAZAS, a town of France, dep. Gironde, cap. arrond., on a rock 33 m. S.S.E. Bordeaux. Pop. 4446. It is old and ill built. It was formerly the seat of a bishopric; and the ancient cathedral, now the parish church, though not large, is a remarkable monument of Gothic architecture. It has a court of original jurisdiction, and an agricultural society; with a royal saltpetre manufactory, a glass work, tanneries, &c. Bazas is very ancient. It is the country of the poet Ausonius, who flourished in the fourth century, and was also, for a lengthened period, the residence of the dukes of Gascony. (*Hugo*, art. *Gironde, &c.*)

BAZOCHES-AU-PERCHE-GONET, a village of France, dep. Eure et Loire, 15 m. S.S.E. Nogent-le-Rotrou. Pop. 2120. Bazoches is the name of several other small towns in France.

BAZZANO, a town of the Papal states, 15 m. W. Bologna, on the Sammoggia. Pop. 1200.

BEACHY HEAD, a conspicuous bold promontory on the S. coast of England, co. Sussex; lat. 50° 44′ 24″ N., long. 0° 13′ E. It is formed of chalky white cliffs, that project perpendicularly over the beach, whence it derives its name, to the height of 564 ft. A light-house of the first class was erected in 1828, on the summit of the second cliff to the W. of the head, 285 ft. above the level of the sea, and caverns have been cut in the cliffs, between the Head and Cuckmore haven, in the view of affording places of refuge to mariners wrecked on this dangerous coast.

BEACONSFIELD, a market town and par. of England, co. Buckingham, hund. Burnham; area of the par. 3710 acres. Pop. 1763. The town is situated on an eminence, on the high road from London to Oxford, being 24 m. W. by N. of the former. It consists of four streets, arranged in the form of a cross, and its houses are mostly constructed of a mixture of flint and brick. The remains of Edmund Burke are deposited in the church, formerly a part of the monastery of Bunham; and the church-yard has a marble monument in honour of the poet Waller, to whom the manor belonged. Bullstrode, formerly a celebrated seat of the Portland family, is within a short distance of Beaconsfield. Market-day, Wednesday. It has fairs for the sale of cattle, sheep, &c., on Feb. 13, and Holy Thursday, at which a good deal of business is done. (*Beauties of England and Wales.*)

BEAMINSTER, a par. and town of England, co. Dorset, hund. Beaminster-Forum, div. Bridport, on the Birt, 123 m. W.S.W. London. Area of par. 4350 acres. Pop. of par., 1821, 2806; 1831, 2968; houses at latter date, 583. The town is surrounded by hills, whence the springs forming the river issue. It has a clean, respectable appearance, and is paved, and lighted by gas. The church is a large structure, on an eminence on the N. side, being a chapel of ease to that of Netherbury. A free school, founded in 1684, educates 100 boys: the ann. amount of its endowment is £160 a year. There are almshouses for six poor women. The weekly market on Thursday, and ann. fairs Apr. 14, Sep. 10, and Oct. 9. There is a manufactory of sail cloth, and tin and copper wares are made in the town. It is the centre of a union of twenty-six parishes: the average of its own rates, for the three years ending 1835, was £1437: it has three guardians. Beaminster is a town of considerable antiquity; but it has been several times wholly or partly destroyed by fire, to which its modern appearance is attributable.

BEAR CREEK, t., Columbia co., Pa. It contains six stores, one furnace, one flouring-mill, five grist-mills, two saw-mills, one oil-mill, one pottery, one printing-office, one weekly newspaper, one academy, 35 students, seven schools, 184 scholars. Pop. 1905.

BEAR LAKE (GREAT), a very irregularly-shaped and extensive sheet of fresh water, in the N.W. part of N. America; between about 65° and 67° N. lat., and under the 120th deg. of W. long. The Bear Lake river flows from it to the Mackenzie river. Its waters are very pure, and it is said to be well supplied with fish.

BEAT (ST.), a town of France, dep. Haute Garonne, on the Garonne, 13 m. S. St. Gaudens. Pop. 1403. It is built of marble furnished by the neighbouring quarries; but being situated in a narrow valley, between mountains which conceal the sun for a part of the day, it is *triste*. It is the *entrepôt* of the contiguous valley of Arran, in Spain.

BEAUCAIRE (an. *Ugernum*), a town of France, dep. Gard, cap. cant., on the right bank of the Rhone, opposite to Tarascon, 14 m. E. Nimes; lat. 43° 48′ 32″ N., long. 4° 38′ 50″ E. Pop. 9601. As a town, Beaucaire is nothing remarkable, and has no public building worth notice; but its command of internal navigation afforded by the Rhone, and its communication with the sea by the canal of Beaucaire, which also unites it with the canal *du Midi*, make it favourably situated for an *entrepôt*. Its entire consequence and celebrity is derived from its fair, which commences on the 22d, and finishes on the 28th July. This was formerly the greatest of European fairs, and though much fallen off, it is still attended by a vast concourse of people, not from France only, but also from Germany, Switzerland, Italy, Spain, and the Levant. Almost every sort of article, whether of convenience or luxury, is then to be met with in the town. It is said that the influx of visiters still amounts to nearly 100,000, and that the business done exceeds 150 millions of francs; but we suspect that both these estimates are materially exaggerated, and that they would be nearer the mark were they reduced a half. The accommodations in the town and at Tarascon not being nearly sufficient for the great and sudden influx of strangers to the fair, large numbers of them are lodged in tents and other temporary erections in the meadow where the fair is held, along the Rhone. All bills due at this fair are presented on the 27th, and protested on the 28th. A tribunal, instituted for the purpose, takes cognizance of and immediately settles, all disputes that grow out of transactions at the fair. Detachments from the garrisons of Nimes and Tarascon assist in keeping order, and everything is conducted with the greatest regularity. The prefect of the dep. is always present, and entertains the leading merchants.

The communication between Beaucaire and Tarascon used to be kept up by a bridge of boats, but this has been replaced by a suspension bridge. This great work consists of four arches, each 130 mètres (426 ft. 6 in.) in span. This is the statement of Hugo; other authorities say that the bridge has only three arches, and that its total length is 441 mètres, and is alike substantial and handsome. There is at Beaucaire a public library of 14,000 volumes. (See *Hugo*, art. *Gard.*; *Encyc. des Gens du Monde*, art. *Beaucaire.*) The article on this fair in the *Dictionnaire du Commerce, &c.*, is as poor as can well be imagined.

BEAUFORT, a town of France, dep. Maine et Loire, near the Couesnon, 16 m. E. Angers. Pop. 6000. It has a college, or high school, two workhouses, a large market-place, and manufactures of canvass and coarse linen.

BEAUFORT, county, N.C., situated in the E. part of the state, and contains 670 sq. ms. Bounded E. by Pamlico sound, watered by Pamlico river. It contained, in 1840, 8191 neat cattle, 4957 sheep, 24,717 swine; and produced 6333 bushels of wheat, 1195 of rye, 153,522 of Indian corn, 90,225 of potatoes, 20,952 pounds of rice, 87,180 of cotton, 106,987 barrels of tar, pitch, and turpentine. It had forty-eight stores, twenty-four grist-mills, eighteen saw-mills, eleven distilleries, two printing-offices, two weekly newspapers, two schools, 45 scholars. Pop.: whites, 7050; slaves, 4472; free coloured, 703; total, 12,225. Capital, Washington.

BEAUFORT, district, S.C., situated in the S. extremity of

the state, and contains 1830 sq. m. Bounded S.W. by Savannah river, and on the N.E. by Combahee river. Watered by Broad and New rivers. The outlets of its rivers and the inlets of the ocean enclose a number of large islands on its S.E. coast, the principal of which are Hilton's Head, St. Helena, and Port Royal. It contained, in 1840, 41,710 neat cattle, 13,751 sheep, 28,521 swine; and produced 5810 bushels of wheat, 3561 of rye, 786,570 of Indian corn, 486,753 of potatoes, 5,699,462 pounds of rice, 1,544,850 of cotton, 1000 bushels of salt. It had thirty-five stores, thirteen grist-mills, eleven saw-mills, five academies, 172 students, twenty-two schools, 503 scholars. Pop.: whites, 5650; slaves, 29,682; free coloured, 462; total, 35,794. Capital, Coosawhatchie.

BEAUFORT, p. v., port of entry, Beaufort district, S.C., 50 m. N.E. Savannah, 75 m. S.W. Charleston, 146 m. S. Columbia, 635 W. Situated on the W. bank of Port Royal river, an outlet of Coosaw river, on Port Royal island. It has a spacious harbour 16 miles from the ocean; but a bar prevents the entrance of vessels requiring more than 11 feet of water. It contains three churches, one Episcopal, one Congregational, and one Baptist. An institution was here chartered as a college with a fund of $60,000 or $70,000, but it has never risen above an academy. The place is unhealthy during the autumn, and its commerce is not extensive.

BEAUFORT, p. v., port of entry, capital of Carteret co., N.C., 11 m. N.W. cape Lookout, 168 m. S.E. Raleigh, 396 W. Situated on North river. It has a good harbour for vessels requiring 14 feet of water, and has considerable commerce. It contains one Methodist church, one male and female seminary, a court-house, jail, masonic hall, eleven stores, 190 dwellings, and about 1190 inhabitants. The tonnage of the port, in 1840, was 1974. The harbour is defended by fort Macon, situated on Bogue point.

BEAUFORT, a town of the Sardinian states, Savoy, cap. mand., near the Doron, 30 m. E.N.E. Chamberry. Pop. 3000.

BEAUGENCY, a town of France, dep. Loiret, cap. cant., on the right bank of the Loire, 16 m. S.W. Orleans. Pop. 4849. This is a very ancient town, and occupies a conspicuous place in the history of the foreign, civil, and religious wars of France. It fell successively into the hands of the Huns, Saxons, Normans, and English; but it suffered most from the religious wars of the 16th century. It was surrounded by walls, flanked with towers and bastions, part of which are still standing, the rest having been pulled down and converted into promenades; it was also defended by a castle, of which nothing now remains but a massive tower, 115 ft. high. It has a bridge over the Loire of 39 arches; with fabrics of cloth, distilleries, and tanneries, and a considerable trade in wine, corn, and wool. (*Hugo*, art. *Loiret.*)

BEAUJEU, a town of France, dep. Rhone, cap. cant., on the Ardière, 30 m. N.N.W. Lyons. Pop. 2312. It is situated at the foot of a hill, on the top of which are the ruins of an old castle. It has manufactures of casks and lanterns, and is the entrepôt of all the products exchanged between the Saone and the Loiret.

BEAULIEU, a town of France, dep. Correze, cap. cant., on the Dordogne, 22 m. S. Tulle. Pop. 2547. It has some trade in wine. Beaulieu is the name of at least twenty-four other small towns in France.

BEAULY, a sea-port and village of Scotland, co. Inverness, on the N. side of the Beauly water, where it falls into the bottom of the Beauly frith, 9 m. W. Inverness. It is small, but finely situated. The Beauly is here crossed by a bridge of five arches, and the village has some trade.

BEAUMARIS, a bor. and sea-port town of N. Wales, co. Anglesea, hund. Dendaethwy, near the N. entrance to the Menai strait, in Beaumaris bay, 4 m. N.N.E. the Menai bridge; lat. 53° 17′ N., long. 4° 5′ W. Pop. (1821) 2205; (1831), 2497; houses at the latter date, 427. It is finely situated near the edge of the bay, in a low, level tract, which, however, commands some of the finest views in Wales. It is neatly built. The castle, erected by Edward I., though in a dilapidated state, is a fine ruin: it is surrounded by a fosse, flanked by twelve circular bastions. The building is nearly quadrangular, with a round tower at each angle. The par. church is at Llandefan, but there is a chapel of ease in the town, in which service is performed in English and Welsh. There are four chapels, belonging to Calvinists, Independents, Baptists, and Wesleyans, all well attended; a free grammar school, well endowed, the head master of which must be of the Established church, and M.A.; a national school, for 240 boys and girls, in the town, and another in Llandagvan (endowed by the Duchess of Kent), for 60 scholars: each of the religious sects have also large Sunday schools; and in all the English language is now taught. The town-hall is a commodious modern structure, with rooms for the bor. business, courts of justice, and a spacious ball-room. There are also a co. hall, a co. prison, and a custom-house. The weekly markets are held on Sat. and Wed.: annual fairs on Feb. 13, Holy Thurs., Sept. 19, Dec. 19, all for cattle. No particular manufacture or trade is carried on in the town. There is good anchorage in the bay, opposite the town, in 7 fathoms stiff clay; or vessels (as is often done) may be grounded near it on soft mud. The W. passage may be entered at any time of tide. Vessels often resort thither for security in hard gales; and occasionally some are repaired on the beach. Beaumaris is the chief port of the island and of the Menai strait, and comprises in its jurisdiction those of Conway, Almwich, Holyhead, Pwllheli, Barmouth, and Caernarvon. What trade the town itself possesses is chiefly coastwise. There is a regular steam-packet communication between Beaumaris, Liverpool, Caernarvon, and Dublin. There belonged to the port, in 1836, 401 ships, of 22,856 tons burden. The pier, quays, and ware-houses, are protected by extensive sea walls. The place derives considerable advantage from visiters from Liverpool and elsewhere, who resort to it for sea-bathing, in which respect it can scarcely be surpassed. There are many bathing machines, and the fine, firm sands of the beach form a delightful promenade, from whence, as well as from the green, a magnificent prospect presents itself. Baron Hill, the seat of the Bulkeley family, is on an eminence near the town, and its fine grounds slope towards it: there are several other good mansions in the neighbourhood. The hotels and inns in the town are excellent. There is a fine road from the town to the Menai bridge (4½ m.), which also commands splendid views.

Since the Municipal Reform Act, the limits of the bor. have been restricted so as to comprise only the town and its immediate neighbourhood. The ancient bounds included its own parish, and parts of six others, for an extent of upward of 10 m.: it has now four aldermen and twelve councillors. Its governing charter, previously, was granted in the 4th of Eliz.; this quotes, by *inspeximus*, ten others, the earliest being in 24 Edw. I. The government was vested in a self-elective body, consisting of a mayor, two bailiffs, and twenty-one burgesses, who had the privilege of returning one m. to the H. of C. The Reform Act divested them of this privilege, and made Beaumaris the principal of five contributory bors., which jointly return one mem. to the H. of C. There are 340 houses of £10 and upward; and it had, in 1838, 336 registered electors. The poor-rates of the bor., in 1836, amounted to £1467 1s. The corporation revenues are derived from rents of lands, tenements, &c., oyster-beds, and harbour dues. They average about £556. The town derives its origin from Edw. I., who, after founding the castles of Caernarvon and Conway, built that of Beaumaris, in 1295.

BEAUMONT-DE-LOMAGNE, a town of France, dep. Tarn et Garonne, cap. cant., on the Gimone, 21 m. S.W. Montauban. Pop. 4211. This little town is alike remarkable by the regularity of its plan, the neatness of its houses, and the beauty and fertility of its territory. It is built round a spacious square, and its streets, which are broad and straight, intersect each other at right angles. It has fabrics of coarse cloth, hats, and tanneries. (*Hugo*, art. *Tarn et Garonne.*)

BEAUMONT-LE-VICOMTE, a town of France, dep. Sarthe, cap. cant., on the Sarthe, 17 m. N. Mans. Pop. 2378. It has manufactures of druggets and other descriptions of woollen cloth, and has a considerable trade in corn and fat geese. There is a fine promenade on an adjoining hill. Beaumont, either singly or with some addition, is the name of a vast number, at least forty-five, small towns in France. The most considerable is BEAUMONT SUR OISE, dep. Seine et Oise, 21 m. N. Paris. Pop. 1874. It stands on a hill, and has glass-works, and a manufactory of saltpetre.

BEAUNE, a town of France, dep. Côte d'Or, cap. arrond., in an agreeable country, at the foot of a hill which produces excellent wine, on the small river Bouzoeise, 20 m. S.S.W. Dijon. Pop. (town ex cant.) 9958. It is well built; streets, broad, straight, and watered by the fountain *de l'Aigue.* The church of Notre Dame is handsome; but the finest building in the town is the magnificent hospital, founded in 1444, and endowed by Nicholas Rollin, chancellor to Philip, duke of Burgundy. Beaune is the seat of tribunals of commerce and primary jurisdiction; has a command college, and a public library with above 10,000 volumes. Its ramparts, which are planted, afford fine promenades; and it has an extensive public garden, public baths, a theatre, &c. It produces cloth, cutlery, leather, vinegar, casks; and has dye-works and large nurseries of fruit trees. But the principal celebrity of Beaune is derived from its being the centre of the trade in the wine that bears its name; that is, in the best of the second growths of Burgundy. M. Jullien says, that "*les vins de la côte de Beaune ont la réputation, bien acquise, d'être les plus francs de goût de toute la Bourgogne.*"

BEAUNE-LA-ROLANDE, a town of France, dep. Loiret, cap. cant., 16 m. W. by N. Montargis. Pop. 2123.

BEAUPREAU, a town of France, dep. Maine et Loire, cap. arrond., on the Evre, 28 m. S.W. Anvers. Pop. 3288. It has a court of original jurisdiction, with dye-works and tanneries. In 1793 the Vendeans obtained, in the vicinity of this town, a complete victory over the republicans under General Ligonnier.

BEAUSSET, a town of France, dep. Var, cap. cant., 9 m. N.W. Toulon. Pop. 3050. It has fabrics of hats and tiles, with tanneries, a glass-work, and a considerable trade in oil, wine, spirits, soap, and coarse cloth and linen.

BEAUVAIS, a town of France, cap. dep. Oise, on the Thérain, where it is joined by the Avelon, in a valley surrounded by wooded hills, 42 m. N. by W. Paris; lat. 49° 26′ 7″ N., long. 2° 5′ E. Pop. 13,082. This is a very ancient city, and has undergone many vicissitudes. So late as 1803 it was surrounded by ramparts and fossés, but these have been since partly levelled, and converted into agreeable promenades. It is ill built, the houses consisting, for the most part, of wood, clay, and mortar; the streets are not narrow, nor dirty, but they are badly planned. Had the cathedral been finished on its original plan, it would have been the finest Gothic edifice in France, but the choir only is complete. It contains a fine monument of Cardinal de Janson, bishop of Beauvais. The church of St. Stephen, erected in 997, is celebrated for its fine painted glass windows. The Episcopal palace, now the hôtel de préfet, is very large and ancient, and has the appearance of a Gothic castle. Previously to the Revolution there were in Beauvais, besides the cathedral, six collegiate churches, twelve parish ditto, with six convents for men and two for women! Now, however, the convents have ceased to exist; and all the churches, save two, and two chapels of ease, have either been pulled down, or applied to other purposes. The other public buildings are the college, theatre, hôtel de Dieu, with forty beds, poor-house, royal manufactory of tapestry, &c. It is the seat of a bishopric, of courts of *premiere instance*, and, besides the college, has a diocesan seminary, with 145 pupils, gratuitous courses of geometry and mechanics applied to the arts, and a public library with 7500 volumes. Beauvais has considerable advantages in the command of water power, and in the cheapness of turf fuel for the prosecution of manufactures; but though these carried on in the town be considerable, they are not flourishing. The principal is that of a sort of flannel (*molleton*); at present, however, it is said to be in a retrograde condition, owing to the want of capital and enterprise in those engaged in it. A good deal of cloth is made of a medium quality. There is also a royal manufactory of tapestry, established in 1664; but these establishments are of little or no use, except as works of art, their products being too dear to come into general demand. The fabrics of printed cottons are much fallen off; but the art of dyeing is still successfully practised, and there are extensive bleach-fields, with flour-mills, tanneries, &c. The trade of Beauvais is extensive. Large quantities of corn, and of linen, called *demi Hollande*, manufactured in its vicinity, are disposed of in its markets.

Beauvais existed under the Romans, and has since been held by the Normans and the English, from the latter of whom it was wrested in the 15th century. In 1477 it was besieged by Charles le Téméraire, duke of Burgundy, and though without a garrison, the citizens, led on by the famous heroine Jeanne Hachette, repelled the enemy. An annual festival is still celebrated in honour of this event, when the ladies take the part of the gentlemen. (*Hugo*, art. *Oise*; *Dictionnaire du Commerce*, art. *Beauvais*.)

BEAUVOIR, a town of France, dep. Vendée, cap. cant., opposite the island of Noirmutier, about 3 m. from the sea, with which it is united by a canal. Pop. 2357. Vessels of from sixty to eighty tons come up to the town, to load with corn and salt, produced in the salt marshes in the vicinity. This town was formerly fortified, and had a castle: it was besieged by Henry IV. in 1588, who, having fallen into an ambuscade, was involved in the greatest danger.

BEAVER, BIG, river of Pa., is formed by the union of the Mahoning river, which rises in Ohio, and the Shenango river, which rises in Pa. After the junction, it has a course of about 20 m. Its whole course from its sources is about 80 m. The Pa. and Ohio canal passes along this river by the Mahoning branch.

BEAVER, county, Pa. Situated in the W. part of the state, and contains 648 sq. m. Watered by Ohio and Beaver rivers. It contained, in 1840, 21,028 neat cattle, 74,176 sheep, 33,355 swine; and produced 326,663 bushels of wheat, 53,141 of rye, 233,735 of Indian corn, 515,985 of oats, 203,137 of potatoes, 436,915 of bituminous coal. It had ninety stores, four furnaces, eight fulling-mills, eight woollen-factories, two cotton-factories with 2800 spindles, thirty tanneries, thirteen distilleries, four breweries, five potteries, twelve flouring-mills, sixty grist-mills, seventy-three saw-mills, three oil-mills, two paper-mills, three printing-offices, two weekly newspapers and one periodical, five academies, 154 students, 110 schools, 3098 scholars. Pop. 29,368.

BEAVER, p. b., capital of Beaver co., Pa. Situated on Big Beaver river, at its entrance into Ohio river, 30 m. below Pittsburg, by the course of the Ohio river, 227 m. N. by W. Harrisburg, 253 W. It is built on a plain, and is 3 m. long and one wide. On a public square is a court-house, jail, one Methodist and one Presbyterian church. It has one academy, 28 students, one school, 90 scholars. Pop. 551.

BEAVER, t., Beaver co., Pa. It has twenty stores, one grist-mill, two saw-mills, two furnaces, three tanneries, two breweries, two potteries, one printing-office, one weekly newspaper, one school, 90 scholars. Pop. 445.

BEAVER, t., Crawford co., Pa. It has two grist-mills, three saw-mills, two schools, 40 scholars. Pop. 734.

BEAVER, t., Venango co., Pa. It has two stores, three furnaces, five grist-mills, nine saw-mills, one oil-mill, one school, 15 scholars. Pop. 1611.

BEAVER, t., Union co., Pa. It has five stores, six grist-mills, thirteen saw-mills, two fulling-mills, four distilleries, two potteries. Pop. 2809.

BEAVER, p. t., Pike co., O., 73 m. S. Columbus, 389 W. Contains two stores, one grist-mill, two saw-mills, six schools, 108 scholars. Pop. 1099.

BEAVER, t., Columbiana co., O. It has five schools, 103 scholars. Pop. 1973.

BEAVER, t., Guernsey co., O. Pop. 1842.

BEAVER CREEK, t., Green co., O. Bounded S.E. by Little Miami river. It contains two stores, three flouring-mills, four saw-mills, one woollen-factory, two distilleries. Pop. 1767.

BEAVER DAM, t., Erie co., Pa. It contains seven saw-mills, ten schools, 400 scholars. Pop. 1081.

BECCARIA, t., Clearfield co., Pa. Pop. 389.

BECCLES, a bor., par., and town of England, N.E. border co. Suffolk, on the Waveney, 95 m. N.E. London. Area of par. 1740 acres; pop. of par., in 1821, 3,493; 1831, 3862. The town is well built on the S. side of the river, and consists of several streets, diverging from a central area where the market is held. The church, with a modern detached steeple, is an ancient structure on the edge of a cliff, overlooking the level pastures through which the Waveney flows. There are two dissenting chapels; a free school, founded under James I., for 100 boys; a grammar school, endowed in 1713, which has ten exhib. to Emanuel Coll., Cambridge; a national school; a good town-hall, theatre, and assembly-rooms. The weekly market is on Saturday. Annual fairs are held on Whit-Monday, June 29, and Oct. 2; the last being a horse fair. The river is navigable for sea-borne vessels of 100 tons to the town, and by it an active trade is carried on in coals, &c. There are no manufactures, but malting is carried on to a considerable extent. In 1832, when its communication with the sea was first opened, and a new dock was formed, there were three vessels, of 231 tons, entered inwards, in the foreign trade; and in the coasting trade sixty-four vessels, of 3596 tons, inwards, and thirty-six vessels, of 2034 tons outwards.

In 1836 there were six vessels, of 415 tons, belonging to the town, but registered at Yarmouth, of which it is an out station. The annual value of the rateable property in 1835 was £11,208. A rate for lighting, paving, &c., under a local act, averages £240 a year. The poor-rate, £1471 10*s*.

Since the Municipal Reform Act, the limits of the bor. have been contracted so as to include only the part on which the town stands, an area of 350 acres. It was previously co-extensive with the parish, and was first incorporated in 34 Hen. VIII., when Beccles Fen, consisting of 1400 acres of pasture, was granted. The governing charter was granted in 2 James I. The privilege of depasturing stock on the fen extends to every householder; and, of the original grant, 940 acres remain unalienated. The corporation also possess an estate, called the Hospital hill, and a lease of the tolls of markets and fairs, &c.; making the average amount of their annual revenue upwards of £1100. Their business is transacted in the town-hall, where quarterly sessions for the neighbourhood are also held by the co. magistrates. (*Parl. Papers and Reports*; *Beauties of Eng. and Wales*, ii., 14.)

BECKET, p. t., Berkshire co., Mass., 118 m. W. Boston, 377 W. Watered by a branch of Westfield river. Incorporated in 1765. It contains a Congregational and a Baptist church, three stores, two grist-mills, twelve saw-mills, one fulling-mill, nine schools, 335 scholars. Pop. 1342.

BEDALE, a market town and par. of England, N.R. co. York, on an affluent of the Swale, 34 m. N.N.W. York. Area of par. 7070 acres. Pop. of ditto, 2707; of the town, 1266. The town is well built, and the church is a large and handsome edifice, constructed in the reign of Edward III. The living, which is a rectory, is one of the best in the country, having been worth, at an average of the three years ending with 1831, £2000 a year. It has a grammar school and some charities. The country round is very fertile, and it has a well-supplied market.

BEDARRIEUX, a town of France, dep. Herault, cap.

cant., on the Orb, 20 m. N. Beziers. Pop. (town ex cant.), 5760. It is neat and well-built, and is one of the most industrious towns of its size in France. It has manufactures of fine and coarse cloth, of stuffs, of silk and wool, woollen and cotton stockings, hats, oil, paper, and soap, with dyeworks and tanneries.

BEDDINGTON, t., Washington co., Me. It has two schools, 40 scholars. Pop. 164.

BEDFORD, an inland co. of England, having N. and N.W. Huntingdon and Northampton shires; E. Huntingdon and Cambridge; S. Hertford; and W. Buckingham and Northampton. Area, 296,320 acres, of which about 250,000 are supposed to be arable, meadow, and pasture. Surface diversified with low hills, valleys, and extensive level tracts. On the S. the Chiltern hills rise to a considerable elevation. Principal rivers Ouse and Ivell. It has every variety of soil, from the stiffest clay to the lightest sand. In the vale of Bedford, the soil is clayey; the sandy soil is well suited for the turnip husbandry and garden culture; and, on the whole, the co. may be said to be of about an average degree of fertility. It is chiefly under tillage, which is in a medium state of improvement—not so far advanced as in some counties, nor so backward as in others. Wheat and beans are the principal produce of the clays, and turnips and barley of the sandy soils. Large quantities of vegetables are raised in various places, for the supply of the markets of London and Cambridge. Cattle of a mixed breed. Stock of sheep estimated at about 200,000. There are some large estates, but property is, notwithstanding, a good deal subdivided. Average size of farms, 150 acres; average rent of land, 18*s.* 4*d.* an acre. Fullers' earth is dug up in considerable quantities in the vicinity of Woburn. Excellent straw platt for ladies' hats is made at Dunstable: the manufacture of pillow lace, once widely diffused through the county, has much declined, and there is no other manufacture of any importance. Principal towns, Bedford, Biggleswade, Leighton-Buzard, and Luton. Bedfordshire contains 9 hundreds, and 123 parishes, and had, in 1831, 21,756 houses, 20,016 families, and 107,937 inhabitants. It returns four members to the H. of C.; viz., two for the co. and two for the bor. of Bedford. Sum expended for the relief of the poor in 1838, £39,380. Annual value of real property in 1815, £364,277; profits of trade and professions in ditto, £94,797.

BEDFORD, a bor. and town of England, cap. co. Bedford, on the Ouse, 45 m. N.N.W. London. Pop., 1821, 5466; 1831, 6959: houses at the latter date, 1491. It is situated in a pleasant vale, on both sides the river, which is spanned by a handsome five-arched stone bridge, built in 1810. It consists chiefly of a wide street, between 1 and 2 m. long, intersected by several smaller streets at right angles. The houses on the S. side of the river are handsome modern structures; the rest, an intermixture of ancient and modern, but mostly well-built and neat; the whole is paved, lighted by gas, and amply supplied with water. There are four churches: St. Peter's, the most ancient, has a Norman porch, and a fine tower; St. John's, St. Mary's, and St. Paul's, are all in the Gothic style, with good towers. The Baptists, Independents, Wesleyans, Jews, and Moravians, have each places of worship; the last have also a female establishment. There is a grammar school, founded in 1556, which educates between 70 and 80 of the town boys free; and about the same number who board with the head master, and pay: it has eight exhib., of £80 a year each, to Oxford, Cambridge, and Dublin: another free school founded in 1727, for 10 boys and ten girls; and a blue-coat school, founded in 1760, for clothing and educating 25 boys: this last is now united with the national school, but the endowment is kept distinct. The charities, compared with the size of the town, exceed, in amount, those of any other in the kingdom. The principal charity consists of property in Bedford and London, left by Sir Wm. Harpur, who was born in the former, and became lord mayor of the latter. The rental of this property has increased, so that its annual amount in 1833 was £13,500. The trustees are—the lord lieut.; the members for the co. and the bor.: the first and second masters of the grammar school; 18 persons chosen by the inhabitants of Bedford; and the corporation: the last being, in fact, virtually its managers. The revenue is distributed among the free grammar, English, national, and commercial schools; fifty-eight almshouses; and in marriage portions, apprentice fees, premiums, and donations among the poor. Besides this, the principal charity, there is the hospital of St. John, founded in the reign of Edward II., for a master and 10 poor brethren; and eight almshouses, endowed in 1679, for decayed single folks of either sex. There is a sessions-house, a theatre, and a public library; reading, lecture, billiard, and assembly rooms, all in one handsome structure, recently built. There is also a new building in the Tudor style, erected by the trustees of the Bedford charity, with rooms for the English and national schools, a committee-room, &c. The co. jail and house of correction are at the N. entrance to the town. The co. lunatic asylum and the co. infirmary are also near the town, on the Ampthill road: the infirmary, a large, fine building, was erected in 1833, chiefly from funds bequeathed by the late Samuel Whitbread, Esq.; but the Marquis of Tavistock subscribed £2000 towards its completion. The penitentiary (a large estab.), on the Kettering road. The chief market is held on Saturday: the weekly sale of wheat averages about 600 quarters. There is a smaller market on Monday, chiefly for pigs. Annual fairs are held first Tuesday in Lent, April 21, July 5, Aug. 21, Oct. 12, Nov. 17, and Dec. 19. That in Oct. is called the statute fair, and is the most important: the others are cattle fairs. The Ouse is navigable from hence to Lynn Regis, and a considerable traffic is carried on between the two towns, chiefly in malt, coals, timber, and iron. Lace-making formerly employed a great many of the women and children, and now straw-platting. There are no other manufactures. The bor. is coextensive with the five parishes of Sts. Peter, Paul, Cuthbert, Mary, and John; the area of the whole is 2164 acres, the town being in the midst, with a fertile belt of land all round. It is divided into two wards, and governed by a mayor, three aldermen, and eighteen councillors. The annual revenue of the corporation is derived from lands and houses in the bor., and averages about £440 a year. There are local courts of petty and quarter sessions, and of pleas. The co. sessions and assizes are also held in the town: the number of committals for the whole co. in 1837 was 173; of these, 42 were tried at the assizes, 121 at the co. quarter sessions, and 10 at the local courts. The value of rateable property in the town in 1815 was £9188 a year; in 1835, it was £8892. The borough-rate amounts, on an average, to £324 5*s.* a year.

Under the Poor Law Amendment Act, Bedford is the union town for twenty-four parishes. The average of its own poor-rates for three years, ending 1834, was £2774. It is represented by six guardians. The bor. has returned two members to the H. of C. since the 23d Edw. I. Previously to the Reform Act they were elected by the burgesses and freemen, both bodies consisting of an indefinite number. In the contest of 1830 (gained by one vote), 160 polled, of whom 61 only were resident. There are 183 houses of the annual value of £10 and upwards. Registered voters for 1837, 878; of whom 91 were freemen. It is the principal polling town, also, of the co. Its modern is a contraction of its Saxon name, *Bedan ford.* A strong castle was built here soon after the Conquest, which, in subsequent reigns, endured many sieges: part of its intrenchments may still be traced. Near the town are the remains of Caldwell and Newenham priories. John Bunyan, author of the *Pilgrim's Progress*, was pastor of the Independent congregation at Bedford, from 1671 till his decease, in 1688. The Russell family derive their title from the town. (*Lysons's Mag. Brit.; Parl. Reports; Brayley and Britton's Beauties of England and Wales.*)

BEDFORD, county, Pa. Situated in the S. part of the state, and contains 1612 sq. m. Drained by branches of Juniata and Potomac rivers. It furnishes iron and bituminous coal. It contained, in 1840, 53,213 neat cattle, 82,055 sheep, 95,716 swine; and produced 347,704 bushels of wheat, 295,051 of rye, 329,956 of Indian corn, 591,371 of oats, 284,222 of potatoes. It had forty stores, nine furnaces, eleven fulling-mills, one woollen-factory, nineteen flouring-mills, twelve grist-mills, forty-three saw-mills, twenty-two tanneries, nine distilleries, one powder-mill, two printing-offices, three academies, 99 students, forty schools, 1320 scholars. Pop. 29,335. Capital, Bedford.

BEDFORD, county, Va. Situated in the S. part of the state, and contains 600 sq. m. Drained by Staunton river and Otter and Goose creeks, branches of Roanoke river. It contained, in 1840, 16,200 neat cattle, 14,793 sheep, 30,520 swine; and produced 206,064 bushels of wheat, 7358 of rye, 536,832 of Indian corn, 285,172 of oats, 22,364 of potatoes, 3,442,433 pounds of tobacco, and 3498 of cotton. It had nine stores, four flouring-mills, twenty grist-mills, twenty-four saw-mills, thirteen distilleries, six tanneries, one academy, 30 students, eight schools, 167 scholars. Pop.: whites, 11,016; slaves, 8864; free coloured, 323; total, 20,203.

BEDFORD, county, Tenn. Situated in the central part of the state, and contains 600 sq. m. Drained by Duck river and its branches. It contained, in 1840, 18,920 neat cattle, 20,953 sheep, 84,685 swine; and produced 94,631 bushels of wheat, 5754 of rye, 1,248,965 of Indian corn, 153,513 of oats, 9837 of potatoes, 171,339 pounds of tobacco, 174,733 of cotton. It had twenty-four stores, seven flouring-mills, twenty-five grist-mills, twenty saw-mills, two rope-factories, sixty-four distilleries, ten tanneries, two printing-offices, two weekly newspapers, four academies, 215 students, thirty-four schools, 1398 scholars. Pop.: whites, 16,192: slaves, 4295; free coloured, 59; total, 20,546.

BEDFORD, p. t., Hillsborough co., N.H., 21 m. S. by E. Concord, 460 W. Bounded E. by Merrimac river. Piscat-

aquoag river enters the Merrimac in its N.E. part. Incorporated in 1750. It contains four stores, five grist-mills, nine saw-mills, thirteen schools, 541 scholars. Pop. 1555.

BEDFORD, p. t., Middlesex co., Mass., 15 m. N.W. Boston, 455 W. Incorporated in 1729. Shawsheen river, a branch of Merrimac river, affords water-power. It contains one Congregational and one Unitarian church, three stores, five forges, two grist-mills, two saw-mills, five schools, 297 scholars. Pop. 929.

BEDFORD, p. v., Bedford t., capital, with White Plains, of Westchester co., N.Y., 125 m. S. Albany, 270 W. The village contains a court-house, two churches, a female seminary, three stores, forty dwellings, and about 250 inhabitants. The town has seven stores, two fulling-mills, seven grist-mills, eight saw-mills, three academies, 80 students, seventeen schools, 788 scholars. Pop. 2822.

BEDFORD, p. t., Cuyahoga co., O., 12 m. S.E. Cleveland, 149 m. N.W. Columbus, 347 W. Situated on Tinker's creek. It contains three stores, one flouring-mill, one grist-mill, six saw-mills, ten schools, 469 scholars. Pop. 1244.

BEDFORD, p. b., Bedford t., capital of Bedford co., Pa., 200 m. W. Philadelphia, 103 m. S.W. by W. Harrisburg, 129 W. Situated on the Raystown branch of Juniata river, on the great road leading from Philadelphia to Pittsburg. It is situated on an eminence in the midst of a mountain valley. W. of the village is Will's mountain, elevated more than 1300 ft. On the E. is Denning's mountain, with an altitude of 1100 ft. The bases of these mountains are about a mile and a half apart. It contains a court-house, jail, five churches, one Roman Catholic, one German, one Lutheran, one Reformed, and one Presbyterian. These are all fine buildings. The Presbyterian church has lofty Tuscan columns, and a commanding cupola. The mountain scenery and the cooling breezes render the place attractive. But it derives its chief interest from its valuable mineral springs. These rise in a beautiful valley a mile and a half S. of the borough. They are Andersons', Fletcher's, Limestone, Sweet, Sulphur, and the Chalybeate springs. Fletcher's spring discharges six gallons of water per minute, and contains in a quart of water 18½ cubic inches of carbonic acid gas, sulphate of magnesia or epsom salts 20 grains, sulphate of lime 3·75, muriate of soda 2·50, of lime 0·75, carbonate of iron 1·25, carbonate of lime 2, loss 0·75. Fletcher's contains more iron and common salt, less magnesia, and about the same proportion of other substances. About 40 rods N.E. of the principal fountain is a rich sulphur spring. Anderson's spring discharges twenty gallons of water per minute, at a temperature of 55° Fahrenheit. These waters possess laxative and sudorific powers, and have been found efficacious in removing chronic obstructions, dispepsia, diseases of the liver, cutaneous eruptions, and almost all cases of debility. . To these effects, the salubrious air of this interesting region greatly contributes. These springs are much resorted to, and respectable accommodations are provided for visiters. The streets of the borough are spacious, and it contains eight stores and 150 dwellings, mostly of stone or brick. It has three schools, 21 scholars. Pop. 1022. The town is watered by Raystown branch of Juniata river, and, exclusive of the borough, contains one store, one fulling-mill, one distillery, one pottery, one saw-mill, one academy, 40 students, two schools, fifty scholars. Pop. 1721.

BEDFORD, p. t., Calhoun co., Mich., 124 m. W. Detroit, 589 W. It has two saw-mills, two schools, 44 scholars. Pop. 220.

BEDFORD, p. v., capital of Trimble co., Ky., 41 m. S.W. by W. Frankfort, 572 W. It contains a court-house, jail, an academy, and a Methodist church. One mile from the village is a mineral spring, which contains sulphur and Epsom salts, and respectable accommodations are provided for its numerous visiters.

BEDFORD, p. v., capital of Lawrence co., Ia., 71 m. S.W. Indianopolis, 621 W. Situated 3 m. N. of the E. fork of White river, and contains a brick court-house, a jail, five stores, and about 450 inhabitants. It was laid out in 1825.

BEDFORD, t., Monroe co., Mich. It contains one store, one grist-mill, three saw-mills, two schools, 67 scholars. Pop. 499.

BEDFORD, t., Meigs co., O. Watered by Shade river, and contains eight schools, 158 scholars. Pop. 567.

BEDFORD, t., Coshocton co., O., 60 m. N.E. Columbus. It has two stores and one saw-mill. Pop. 1141.

BEDFORD LEVEL, a distr. on the E. coast of England, comprising the greater portion of a flat, marshy tract, called the Fens, which extends into six counties, and is bounded on the N.E. by that great inlet of the German ocean, known as the Wash; and in all other directions by ranges of hills that enclose it in the form of an ellipse. It includes about 400,000 acres of this fen country, and extends N. and S. from Tydd St. Giles to Milton, 23 m.; and from Peterborough to Brandon, in an E. and W. direction, 40 m. Its boundaries are irregular; but, commencing from Peterborough northerly, the line extends by Peakirk, Crowland, Whaplode Drove, Parson Drove, Guyhirn, Salter's Lode, and Methwold, to Brandon; and thence, on the S. side, by Mildenhall, Milton, Earith, Ramsay, Wood Walton, and Yaxley, to Peterborough. This comprises the whole isle of Ely (the N. division of Cambridgeshire), and also a few parishes in the S. division of that county; 30,000 acres of Suffolk; 63,000 of Norfolk, 57,000 of Huntingdon; between 7000 and 8000 of Northamptonshire; and the S.E. portion of Lincolnshire. The whole tract appears to have been gradually formed, by sedimentary depositions, in an inlet of the ocean, brought thither by the tidal currents, from the *débris* of the coast, and by torrents from the surrounding uplands. Eight principal rivers, or drains, originally traversed the level, three of which had their outfalls in the sea: the Welland, in Foss-dyke wash; the Nene, in the Sutton wash-way; and the Ouse, at Lynn Regis: of the rest, the Glen joined the Welland, near its outfall; the Wisbeach was a branch of the Nene; the Cam, the Larke, and the Little Ouse, fell into the great Ouse on its E. side. The Romans appear to have been the first who formed sea embankments, and shut out the tide: subsequently to which, for a prolonged period, it was a very fertile and populous tract. The outfalls of the streams, and the depths of their channels, remained adequate to carry off the superfluous water, and effect a proper drainage, although it is a well-ascertained fact that the average level of the surface was several feet lower than at present (at Spalding and Wisbeach not less than ten feet, and at Peterborough five feet). This is easily accounted for, from the subsequent changes being of a nature favourable to the formation of peat, and the deposition of matter continuing more and more to silt up the outfalls, and channels, and coast line. The roots of large trees, grass lying in swathes, as when first mowed, boats, shoes of a pattern worn in Rich. II.'s reign, &c., have been discovered in various places at the depth of several feet under silt or peat At the setting down of Skirbeck sluice, near Boston, a blacksmith's shop was found under 16 ft. of silt. These changes, therefore, were occasioned by the continued operation of the same causes to which the formation of the district is originally attributable, and which are still in ceaseless action on the coast. By shutting out the tide also, its scouring action would be greatly limited; and, consequently, the channels and outfalls of the streams would silt up and contract more rapidly, unless prevented by some artificial means. This process, however, would be gradual; and, down to the time of Stephen, we find the district round Thorney described by Henry of Huntingdon as most beautiful and fertile; while, at the period when Francis, earl of Bedford, and his coadjutors undertook the drainage of the great level that is named from him, this tract, comprising 18,000 acres, was an inundated morass, with the exception of a small hillock on which the abbey stood. As early, however, as the reign of Edward I. the silting up of the rivers and the want of adequate drainage, had become an evil of great magnitude; and as a large proportion of the fens then belonged to rich religious establishments, they made many vigorous efforts to obviate the increasing evil. But it was not till the æra of Elizabeth that the drainage of the fens was viewed in its true light, that of an important national concern; and an act was passed for effecting it in the 44th of her reign. In consequence of the queen's death, nothing was attempted till 1634, when a charter was granted by Charles I. to Francis, earl of Bedford (who had succeeded to the property of Thorney Abbey), and thirteen other adventurers, who undertook to drain the level, on condition of being allowed 95,000 acres of the reclaimed land: this was partially accomplished within three years, at the cost of £100,000. The principal cuts then made were, the Old Bedford river, 6 m. long, 20 ft. wide: Sam's cut, of the same length and size; Bevil's loam, 10 m. long, and 40 ft. wide; and Peakirk drain, of the same length, and 17 ft. wide. The old drains were also repaired and enlarged, and four sluices formed to keep out the tide: two at Tidd, one at Wisbeach, and one at Salter's lode. After all these works had been accomplished, at so great a cost, by the corporation, the contract was set aside, at the instigation of government, under the plea of the drains being inadequate. An offer was then made by the king to undertake the drainage of the fens, on being allowed 152,000 acres, which was 57,000 more than were to have been allotted to the corporation for effecting it. This disgraceful attempt to swindle the latter out of the advantages likely to result from their outlay and exertions was, however, defeated by the national disturbances that shortly after broke out. But the neglect consequent on the distracted state of the country rendered what had been effected in a great measure useless, so that the district remained a waste till 1649, when William, earl of Bedford, had all his father's rights restored by the Convention parliament; another effort was then made, under his direction; and, at the cost of £300,000, the original adventurers

were enabled to claim their 95,000 acres. The principal cut last made was that of the New Bedford river, 100 ft. wide, a short distance from, and running nearly parallel with, the old one. In 1668 a corporation was established by an act (15 C. 2, c. 17), to provide for the maintenance and repair of the works, and to levy assessments on the proprietors for the sums necessary to defray the expenses. The corporation consists of a governor, six bailiffs, twenty conservators, and a commonalty consisting of all who possess 100 acres within the level. The conservators are required to have 200, the bailiffs and governor 400, each; the officers are elected annually. Several subsequent acts have been passed to explain, alter, and amend the original one; but its main outlines have been preserved, and continue to form the basis of the government of the Fen. In 1697 the level was divided into three parts—the N., Middle, and S. levels: the first comprises the lands between the Welland and the Nene; the second, those between the Nene and Old Bedford rivers; the third extends from Old Bedford river to the southern limits.

In 1795, an act passed for improving the outfall of the Ouse, and for making a cut from Eaubrink to Lynn: this was not effected till 1820, and has proved highly beneficial. To enumerate the various cuts and drains that have been made at various times would be tedious and useless. The water, in the rivers and great artificial cuts, is mostly above the level of the lands they pass through, and is confined by embankments: the water, therefore, collected in the smaller land-drains and ditches has to be lifted into these main channels by pumps, which are mostly worked by windmills, but in a few instances by steam-engines. The most recent, and by far the most efficient, improvement that has been made in the drainage and navigation of the Fens has been accomplished under acts passed in 1827 and 1829, "for improving the outfall of the Nene; for draining the lands which discharge their waters into the Wisbeach river; and for improving the navigation of that river, from Kindersley cut to the sea; and embanking the salt marshes." A new tidal channel was cut for the discharge of the Nene: this begins about six m. below Wisbeach, and extends to Crabhole (6½ m.); thence the river has shaped for itself a natural channel (1½ m. in length) to the Wash. The surface width of the new cut varies from 200 to 300 ft.; its depth, from the surface of the adjacent land to the bed of the stream, is 24 ft. throughout: the spring tides rise about 22 ft. at the end nearest the sea, and 18 ft. where it joins Kindersley cut. A bridge has been thrown over this channel at Sutton wash, 8 m. below Wisbeach, and an embankment made across the sands, forming a new and safe line of road between Norfolk and Lincolnshire. Between 7000 and 8000 acres of marsh will ultimately have been reclaimed from the sea, and brought to a cultivated state by these operations. An uninterrupted communication with the sea from Wisbeach (the emporium of a large district) has been effected for small vessels at all times of tide, and in any weather; and at springs, for large vessels; where, previously, those drawing 6 ft. could only reach with a spring tide and favourable wind. But the most important result is the improved drainage that has been effected. In this new channel the tide ebbs nearly 10 ft. lower than in the old one, immediately opposite the S. Holland and N. Level sluices, which are the outlets for the water of about 100,000 acres of fen land. A new main drain and sluice has been formed to take the proper advantage of this; and also several minor drains. The Nene outfall was finished in 1835, at a cost of £200,000. The drainage of the N. level, under an act obtained in 1830, cost £150,000. Following the example of his ancestors, the Duke of Bedford has been the chief supporter of both these undertakings, which have rendered pumping, either by wind or steam, unnecessary in the N. level; and proved that, by due skill and exertion, all the waters of this important tract might have an adequate outfall created for them. (*Elstobb's Hist. of Bedford Level; M'Culloch's Statistical Acct. of the British Empire; Smeaton's Tracts; Penny Cyclopædia.*)

BEDMINSTER, t., Somerset co., N. J., 8 m. N. W. Somerville. It contains one Dutch Reformed church, six stores, six grist-mills, five saw-mills, two tanneries, two distilleries, nine schools, 254 scholars. Pop. 1589.

BEDMINSTER, t., Bucks co., Pa., bounded N. by Tohicton creek. It contains three stores, three grist-mills, four saw-mills, two tanneries. Pop. 1640.

BEDNORE, a town of Hindostan, cap. of a district of Mysore, lat. 13° 50′ N.; long. 75° 6′ E.; 150 m. N.W. Seringapatam, 360 m. W.N.W. Madras. It is situated on one of the best roads in the W. Ghauts, which leads from Mangalore. When Hyder Ali took it, in 1763, it was said to be 8 m. in circ.: it afforded him considerable plunder. In 1783 it was taken by the English; but in the following year the troops in possession were either destroyed or dislodged by Tippoo. At his death it had but 1500 houses—some additions have, however, been made to it since. Its trade is increasing, but it has no manufactures. (*Hamilton's E. I. Gaz.*, i., 156.)

BEDWIN (GREAT), a bor. and par. of England, co. Wilts, hund. Kinwardstone, 64 m. W. by S. Lond. Area of par., 10,420 acres. Pop. of par., in 1831, 2191. The town, which is old, stands on an elevated site, on a chalky soil. Its church exhibits specimens of the style of various eras (from the Norman to Henry VIII.), and is a cruciform structure, with a fine embattled tower rising from the intersection. The market-place (a very old building) is still standing in the principal street; but the market has long been disused. Fairs are held, April 23 and July 26. The place is in the jurisdiction of the county magistrates, being merely a nominal borough, with a portreeve, bailiffs, &c., elected at the manor court leet. It sent two members to the parliaments of Edward I.; thence, with some interruptions, to 9 Henry V., and thence, continuously, till the Reform Act, by which it was disfranchised. There is a fine relic of Saxon earth-work, called Chisbury castle, about a mile N.E. of the town; it encloses an area of about 15 acres. Some Roman remains have also been found about ½ a mile S.W. of the town. The Kennet and Avon canal passes through the parish, and furnishes coals. The living is a vicarage, with the chapel of East Grafton annexed.

BEEDER, a considerable prov. of Hindostan; part of the Deccan; chiefly between lat. 17° and 20° N., having N. Aurungabad and Berar; E. Hyderabad and Gundwana; S. Hyderabad and W. Bejapoor and Aurungabad: it is included in the nizam's dominion, and divided into seven districts; viz., Calberga, Naldroog, Akulcotta, Calliany, Beeder, Nandere, and Patree. It is hilly but not mountainous, and watered by many rivers, of which the Manjera and Godavery are the chief, and is generally fertile. It is but thinly inhabited, the Hindoos being to the Mohammedans as 3 to 1: before the conquest by the latter it was comparatively populous. Three languages, the Telinga, Maharatta, and Canarese, are spoken in this province, and their mutual point of limit is somewhere in the neighbourhood of the principal town, Beeder. The Bhâmenee dynasty reigned here after the Mohammedan conquest, and other small states were subsequently founded, one of which was fixed in Beeder as the capital. The Moguls conquered it at the end of the 17th, and the Nizam early in the 18th century, since which it has always been occupied by the successors of the latter.

BEEDER, a city of Hindostan, cap. of the above prov., in lat. 17° 49′ N., long. 77° 46′ E.; 73 m. N.W. Hyderabad, and 395 m. E.S.E. Bombay. It stands in an open plain, except to the E., where it rests on ground having a declivity; is fortified by a stone wall, with many round towers, and a dry ditch; has remains of some good buildings, and was formerly famous for its tutenague ware. (*Hamilton's E. I. Gaz.*, i., 157, 158.)

BEEKMAN, p. t., Dutchess co., N. Y., 14 m. S.E. Poughkeepsie, 87 m. S. Albany, 307 W. Drained by Fiskill river and its branches. It contains three churches, one Presbyterian, one Methodist, one Friends'; six stores, one fulling-mill, one furnace, three flouring-mills, three grist-mills, two saw-mills, one school, 52 scholars. Pop. 1400.

BEEKMANTOWN, p. t., Clinton co., N. Y., 8 m. N. Plattsburg 169 m. N. Albany, 544 W. It extends across the county, 37 miles. Chazy and Chateaugay rivers rise from two lakes of the same names, in the W. part of the county. It contains one store, one woollen-factory, one furnace, four grist-mills, fourteen saw-mills, four tanneries, eleven schools, 320 scholars. Pop. 2769.

BEER ALSTON, a bor. of England, co. Devon, hund. Roborough, parish Beer-Ferris, 211 m. W.S.W. London. Pop. of the par., 1821, 2198; 1831, 1876: houses, 344; area, 5850 acres. The village is situated between the Tavy and Tamar, 1 m. from the latter: its market and fair (granted in 1295), have been long discontinued. Silver-lead mines were opened in the reign of Edward I. contiguous to the place, which owes what importance it possessed to them; they have been worked within the last 20 years, but are now discontinued, though some smaller ones are, or recently were, in work. The bor. claimed by prescription, but did not return mem. to the H. of C. till the reign of Elizabeth, from which period two were regularly elected, till the passing of the Reform Act, by which it was disfranchised. The annual value of property, in 1815, in the entire parish, was £25,550. In its ancient church are some curious monuments of the old families of Champernowne and Ferrers.

BEERBHOOM, or BIRBOOM (*Virabhumi*, the land of heroes), a district of Hindostan, prov. Bengal, chiefly between lat. 23° 25′, and 24° 25′ N., and long. 86° and 88° E.; having N. the distr. Bhauguipore; E. Moorshedabad and Nuddea; S. Burdwan and the Jungle Mehals; and W. Ramgur. Area, 3870 sq. m. Pop. (1822) 1,387,065. Much of it is hilly, covered with jungle, and thinly inhabited; there are no navigable streams, which impedes its cultivation and trade; but the roads and bridges are kept in good

under by government convicts, and its population and prosperity are increasing. Good coal and iron ore are found; the latter is worked in numerous native forges, supplied with fuel from extensive forests. The other most important products are rice, sugar, and silk. The land revenue in the year 1839-40 was 691,876 rup. Highway depredations are frequent, especially by the petty hill chiefs in the W.; the head-quarters of the judicial establishment are at Soory; the other chief towns are Nagore, Noony, and Serampore. In 1801 the Hindoos were to the Mohammedans as 30 to 1. (*Hamilton's E. I. Gaz.*, i., 246; *Reports on the E. I. Affairs, Append.*, iii.; *Revenue Map*, i., 702.)

BEER-REGIS, a parish and market town of England, co. Dorset, hund. of same name. Pop. of par. 1483. The town is situated on an affluent of the Piddle, 7 m. N.W. Wareham. It has a good church, with some monuments. Its annual fair, held on Woodbury Hill, 18th September and three following days, used to be one of the most important in the county for the sale of cattle, horses, &c.; and is still very considerable.

BEES (ST.) HEAD, a cape of England, being the most westerly point of the county of Cumberland, about 3 m. S.W. Whitehaven; lat. 54° 30′ 55″ N., long. 3° 37′ 24″ W. It is composed of abrupt, high, rocky cliffs; and is surmounted by a light-house, exhibiting a fixed light, having the lantern elevated 333 feet above high water mark.

BEESKOW, a town of Prussia, prov. Brandenburg, on the Spree, 18 m. S.W. Frankfort on the Oder. Pop. 3000. It is the seat of a court of justice, and has manufactures of cloth and linen, with breweries, tanneries, and lime-kilns.

BEFORT, or BELFORT, a town of France, dep. Haut-Rhin, cap. arrond., on the Savoureuse, 38 m. S.S.W. Colmar. Pop. 5687. When this town was ceded by Austria to France, in 1648, it was not fortified; but the importance of its position for the defence of the plain to the E. of the Vosges being obvious, works were constructed on a new principle, by Vauban, which made it a fortress of the second class. It consists of two parts—the high and low town; is well built; has large barracks, a handsome church, a college, a public library, containing 20,000 volumes, and a tribunal *de premiere instance*. Belfort has iron-foundries, with fabrics of iron-wire, printed calicoes, hats, paper, &c.; and is the entrepôt of most part of the trade of France with Alsace, Lorraine, Germany, and Switzerland. (*Hugo*, art. *Haut-Rhin*.)

BEG (LOUGH), a small lake of Ireland, about 2 m. from the N.W. corner of Lough Neagh, with which it is connected by the river Bann. (*See* LOUGH NEAGH.)

BEGARD, a town of France, dep. Côtes du Nord, cap. cant., 3 m. N.W. Guingcamp. Pop. 3503.

BEHABAN, a town of Persia, prov. Fars, on an extensive and fruitful plain, about 3 m. E. from the ruins of the ancient city of Aragian, and 130 m. W.N.W. Shiraz. Mr. Kinneir says that the walls are about 3 m. in circumference, and that he was informed by the governor that the population amounted to about 10,000. It is the residence of a Beglerbeg. (*Kinneir's Persia*, p. 72.)

BEHRING'S STRAIT, the channel which separates the N.E. corner of Asia from the N.W. corner of America, and which connects the North Pacific with the Arctic ocean. It is formed, in its narrowest part, by two remarkable headlands, the extreme points E. and W. of the continents to which they belong; Cape Prince of Wales, on the American coast, in lat. 65° 46′ N., long. 168° 15′ W.; and East cape, on the shore of Asia, in lat. 66° 6′ N., long. 169° 38′ W. The distance between these points is about 36 m.; but N. and S. of them, the land on both sides rapidly recedes, and, on the N. especially, it trends so sharply, that the name of Strait is not very applicable to any part beyond the capes in that direction. It is usual, however, to regard it as extending along Asia from Tchukotskoi Noss, in 64° 13′ to Serdre Kumen in 67° 3′ N., which gives it a length of 400 m.: its width between Tchukotskoi Noss (173° 24′ W.) and cape Rodney, on the opposite shore of America (166° 3′ W.), is about 250 m.

The land on both sides is considerably indented, the Asiatic shore especially exhibiting several extensive and commodious bays, as St. Lawrence, Metchickma, and others; but the country is not of a kind to tempt navigators to its coasts, which are generally steep and rocky, very bare of wood, and not at all abundant in other vegetation. The water has an equal, but not great depth. Cook remarks, that, on both sides of the strait, the soundings are the same, at the same distance from the shore: that near land, he never found more than 23 fathoms; and by his chart it appears that he *nowhere* found more than 30. Shoal water appears to be principally confined to the bays and inlets on the American side. There are a few small islands scattered here and there along the strait; and one of some size, St. Lawrence or Clerke's island, lies at a short distance S. from its entrance. The temperature is low; by the end of August the thermometer sinks to the freezing point, and N. of the two capes, there is always a store of ice which the heat of summer is quite powerless to disperse. It need scarcely be added, that the strait is frozen over every winter. Fogs, and hazy weather, are very common, almost, indeed, perpetual; for, though the summer sun is above the horizon for a very considerable time, yet he seldom shines for more than a few hours, and often is not seen for several days in succession. The animals on both sides the strait are similar, as might be expected from the proximity of the continents, and the annual freezing of the water; they consist of the common fur-bearing tribes and birds of the Arctic regions, but not in great numbers. It might be reasonably presumed that a corresponding similarity would have been observed in the human race on each side of the channel; but this is not the case: the Tchutski (Asiatics) are long-faced, stout, and well made; while the Americans are of low stature, with round chubby faces, and high cheek bones. The Asiatics, also, appear to possess more arts, to be more refined, in short, to be of a superior race. On both shores, the principal occupations appear to be hunting and fishing, for the latter of which the waters are well fitted, being much more abundant in life than the barren land. Whales frequent the strait, and the walrus (morse) seems to be more abundant here than in any other part of the world. The flesh of the latter creature is fit for food (*Cook's Third Voy.*, ii., p. 457), and it appears probable that the natives of the coasts feed also upon the whale.

In 1728, Vitus Behring, a German in the service of the Empress Catherine, sailed from Kamtchatka, in the view of discovering whether Asia were or were not terminated by the sea towards the N.E: He reached the Serdre Kumen, and laid down the Asiatic coast in a manner to call forth the unqualified approbation of Cook. In a second voyage to explore the American shore, he unfortunately perished under circumstances of great misery. Behring may be considered as having settled the fact of the existence of this strait, and therefore it is most properly called by his name; but the complete discovery was reserved for Cook, who, in 1788, surveyed the whole length of both coasts, with a precision and accuracy which left nothing for after voyagers to perform, and which has made the geography of this remote and barbarous region as precise as that of our own country. It may, perhaps, be interesting to know, that a very old *Japanese* map of the world, now in the British Museum, lays down the leading features of the strait with surprising accuracy. (*Russian Voyages and Discoveries*, p. 48; *Cook's Third Voyage*, p. 438, 467-475, &c.; iii., p. 242, &c.; *Billings*, p. 239-265, &c.)

BEHRING'S ISLAND, a small island in the Pacific; lat. 55° N., long. 165½° E., the most W. of the Aleutian chain. It is rocky and desolate, without inhabitants, and only remarkable as the place where the great navigator, whose name it bears, breathed his last. After suffering great hardships in his attempt to explore the coast of America (*see last article*), the scurvy broke out among his men, and in the attempt to return to Kamtchatka, he was wrecked on this barren rock, where was neither food, except marine animals, nor covering, except fine sand, in which the captain and crew attempted to screen themselves from the effect of an Eastern winter, and in which the former died worn out by disease and disappointment, Dec. 8, 1741. (*Russian Voy. and Discov.*, p. 97.)

BEILA, or BELA, an inland town of Beloochistan, cap. prov. Lus, on an elevated rock on the N. bank of the Poorally, lat. 26° 11′ N., long. 66° 36′ E., and 50 m. N. of the Indian ocean. It contains about 2000 houses, 300 of which belong to Hindoos. The streets are narrow, but the bazar is neat, and the town generally clean and dry; on the N.W. it is protected by a tolerably good mud wall; elsewhere it has no external defence. (*Pottinger's Trav.*, p. 19.)

BEILAN, a town of Syria, near the sea, 9 m. S.E. Iskenderoon; lat. 36° 29′ 30″ N., long. 36° 17′ E. Pop. uncertain, but, as the town is the residence of many rich families, it cannot be inconsiderable, probably from 4000 to 5000.

The houses are of stone, with flat roofs, occupy both sides of a mountain gorge, and are so disposed that the terraces of the lower buildings serve as streets to those above. A large stream rushes through the middle of the town, and in winter, cascades pour down on every side. A considerable number of aqueducts, some of them very ancient, conduct this abundant supply of water to the houses of the inhabitants.

Beilan gives name to the mountains among which it stands (an. *Amanus*), the S.W. termination of the Taurus. The summits of these mountains are usually snow-topped; hence the winter cold is very severe, but the summer climate delightful, and, at all times, the atmosphere is pure and salubrious.

The town was formerly much frequented by the inhabitants (especially Europeans) of Aleppo and Iskenderoon, as a refuge from the burning heats and unwholesome vapours of the plains during the summer. The decline of these pla-

ces has affected Beilan, but its natural advantages have drawn to it a great many wealthy Turks, who find a farther inducement to reside here, in the fact, that, though nominally a part of the pachalic of Aleppo, the town is really governed by a sheikh, elected by the inhabitants from among themselves. In 1832 Beilan was the scene of a decisive battel between Ibrahim and Hussein, pachas. (*Volney*, ii., 135, 136; *Robinson*, ii., 279–281.)

BEJA (an. *Pax Julia*), a town of Portugal, prov. Alentejo, cap. Camarca, 85 m. S.E. Lisbon. Pop. 5450. It is surrounded by walls, flanked with forty towers, and defended by a castle. It has a cathedral, a rich hospital, a Latin school, a fabric of earthenware and tanneries.

BEJAPOOR, a large prov. of the Deccan, Hindostan, comprised partly in the British dominons and partly in those of the rajah of Sattarah and the Nizam, and containing the Portuguese territory of Goa. It extends from 15° to 18° N. lat., and between 73° and 78° E. long., having N. prov. Aurungabad; E. the same prov. and that of Hyderabad; S. the Toombuddra and Wurda rivers, and district of Canara; and W. the Indian ocean: length 320 m., by 200 m. average breadth.

Its W. districts are very mountainous, being intersected by the W. Ghauts; and there are numerous strong hill positions on isolated eminences, with perpendicular sides, often crowned by fortresses. The principal rivers are the Krishna or Kistnah, Toombuddra, and Beema. The Krishna is remarkable as forming the boundary between two regions in which distinct languages and species of building prevail; N. of that stream the Maharatta tongue is spoken, and the roofs of the ordinary houses are pitched and thatched; S. of its banks the Canara language prevails, and the houses are flat-roofed, and covered with mud and clay. The Ramooses, a tribe resembling the lower castes of the Maharattas, with the thievish habits of the Bheels, but more subdued and civilized, inhabit the hills joining the Ghauts in Sattarah, between Poonah on the N., Colapoor S., and Bejapoor E. They are robbers by trade, plundering the country when not kept in subordination; addicted to hunting, &c., and neither tilling the ground, nor disposed to any fixed or laborious employment. They do not eat beef, but are without caste.

After the dissolution of the Bhamenee empire of the Deccan, in 1489, Adil Shah established a dynasty in Bejapoor, which lasted till 1689, and was singular in conferring Hindoo titles of distinction, which, among other Mohammedan governments, were always Arabic. It next became nominally subject to Aurungzebe; then really subject to the Maharattas: after suffering all the evils of anarchy from 1804 to 1818, most part of it became, in the latter year, subject to the British; but portions of it have since that period been again entrusted to the rule of subsidiary native princes. (*Hamilton's E. I. Gaz.*, p. 159–162.)

BEJAPOOR (*Vijayapura, the impregnable city*), the anc. cap. of the above prov. under the Adil Shah dynasty, stands near the right bank of a tributary of the Krishna, 115 m. S.E. Sattarah, lat. 16° 46′ N., long 75° 47′ E. In the beginning of the 17th century it was a city of great size and strength; but at present it consists merely of an immense number of mosques and other public buildings, many of which are in a state of partial decay; and a scanty population scattered among their ruins, and occupying miserable huts. "As the traveller approaches the city from the N., the great dome of Mahomed Shah's tomb is discerned from the village of Kunnoor, 14 m. distant. A nearer view gives the idea of a splendid and populous metropolis, from the innumerable domes and spires and buildings which meet the eye." "On entering, the illusion vanishes; jungle has shot up in the partly obliterated streets, and the visiter may now lose himself in the solitude of ruins, where crowds were formerly the only impediments to a free passage." It comprises an outer fort, or old city, and an inner fort or citadel, partly enclosed by, and laying E. of, the former: the space between the walls of these two is said to have been sufficient for the encampment, in 1689, of 15,000 of Aurungzebe's cavalry. The walls of the outer fort are 8 m. in circ., and but little dilapidated, though the outworks be in great part destroyed; the inner fort, on the contrary, is fast crumbling away. The old city (besides a stone bazar, its only frequented spot) contains the mausoleum and mosque of Ibrahim Adil Shah, built on a basement 130 yards long, by 52 yards broad, covered by an immense dome raised on arches, and so elegant as to bear a favourable comparison with the most celebrated Mogul sepulchres of upper Hindostan. This structure, as well as others in Bejapoor, is distinguished by rich overlapping cornices, and small minarets peculiar to this place, and terminating in a globe or pinnacle, instead of the open square turrets common in the N. of India. The inner fort, the S. walls of which bound Bejapoor in that direction, encloses the ruins of the palace, the great mosque, an imposing edifice in good repair, the celebrated mausoleum of Mahomed Shah, and a multitude of other tombs and mosques. Sir James Mackintosh, who visited this city, says, that the elaborate stonework in some of these is exquisite, and not surpassed by that of any cathedral he had ever seen. Here, also, is a low Hindoo temple, the only building of the kind in or about Bejapoor; it is in the earliest and rudest style of art, and popularly thought to have been raised by the *Pandoos* (a mythological race): the military Khajoos (*treasury*) has massive stone chains cut out of solid blocks suspended from its angles. Excepting the palace, little wood having been used in the construction of the public buildings, they are in tolerable preservation. Two parallel streets (one nearly 3 m. long and 50 feet wide, paved throughout and regularly built), intersect the inner city, the most populous part of which adjoins the great mosque. Mud hovels are stuck up here and there among the ruins, but the space within the walls is mostly a wilderness covered with grass and shrubs. There are here some enormous brass guns, formerly belonging to the fort, one of which would require a ball weighing 2646 lbs. For 5 m. W. of the fort the country is studded with ruins, chiefly Mohammedan tombs. (*Hamilton's E. I. Gaz.*, i., 162, 163; *Mackintosh's Memoirs*, 2d edit., i., 463.)

BEJAR, a town of Spain, prov. Salamanca, 49 m. S. Salamanca. Pop. 4700. It is distinguished by its woollen manufactures, which have been much improved and extended since 1824. A large fair is held here on the 25th of Sept. and the two following days. (*Miñano.*)

BEJETSK, a town of Russia in Europe, gov. Twer, cap. district, on a lake near the Mologa, 62 m. N.N.E. Twer. Pop. 3000. It is an old town, *de triste apparence*, with thirteen churches and two convents. (*Schnitzler, La Russie, &c.*)

BEIRA, a prov. of Portugal, which see.

BEIT-EL-FAKIH (vulg. *Beytlefackie*), in a town of Arabia, cap. of, and giving name to, one of the six depts. of the Tehama of Yemen Proper, about 100 m. E.S.E. Loheia, and 90 m. N. Mocha; lat. 14° 31′ N., long. 43° 23′ E. A large and strong citadel (the residence of the dola), and a mosque, are the only public buildings. A few of the houses are of stone; but the majority are mere huts of wicker-work or clay. It is unwalled. There is no account of the pop.; but it may, perhaps, be estimated at from 7000 to 8000. It is the great centre of the coffee trade of Yemen; the berries are brought from the neighbouring mountains half a day's journey distant; the best in May, but the general supply is almost constant throughout the year. The ports of Loheia, Hodeida, and Mocha, are supplied from hence (the last taking annually about 22,000 tons); in addition to which, caravans from El-Hedjaz, Oman, Persia, Syria, Egypt, &c. resort to the town, in which merchants of almost every trading nation are settled. All purchases are made for ready money.

Beit-el-Fakih (that is, *house of a saint*), derives its origin and name from a famous sheikh, whose tomb in this neighbourhood became an object of veneration; and to whose memory an annual festival of three days is observed, during which miracles are sometimes said to be performed. The town, which rose in consequence of pilgrimages to the tomb, gradually drew to itself the coffee trade, which before had centred in Zebid, a town about 20 m. to the S. (*Niebuhr, Descr. de l'Ar.*, 197, 198; *Voy. en Ar.*, i., 253–256.)

BEITH, a parish and town of Scotland; the latter is situated in the co. of Ayr, 9 m. S.W. Paisley, but the par. extends into Renfrew. Pop. of par. 5113, of which about two thirds belong to the town. The latter, which is pleasantly situated on a rising ground, has grown into importance since the earlier part of last century. It was at one time famous for its manufacture of linen; it was afterward no less eminent in the department of silk gauze; but cotton has of late constituted its staple manufacture. In this respect it may almost be regarded as a suburb of Glasgow. It has also two flax and three corn mills. A great number of the female inhabitants are engaged in tambouring and flowering muslin for the markets of Paisley and Glasgow. The line of the Glasgow, Paisley, Kilmarnock, and Ayr Railway, which is now (1839) being constructed, passes close by Beith; a circumstance which will give a great impulse to the prosperity of the place. The limestone, freestone, ironstone, and coal, with which the neighbourhood abounds, will, when the railway is open, become more available, and find a ready market. The parish of Beith, which borders on that of Dunlop, is famous for its dairies; and the one parish produces as much of what is called *Dunlop* cheese as the other. Beith has a town-house, built by subscription, a parish church, and two dissenting chapels, two branch banks, and a subscription library.

BEKES, a town of Hungary, cap. of an extensive co. of the same name, at the confluence of the Black and White Koros, 40 m. S.W. Grosswardein; lat. 46° 46′ 16″ N., long. 21° 7′ 33″ E. Pop. 20,000. It has three churches, and a considerable trade in cattle, corn, and wine, the produce of the surrounding country. It was formerly fortified.

BELAIR, p. v., capital of Harford co., Md., 22 m. N.N.E. Baltimore, 53 m. N. by E. Annapolis, 63 W. It contains a

court-house, jail, a Methodist church, an academy, and a female seminary, a printing-office, and about 150 inhabitants.

BELALCAZAR, a town of Spain, prov. Cordova, 48 m. N.N.W. Cordova. Pop. 2800.

BELASPOOE, an inland town of N. Hindostan, cap. of the Cahlore rajah, on the left bank of the Sutleje, 1465 feet above the level of the sea; 180 m. N. Delhi, 300 m. N.N.W. Agra; lat. 31° 19′ N., long. 76° 45′ E. In 1810, it contained 3000 houses: it is regularly built; the houses of stone, cemented with mortar, and the streets roughly paved. The Sutleje is here about 100 yards broad, when its waters are lowest. In 1822, this town, with the rest of the Cahlore territory, devolved to the British government, on the death of its previous sovereign. (*Hamilton's E. I. Gaz.*, i., 164.)

BELBEIS, a town of Lower Egypt, on the most W. arm of the Nile, 29 m. N.E. Cairo. It was occupied in 1798 by Napoleon, who repaired its fortifications; but they are now of little importance, the walls consisting chiefly of mud. It is ill built, has several mosques, and its population has been estimated at 5000. It is supposed by D'Anville to occupy the site of the ancient Pharbætus; but the preferable opinion seems to be that the site of Pharbætus is identical with Horbeet. Belbeis is a place of considerable importance, from its situation on the road to Syria.

BELCASTRO, a town of Naples, prov. Calabria Ultra, 15 m. N.E. Catanzaro. Pop. 3400. It is situated on a rock, is the seat of a bishopric, has a cathedral, a diocesan seminary, and a *mont de piété*. Large quantities of cattle are bred in its vicinity.

BELCHERTOWN, p. t., Hampshire co., Mass., 11 m. E. Northampton, 78 m. W. Boston, 362 W. Incorporated in 1761. Carriages and wagons are manufactured to the amount of $30,400 annually. The village is on elevated ground, and contains three churches, two Congregational and one Baptist; a classical school, and 40 dwellings. The town contains five stores, five grist-mills, nine saw-mills, one academy, 41 students, seventeen schools, 763 scholars. Pop. 2554.

BELEM, a suburb of Lisbon, which see.

BELFAST, a sea-port town of Ireland, co. Antrim, prov. Ulster, at the confluence of the Lagan with Carrickfergus bay, 102 m. N. Dublin; lat. 54° 36′ N., long. 5° 59′ W. At a very early period it was known as a fortified station, and on the arrival of the English it was farther secured by the erection of a castle, of which, however, no trace now exists. It owes its present importance to its commerce and manufactures, which have raised it to the first rank among the great marts of Ireland. The pop., in 1821, was 37,277, and, in 1831, 58,387, being an increase of 21,010 in 10 years, or at the rate of 42·948 per cent. A census taken in 1834, but believed to be very incorrect, gave a pop. of 60,763, viz., of the Estab. church, 16,388; Rom. Cath. 19,712; Presbyterians, 23,576; other persuasions, 1137. At present (1839) the pop. is supposed to amount to about 70,000. There were, in 1831, 7750 inhabited houses, giving 6·875 individuals to each house.

Though lying low, a great portion of the town not being more than 6 feet above high water mark, it is very healthy. The Lagan forms its S. boundary, separating it from the adjoining county of Down, in which is the district of Ballymacarret, considered as a suburb of Belfast. The river is crossed by three bridges; one, the eldest, consisting of 21 small arches, the others of modern construction.

The town has a cheerful and lively appearance. The houses, mostly of modern construction, are of brick; the streets are wide, airy, well paved and flagged, clean, and lighted with gas. Its principal ecclesiastical buildings are the parochial church, with a tower of the Ionic order; St. George's church, or chapel of ease, with a very fine portico; Christ church; two Rom. Cath. chapels, nine Presbyterian places of worship, one of very elegant architecture; three meeting-houses for Seceders, two for Covenanters, six for Methodists, one for Independents, and one for Quakers; exclusive of five places of worship in Ballymacarret.

Of the buildings erected for the purposes of education, the principal is the Royal Academical Institution, which originated in a voluntary subscription of the inhabitants in 1807, by whom a fund of above £25,000 was raised for the buildings, and the endowment of professors and teachers. It was afterward incorporated by act of parliament, and receives an annual parliamentary grant of £1950, taken at an average of the seven years ending with 1837. It consists of two departments; one elementary, the other for the higher branches of literature and science. The eight professors of natural philosophy, moral philosophy, logic and belles-lettres, anatomy and physiology, mathematics, church history, Hebrew, and Greek and Latin, receive annual salaries of £150, besides students' fees; and two professors of divinity, £100 each, with fees. The professors of chemistry, midwifery, materia medica, surgery, and botany, and two of biblical criticism, derive their incomes solely from fees. There are also two head masters of the classical and English elementary schools. The number of pupils averages about 460. The affairs of the institution are conducted by a board of managers, and another of visiters, elected by and from among the subscribers. The building is of plain appearance, and is surrounded by a large enclosed area. The Belfast academy was also founded by private subscription some time previously to the academical institution. It consists of well-conducted classical and mercantile schools. The Lancasterian school is a large building; there is also a public school in Brown-street, and another connected with the board of national education. The private schools, both male and female, are numerous. The number of pupils in the free and charity schools is about 2800, and those in private schools 6500. The other literary and scientific institutions, all of which are wholly supported by the voluntary contributions of the members, are the Society for Promoting Knowledge, founded in 1788, with a library of about 10,000 vols.; the Literary Society, for the discussion of subjects of general literature, science, and art, founded in 1801; the Natural History Society, founded in 1821—the meetings of this institution are held in a very elegant building, erected by the contributions of the members, who have also formed a large botanic garden near the town. There are also four public news rooms, and *seven* newspapers, some of them very ably conducted, are published in the town.

The poorhouse, for the reception of aged and infirm paupers and destitute children, is the principal charitable institution. It is a large building, erected by means of a lottery and a public subscription, in an elevated situation, at the N. extremity of the town, and is incorporated by act of parliament. It maintains about 500 inmates, of whom those capable of work are employed in useful manufactures, or in its domestic arrangements. The funds amount at an average to £2500 per ann. The House of Industry is a mendicity asylum, in which paupers are employed in useful branches of industry, and occasionally assisted with food and clothing; strangers are also relieved and assisted in proceeding to their respective places of destination. The Fever Hospital, with a dispensary attached to it, is a handsome building, and can accommodate 220 patients: its annual income averages £1000. A lying-in hospital, also a new and handsome building, is maintained by public subscription. The district lunatic asylum, for the counties of Antrim and Down, and the town of Carrickfergus, situate about 1 m. from the town, in an enclosed area of 33 acres, has accommodation for 250 inmates: the number of patients on the 31st March, 1839, was 205; 107 being males and 98 females. The total expense of the establishment during the year ending as above, was £3722, the average cost of each patient being £19 1*s.* 6*d.* There are also two female penitentiaries. The only places of amusement are a theatre, occasionally opened for dramatic performances, and a suite of rooms in the Commercial Buildings for balls, assemblies, and concerts. The exchange building, erected at the expense of the Marquis of Donegal, is now used only for the election of magistrates and other corporate purposes. Adjoining the town are barracks for infantry and artillery.

Belfast was incorporated by James I. in 1613. The corporation consists of the sovereign of the town, the lord and constable of the castle, and 12 free burgesses, privileged to make an unlimited number of freemen, of which class there are now none. The borough returned two mem. to the Irish parl.: at the Union it obtained leave to send one mem. to the H. of C., and in 1832 the Reform Act conferred on it the privilege of returning two mem. The right of election, which had been previously confined to the members of the corporation, was at the same time given to the £10 householder, and a new and somewhat more extended boundary was laid down for elective purposes. The parl. constit. in 1837–8 was 2767. General sessions for the county are held here four times a year; there is also a court of record for pleas of debt to the amount of £20; a manor court, a court leet, and a petty sessions court twice a week (at which last the sovereign presides). The town is a constabulary station, and is the residence of the stipendiary magistrate for the co., who holds a court of petty sessions twice a week. Persons committed for graver offences are sent to the county jail in Carrickfergus; those on slighter charges, to the house of correction, a plain brick building, where the prisoners are employed chiefly in breaking stone for the roads. Notwithstanding its limited accommodations, there being but 36 cells for an average of 73 prisoners, its character for internal economy, both as to cleanliness and discipline, stands high. The paving, lighting, and cleaning of the town is superintended by a board of police, empowered to levy a local rate for these purposes, the annual average amount of which is about £9000.

The linen manufacture has been the chief source of the present prosperous state of Belfast. To accommodate the trade of which it is the centre, the White Linen Hall, a large quadrangular building enclosing a spacious area, was erected by subscription in 1765; and about the same period,

the Brown Linen Hall, an uncovered area of smaller dimensions, was opened for the sale of unbleached linens. There are now (1839) in the town and its vicinity 20 mills for spinning linen yarn, which employ in all nearly 7000 hands: and there are several factories for the weaving of linen cloths, employing about 1000 hands. The cotton manufacture, introduced in 1777, is carried on in four factories, which employ about 1100 hands; but the business is declining, and the probability seems to be, that at no very distant period it will be entirely given up. Four large and several smaller foundries are employed, chiefly in making the machinery and implements for the linen and cotton works. There are two vitriol works. The tanning of leather, formerly one of the chief trades, is on the decline; but the manufacture of ropes, canvass, and sailcloth is carried on with much vigour. There are two large ship-yards, in which vessels of all dimensions, up to 400 or 500 tons, are built. There are two distilleries, twelve breweries, several large flour and corn mills, with numerous manufactories for minor articles of consumption, such as soap, candles, starch, &c., and a paper-mill. In 1836, fifty steam engines, of the power of 1274 horses, were employed in Belfast and its immediate neighbourhood.

The increase of trade and commerce has kept pace with that of manufactures. The situation of the town—at the bottom of Carrickfergus bay—has made it the chief mart for the circulation of foreign produce through the most populous and wealthy portion of Ulster. To improve this advantage, a line of inland navigation was commenced in 1787, to connect the town with Lough Neagh, partly by still water and partly in the bed of the river; but the unavoidable casualties attending this latter mode of conveyance have so retarded the progress of the vessels employed in it as to render it comparatively useless; and the inland trade is mostly carried on by the roads, which are kept in an excellent state of repair. A rail-road is in progress, for the conveyance of stone from the Cavehill to the quays; and the Ulster railway, by which the communication of the town with the interior will be greatly facilitated, will be open as far as Lisburn in the course of the present summer. There are two fairs; one on the 1st and 2d August, the other on the 28th and 29th October. The charter market-day is on Friday, but well-supplied markets are held every day. There are three native banking establishments; the Northern, Belfast, and Ulster; each of which has branches in the country, and branches of the Bank of Ireland, and of the Provincial Bank have also been established here. The Savings' Bank, commenced in 1811, was one of the first institutions of the kind in Ireland: its affairs are now transacted in a building erected in 1830 out of the accumulations of the fund. The deposites amounted, on the 20th November, 1838, to £94,513.

Previously to 1637 Belfast was a creek of the port of Carrickfergus; but the privileges of the latter place having been purchased in that year by the crown, the custom-house was transferred to Belfast. The bay is also peculiarly favourable to the purposes of commerce, being safe and easy of access. Large vessels lie at the pool of Garmoyle, about 4 m. from the town; those of smaller draught discharge at the quays, which are numerous and convenient. Within the last few years several docks have been opened, one of which, 1200 ft. in length by 300 in breadth, admits vessels adapted for the timber trade. The superintendence of the harbour is vested in the Belfast Corporation, established under an act passed in 1831, which gives it large powers towards the improvement of the quays and harbour. A plan is in contemplation of carrying out embankments or quays to the pool of Garmoyle, so as to facilitate the loading and discharge of large vessels. The Chamber of Commerce, a voluntary association of merchants, founded in 1783, was revived in 1802. Mercantile transactions were formerly carried on in the Exchange, but latterly in the Commercial buildings, a fine range of apartments erected in 1823, at an expense of £20,000, by a joint stock company of 200 shareholders: the buildings, as already stated, contain, besides the portion appropriated to commercial purposes, a hotel, news-room, and assembly-rooms.

The trade of Belfast is greater than that of any other town of Ireland. The value of its imports and exports (foreign and coastwise), in 1835, amounted to £8,037,232, while the value of the imports and exports of Dublin, during the same year, was only £6,958,864. Of the exports from Belfast, in 1835, amounting to £4,341,794, the principal articles were:

	Quantity.	Value.
Corn, Meal, and Flour	285,953 cwts.	£148,957
Provisions	340,226 "	906,597
Linen Yarn	43,525 "	40,360
Feathers, Flax, and Tow	73,652 "	186,884
Cotton Manufactures	7,363 pack.	146,260
Linen do.	53,881,000 yards	2,694,000
Horses	2,374	35,580
Eggs	2,850,000	5,930

The imports, amounting, for the same year, to £3,695,438, consisted principally of linen yarn (£960,000), cotton and woollen manufactures, and raw cotton; tea, sugar, and other colonial products, haberdashery, coals, iron, &c. (*Railway Report*, B. 73.)

The most important branch of commerce is the cross channel trade, which, since the introduction of steam navigation, has increased to an extraordinary magnitude.

Numerous steamboats ply regularly between Belfast and the principal British ports. The passage to Liverpool, Glasgow, and Dublin, is made by them in fourteen hours each, at an average, and to London in 140 hours. There is an extensive trade with the U. States and the British colonies in N. America, and with the W. Indies, Mediterranean, Baltic, and Archangel. The number of vessels that entered inward, in 1833, was 2445, and in 1836, 2730; that of those which cleared outward in the same years, 1391 and 2047. In 1833 there belonged to the port 25,151 tons shipping, and in 1836, 34,596 tons. The customs duties, including those of Larne and Donaghadee, in the undernamed years, were,

	£		£
1829	250,889	1834	298,756
1830	234,044	1835	367,975
1831	201,947	1836	366,718
1832	216,231	1837	324,856
1833	228,945	1838	316,175

In the excise department Belfast forms part of the Lisburn district, the amount of duties of which, in the under-named years, were,

	£		£
1828	242,064	1834	168,374
1829	209,527	1835	213,877
1830	187,049	1836	219,[illegible]20
1831	226,391	1837	197,328
1832	179,487	1838	204,129
1833	151,267		

The post-office revenue for 1834 was £10,312, and for 1836, £11,785.

In the appearance of the town, and in the habits of the people, the character of Belfast is almost exclusively commercial and manufacturing. There are in it few of the landed aristocracy: its higher classes are formed chiefly of those who have attained an elevated position in society by their personal exertions, or those of their immediate progenitors. There is, therefore, little of external show, but much of internal comfort, in their domestic arrangements. The middling classes enjoy all the comforts, and many of the luxuries, of civilization; the working classes have suffered less from the pressure of distress, arising from temporary stoppages of trade, or manufacturing employment, than those of most of the other great towns similarly circumstanced: on the whole, there is to be seen here little of the aspect of destitution which marks the suburbs of most other Irish towns. The official and other documents which have supplied the data already given, show, by a review of its condition at different periods, that it is steadily and rapidly advancing in manufacturing, commercial, and literary improvements. (*Private Corresp.*)

Belfast, p. t., port of entry, capital of Waldo co., Me., 43 m. E. Augusta, 637 W. It is pleasantly situated at the head of Belfast bay, on the E. side of Penobscot river, 30 miles from the ocean. Incorporated in 1773, first settled in 1785. The harbour is spacious, and is sufficiently deep for vessels of a large class, and is rarely obstructed by ice, which renders it the great winter port of the Penobscot. It has considerable foreign and coasting trade, and is considerably engaged in the fisheries and in ship building. Its tonnage, in 1840, was 38,218. It has forty-two stores, two grist-mills, five saw-mills, two falling-mills, four tanneries, one printing-office, one weekly newspaper; one academy, 40 students, twenty-one schools, 1217 scholars. Pop., in 1810, 1259; in 1820, 2026; in 1830, 3077; in 1840, 4188.

Belfast, t., Bedford co., Pa. It has two stores, one grist-mill, five saw-mills, one tannery. Pop. 720.

Belfast, p. t., Alleghany co., N.Y., 268 m. W. Albany, 341 W. Watered by Genesee river and its tributaries. The Genesee Valley canal here leaves the river, and passes up Black creek in a S.W. direction. It contains six stores, two grist-mills, thirteen saw-mills, one falling-mill, one ropewalk, two schools, 144 scholars. Pop. 1646.

BELFORD, a market town and par. of England, co. Northumberland, Bamborough ward. The par. contains 9360 acres and 2030 inhab.; of which the town has 1354. The latter is finely situated on the great road from York to Edinburgh, and has a considerable corn-market.

BELGARD, a town of Prussia, prov. Pomerania, cap. circle, 16 m. S.S.W. Coeslin. Pop. 3000. It is situated at the confluence of the Leitznitz with the Persante, and is almost entirely surrounded by water. It has an old castle, three churches, two hospitals, and fabrics of cloth.

BELGAUM, an inl. town of Hindostan, prov. Bejapour,

presid. Bombay, distr. Darwar, in a small subdivision, of which it is the capital, 105 m. S.W. Bejapoor, 55 m. N.W. Darwar; lat. 15° 52′ N., long. 74° 42′ E. Pop. (1820) 7650. It is strongly fortified, with massive and solid walls, ramparts flanked by bastions, a broad and deep ditch, and is surrounded by an esplanade. Its interior is extensive, but covered with ruins of native buildings, among which are two ancient temples. This town is well supplied with water, and held out against the British longer than any other garrisoned by the peishwa's forces: it was, however, taken in 1818. The subdivision of Belgaum has a healthy climate; but all external trade is stopped for six months a year by the violence of the rains. A third part of the inhab. are Mahrattas, and about one sixth Mohammedans, one eighth Jains, and one ninth Brahmins. (*Hamilton's E. I. Gaz.*, i., 165.)

BELGERN, a town of Prussia, prov. Saxony, on the Elbe, 7 m. S.E. Torgau. Pop. 2800. It is very ancient, has a hospital and a town-house, before which is a triumphal column. It has some trade in corn.

BELGIOJOSO, a town of Austrian Italy, prov. Pavia, cap. distr., 9 m. E. Pavia, and 23 m. S.S.E. Milan. Pop. 3080. It is situated in a fruitful plain, between the Po and the Olona; is well built, has a magnificent aqueduct and a fine castle, in which Francis I. spent the night subsequent to the battle of Pavia.

BELGIUM (KINGDOM OF) is situated between France and Holland, and has been established since the separation of its provinces from those of Holland by the revolution of 1830. Its territory is small as compared with the great European states, being only about one eighth of that of Great Britain, while its population but little exceeds four millions. However, the important position which this country has occupied in the political, military, commercial, and agricultural history of Europe—its former celebrity in manufactures and the fine arts—and its present rapid progress in every industrious pursuit and social improvement, give it a peculiar interest.

Extent, Boundaries, Area, &c.—Belgium extends from 49° 27′ to 51° 31′ N. lat., and from 2° 37′ to 6° E. long. On the N. the boundary line is formed by Holland, along a line of 380,000 metres;* on the E. by Prussia, 377,000 metres: on the S. by France, 591,000 metres; and on the W. by the North sea, 69,000 metres.

The general outline of the territory, as determined by the treaty signed in 1831, by the allied courts of Great Britain, Austria, France, Prussia, and Russia, forms a triangular figure, of which the longest side extends on the frontier of France, from a point midway between Furnes and Dunkirk to one 9 m. S.E. of Arlon, or 5 m. E. from Longwy. The parts agreed by the treaty to be ceded to Holland are, first, a portion of the province of Luxemberg, on the E. of an irregular line drawn from the point just mentioned to one on the Prussian frontier, about 17 m. S. of Malmedy; and, secondly, the portions of Limburg on the W. of the river Meuse, including the city of Maestricht, in a deviating curve, and on the N. of a line from Stevensweert, on the Meuse, to one on the Dutch frontier, 4 m. W. of Weert. Since the revolution of 1830, the Dutch have retained possession of the cities of Maestricht and Luxemburg; of the communes of Bar-le-Duc, in the province of Antwerp, and of Saint Pierre, in Limburg; also of the forts of Lillo and of Liefkenshoek, on the banks of the Scheldt. If the treaty of the 15th of November, 1831, be executed, the towns of Maestricht, Sittard, Euremonde, Venloo, and Weert, with 124 communes in Limburg; and the towns of Luxemburg, Grevenmacher, Remich, Diekirk, Echternach, Vianden, and Wiltz, with 119 communes in Luxemburg, will belong to the king of Holland. The greatest length of the territory of Belgium from N.W. to S.E. is 64 leagues, of 5000 metres, about 193 English miles; and the greatest breadth from N.E. to S.W. is 42 leagues, or about 127 miles. The whole area contains 2,422,574 hectares,† including the portions of Luxemburg and Limburg which, though claimed by Holland, still continue to be the subject of diplomatic arrangement. The area of these disputed sections contains 477,000 hectares, so that, if appropriated by Holland, the Belgic territory will be reduced to 2,045,574 hectares, or to about two thirds of its present area.

The kingdom consists of nine provinces—Antwerp in the N., East and West Flanders and Hainault in the W., Brabant in the centre, Limburg and Liege in the E., Namur in the S., and Luxemburg in the S.E. These formerly constituted the duchy of Brabant, the marquisate of Antwerp, the principality of Liege, the seigneurie of Mechlin, the comtés of Flanders, Hainault, Louvain, and Namur, and the duchies of Limburg and Luxemburg. At the time of the Belgic revolution, in 1830, the nine provinces of Belgium formed, in conjunction with those of Holland, the kingdom of the Netherlands, which by that event was dissolved into the present kingdoms of Holland and Belgium.

* A metre = 3·281 English feet. † A hectare = 2·471143 English acres.

Civil Divisions.—Brussels is the capital, and seat of government, for the administration of which the kingdom is divided into the nine provinces above enumerated, forty-four arrondissements, ninety-eight towns, and 2640 rural communes. For military purposes it is divided into nine commanderies, corresponding to the nine provinces; and, lastly, for judicial proceedings, it is divided into twenty-nine arrondissements and 237 cantons.

The following Table exhibits the Numbers of these Divisions in each Province.

Provinces.	Chief City.	No. of Towns.	No. of Villages.	No. of Administrative Arrond.	No. of Judicial Arrondissements.	No. of Judicial Cantons.	No. of Communes.
Brabant . . .	Brussels . .	8	388	3	3	34	396
Antwerp . .	Antwerp . .	4	136	3	3	19	141
W. Flanders .	Bruges . .	15	225	8	4	36	238
E. Flanders .	Ghent . . .	11	279	6	3	34	293
Hainault . .	Mons . . .	21	398	6	3	32	404
Liege	Liege . . .	7	320	4	3	28	319
Limburg . .	Maestricht .	8	309	3	3	30	311
Luxemburg . .	Luxemburg .	17	940	3	4	. .	290
Namur . . .	Namur . .	5	342	3	2	21	339
9	9	96	3339	44	28	234	3655

Belgium possesses twenty-one fortified towns, besides forts, viz., in W. Flanders, Ostend, Nieuport, Furnes, Courtrai, Ypres, and Menin; in E. Flanders, Audenarde and Termonde; in Antwerp, the city of that name and Lierre; in Hainault, Mons, Tournai, Ath, and Charleroi; in Namur, the city of that name, Phillippeville, and Marianburg; in Limburg, Maestricht, Hasselt, and Venloo; and in Luxemburg, the city of that name. At present, the fortresses of Maestricht, Venloo, and Luxemburg, are garrisoned by Dutch and Prussian troops, as being claimed by Holland and the German confederation.

General Aspect of the Country.—The north and west provinces of Belgium, in their flatness, fertility, dykes, and canals, may be regarded as a continuation of Holland. This portion of the kingdom is so densely peopled, that it presents to the traveller the appearance of one vast continuous village. The south and east provinces have an opposite character; they are generally more thinly peopled, and less cultivated, and exhibit a most irregular, mountainous surface, with tracts of marshy land, and extensive forests. With the exception of these hilly districts in the south and east, the whole territory presents a series of nearly level plains, traversed by numerous streams, delightfully diversified by woods, arable lands, and meadows of brilliant verdure, enclosed by hedge-row trees, and thickly studded throughout with towns and villages.

In surveying the general face of the country, and proceeding from W. to E., we observe that the coast is uniformly flat, and formed of fine loose sand, which, by the frequent action of the sea winds, is raised into gently undulating downs, or *dunes*. These banks of sand extend, nearly without interruption, from Dunkirk, along the entire coasts of Belgium and Holland. In breadth they vary from one to three miles, and rise in the highest parts to 40 or 50 feet. They are formed entirely by the operation of the sea winds, in elevating the deep sands of the shore; and since they serve as a natural barrier to the encroachments of the ocean, it is an object of great importance to check their constant tendency to advance inland. For the purpose, therefore, of rendering the sand compact and stationary, the *dunes* are sown with a species of reed, *arundo arenaria*, until a sufficient stratum of vegetable mould is collected to support plantations of firs (*Pinus maritimus*), with which most of the Belgic *dunes* are thickly covered.

Though no part of the surface of Belgium be actually below the sea level, like that of Holland, yet, in common with the latter, its shore, in some parts, is defended from the encroachments of the sea by broad and elevated dykes; and whole districts, which formerly were alluvial morasses, have been drained and embanked, or have been gained entirely from the bed of the ocean. The embanked enclosures of this description are called *polders*. On the sea coast, and along the lower banks of the Scheldt, they are very numerous, and some contain above 1000 acres of rich alluvial soil, which is appropriated with great advantage to the purposes of agriculture, under which head will be found some farther account of them.

To the S.E. of the dunes, the provinces of West and East Flanders, and Hainault, form a far-stretching plain, of which the luxuriant vegetation indicates the indefatigable care and labour bestowed upon its cultivation; for the natural soil consists almost wholly of barren sand, and its great fertility is entirely the result of very skilful management, and judicious application of various manures.

The undulations in the surface of the northern districts are so slight that, from the lofty top of the cathedral of

Antwerp, the view, on a clear day, extends on every side over a radius of nearly 50 miles, including, on the E., the city of Turnhout; on the W. that of Ghent; and on the S. the city of Mechlin: the whole panorama towards the W. and S. displaying a beautiful succession of vividly verdant fields, varied by masses of wood, streams, and picturesque villages. Around the cities of Antwerp and Mechlin are great numbers of elegant and highly ornamented country mansions, belonging to the wealthy classes. The northern parts of the provinces of Antwerp and Limburg are less varied and fertile than any others. The soil is for the most part composed of pure sand, very partially mixed with argillaceous earth. The largest unbroken plain in the kingdom is called Campine, and comprises the N.E. portion of Antwerp, and the N.W of Limburg. It consists of marshes, desolate moors, peat bogs, and extensive tracts of sand, covered with heath, broom, and stunted firs. Some parts, however, contain natural prairies, and serve for pasturage to herds of excellent horses; and the portion of Limburg near the banks of the Meuse is fertile and carefully cultivated. The scenic character of Brabant resembles that of Flanders, with respect to its beautiful fields, and gardens, and luxuriant trees; but the surface is more varied by hills and valleys. In the province of Liege, the N. bank of the Meuse overlooks a fertile plain, producing all kinds of grain and vegetables, and affording excellent pasturage for cattle and for dairy husbandry; but the country on the S. bank of the river belongs to the mountainous district which constitutes the provinces of Luxemburg and Namur. Much of this comparatively wild and rugged region is covered with dense forests, which still furnish an asylum for the wild boar, the roe-buck, the bear, and the wolf. The surface is very irregularly varied, in some parts by large tracts of barren heath and marshy lands, and in others by ridges of hills, mantled on the slopes and summits with masses of dark woods, and by precipitous rocks, whose bare escarpments form a striking contrast with the brilliant verdure of the well-cultivated valleys they enclose. The hills are often intersected in different directions by deep ravines and rapid streams; and the romantic beauty of the scenery is much heightened by numerous ruins of old feudal castles. The course of the Meuse, from Dinant to Maestricht, offers some very picturesque combinations of landscape and rock scenery. The river is closely shut in by lofty cliffs of various hues, some of which are surmounted by ruins of modern villas. Here they overhang the river, and are beautifully shrouded with bushes of box, wild myrtle, and ivy; there they slope away to its margin, or are vertically cleft asunder, and present through the chasm a delightful view of highly-cultivated farms and villages half hidden by trees in the distant uplands. The wild state of nature in Namur, Liege, and Luxemburg; the various fossil and mineral products; and the charms of the scenery, have long made this part of the country a favourite resort of the naturalist, the geologist, and the painter. All around the city of Liege, and the celebrated springs of Spa, ornamental villas of the rich are thickly stationed, where vineyards occupy the declivities of the hills, and hop-gardens flourish in the valleys.

Climate, Meteorology.—The climate of Belgium is less chilly and damp, and more temperate and favourable to health than that of Holland; however, it is certainly humid, compared with France and Germany, and may be considered as very similar to England, except that it is still more subject to frequent variations, with a tendency to excess. The provinces differ considerably in the character of their atmosphere. In general, the air in the more elevated central and S.E. districts is clear, fresh, and salubrious; but in the low N.W. plains it is damp and heavy. In the provinces of Flanders and Antwerp the N.W. winds from the sea produce a cold and ungenial temperature throughout the winter, which is long and often wet; and their influence upon the currents of the rivers, which are wholly unsheltered by hills, render the adjacent country liable to disastrous inundations. The great atmospherical humidity produced by fogs from the sea, and the unwholesome miasmata exhaled from extensive tracts of low, marshy, and alluvial lands, enclosed by dykes and ditches, and from almost stagnant canals, occasion annual visitations of dangerous fevers. The neighbourhood of Furnes, in West Flanders, is rendered especially sickly by the malaria from these sources. The provinces of Hainault, Namur, and Luxemburg, are accounted most worthy of preference, with regard to healthiness, and the two Flanders, though first in cultivation, must, in point of salubrity, be placed last. The air of the polders is generally unhealthy, and affects those not inured to it with fever and ague. Speaking of the whole kingdom, it may be stated that the winter, or, rather, the rainy season, often comes on precociously and continues late; and that the summers are either very hot and dry, or extremely wet. November and April are nearly always rainy; the transitions of temperature are frequent and sudden, so that in the same day are experienced oppressive extremes of heat and cold. The most violent winds are from the S.W., and the most frequent from the N. and the W. A W. wind most frequently, and E. wind most rarely, brings on rain.

From observations made at Brussels during three successive years, the medium height of rain which fell in one year was 633 millimètres;* the extremes were 761 and 511. The number of rainy days in 1834 was 165; in 1835, 161; and in 1836, 198. The medium temperature of the year is 10·53 centigrammes, and it is well represented by that of October and April. The temperature of the hottest month 20° 36′, and of the coldest 0° 85′; difference, 19° 51′. At Brussels, which is nearly the centre of the kingdom, the medium height of the barometer, in 1836, was 754·82.

Mountains.—No elevation in Belgium is properly entitled to the appellation of mountain. A ramification of the chain of the Ardennes extends in a N.E. direction through Luxemburg, Namur, and Liege, and forms a mountainous crest, which separates the waters of the Meuse from those of the Moselle, towards each of which it gradually descends. Another offshoot of the Ardennes rises parallel with this, on the N. banks of the Sambre and Meuse, between Mons and Maestricht. The highest points of elevation are about 2200 ft. above the sea, and one of these is the hill which overlooks the celebrated springs and town of Spa.

Forests and Woods.—A space of nearly 650,000 hectares, or one fifth of the whole surface of the kingdom is covered with forests and woods. All the common trees of Europe are abundant; as the oak, poplar, pine, fir, larch, ash, beech, maple, aspen, plane, linden or lime, chestnut, birch, elm, alder, and numerous others. Plantations for hop-poles, oak bark, and firewood, occur frequently throughout the western provinces. Hainault has several forests of fine oaks; but by far the most thickly wooded provinces are Namur and Luxemburg, in many parts of which the soil is less fertile, and better adapted for the growth of timber trees than for the cultivation of corn and grasses. The forests belonging to the state, to the communes, and public institutions, occupy 194,000 hectares, and are submitted to an established system of public management. From the oak timber of the forests of Luxemburg are derived immense supplies of charcoal for the iron-works in that part of the country. The bark forms a considerable branch of commerce, and is principally exported to England.

The forest of Soignies, between Brussels and Waterloo, so interestingly associated with the memorable battle in that locality, is 9 m. in length by 8 in breadth, and contains 11,983 hectares, or 29,641 acres. The timber is valuable for building, and a thousand acres of it are possessed by the Duke of Wellington, in connexion with his title of Prince of Waterloo. The forests in the provinces of Namur, Liege, and Luxemburg, are remains of the immense ancient forest of Ardennes, which covered a great extent of the country between Bonn and Rheims. "Sylva Arduenna, quæ ingenti magnitudini à flumine Rheno ad initium Rhemorum pertinet." (*Cæs. Com.*, v., 3.) The romantic forest of St. Hubert, on the W. side of the province of Luxemburg, between Marche and Neufchateau, is Shakspeare's "Forest of Arden." A general woody appearance is given to even the most cultivated parts of Belgium by the custom of planting trees in the hedge inclosures of the fields: the principal roads are also lined by double rows of majestic lindens, and the canals are usually shaded by rows of poplars, beeches, and willows. The Belgian proprietors of land derive a large and secure income from the produce of timber and underwood, independent of rent; and planting is, therefore, sometimes prosecuted to a greater extent by the landlords than is consistent with the convenience and advantage of the occupiers of farms. The latter, however, are remunerated by the use of a certain share of the wood.

Extensive artificial woods of Scotch pine are created by sowing about six pounds of seed to an acre, generally on the poorest soil, which is prepared by burning the heathy surface, and scattering the ashes. In six years many barren tracts are converted in this way, to flourishing plantation of firs, from 5 to 9 ft. in height. The preservation of trees is very strictly enjoined, not only by proprietors, but by the government. Every farmer is compelled to destroy caterpillars, and remove every other cause of injury to the trees on his premises. All the trees on the public roads, besides those of the numerous royal forests, belong to the government, and the laws for their management are enforced with great vigilance by inspectors appointed for that purpose.

Rivers.—Belgium is one of the most efficiently watered countries in Europe. All its streams belong to the North sea. The Scheldt, in the W., and the Meuse, in the E., can alone be properly denominated rivers. They traverse

* A millimetre = 0·03937 in. English.

the kingdom generally in a direction from N. to S. Minute descriptions of the country enumerate about 40 rivulets, which form the lateral branches of these two principal streams; but though their utility in fertilizing the soil by irrigation, and as feeders of canals, is highly important, they can hardly be entitled to special notice in a general account of the physical features of the territory.

The Scheldt rises in France, flows through Cambray, Valenciennes, and Conde, and enters Belgium on its confluence with the Scarpe, a few miles south of Tournay; through which town it passes, and pursues a northerly course to Ghent, where it receives the Lys. Thence it flows tortuously to Termonde, whence, turning northward, it is augmented by large tributary streams on each side, and becomes, before the walls of Antwerp, a majestic river, 3000 ft. in width, and navigable for fleets of the largest ships. The length of its course in Belgium is 212,000 mètres, and the upper half, and several of its affluents, are navigated by boats of 200 tons. The Meuse also rises in France, and enters Belgium on the S. of Dinant, through which town it flows to Namur, where it receives the Sambre; then, turning eastward, it passes Andenne and Huy, to the city of Liege: there resuming its northerly course, it continues through Maestricht, and winds across the N.W. of Limburg into Holland and the North sea. The length of its course in Belgium is about 126,000 mètres. It is navigated by large, strong boats from 100 to 150 tons. From Liege to Venloo the navigation is particularly difficult. The affluents of the Meuse at Liege descend in some parts of their courses at an angle of 40°, and the long, narrow boats, which shoot down with the velocity of an arrow, are drawn up by ropes and pulleys. The principal affluents of the Scheldt, on the E., are the Dendré and the Senne, Dyle, Geete, Demer, and Nethe, which unite below Mechlin, and flow in the Scheldt, in the channel of the Rupel. On the W. it receives the Lys and Durme, and communicates with several canals.

Of these rivers, belonging to the basin of the Scheldt, the following are each navigable to the extent expressed in mètres:

The Demer,	in Limburg and Brabant . . .	31,000
Dendré,	" Hainault and East Flanders .	67,650
Durme,	" West Flanders	22,200
Dyle,	" Brabant and Antwerp . . .	22,200
Scheldt,	" Hainault, E. Fland. & Antwerp	212,000
Lys,	" West and East Flanders . .	90,000
Nethe,	" Limburg and Antwerp . . .	13,000
Rupel,	" Antwerp	12,000

The Meuse on the E. is joined by the Semoy, Lesse, Ourthe, Ambleve, Vesdre, and Roer; and on the W. by the Sambre, Jaar, and several smaller streams.

The rivers belonging to the basin of the Meuse are navigable as follows:

The Meuse,	in Namur, Liege, and Limburg	126,000
Ourthe,	" Luxemburg and Liege . . .	102,000
Sambre,	" Hainault and Namur . . .	94,356
Vesdre,	" Liege	30,000
Ambleve,	" Liege	10,000

The Our, Sure, and Azette, in Luxemburg, flow into the Moselle, near the town of Treves, and belong to the basin of the Rhine. The Sure is navigable in Belgium 52,000 mètres, the Moselle 37,000, and the Yser 41,540. The total length of navigable rivers is 962,746 mètres.

The following TABLE, constructed from recent official documents of the Belgic Government, exhibits, in hectares, the Space occupied by each Division of the Surface, and the different Objects to which the Soil is appropriated:

	Antwerp.	Brabant.	W. Flanders.	E. Flanders.	Hainault.	Liege.	Namur.	Limburg.	Luxemburg.	Whole Kingdom.
Superficial extent . . .	283,310	328,322	323,449	299,787	372,206	289,319	366,181	460,000	700,000	3,422,574
Arable Lands	118,413	227,933	199,114	209,625	236,423	130,020	145,226	250,000	200,000	1,717,354
Prairies and Meadows . .	35,190	35,792	66,509	34,926	48,256	73,893	30,328	37,000	77,700	439,594
Gardens and planted Grounds	6,231	7,681	5,316	7,096	7,870	5,014	5,744	6,700	5,250	56,902
Hop Fields	. .	428	. .	40	568	221	5	. .	. .	1,262
Vineyards	. .	30	. .	13	. .	184	2	. .	700	929
Forests and Woods . . .	32,632	42,986	33,546	30,137	60,810	54,300	125,541	55,000	215,000	649,952
Ponds and Reservoirs . .	1,398	661	279	1,200	770	82	283	1,200	350	6,223
Sites of Buildings, Yards, and Courts	2,301	2,612	2,916	3,961	3,261	1,675	1,277	1,800	1,600	21,385
Roads, Canals, Streets, and Squares	6,787	8,050	5,665	7,388	8,766	7,505	7,523	9,100	14,060	74,844
Rivers and Brooks . . .	3,027	804	757	2,437	721	2,023	1,658	1,700	2,000	15,126
Spaces devoted to various public purposes	1,777	83	4,740	1,839	1,100	212	251	500	210	10,712
Uncultivated Tracts . .	75,554	1,202	4,607	1,126	3,661	13,608	48,343	97,000	183,130	428,201

It hence appears that the whole extent of surface under cultivation is nearly 2,220,000 hectares; that one half is arable, and nearly one eighth is prairie and meadow: that forests and woods cover 650,000 hectares, or above one fifth; the sites of buildings about 1-160th part, and the uncultivated lands about one eighth. Thus 15-17ths of the territory are occupied in a profitable manner, without including roads, canals, &c., which cannot be deemed unproductive.

Geology, Mineral Products.—West and East Flanders are composed of horizontal strata of white, yellow, and gray sand, and clay, separate, and mixed in different proportions. When the stratum of sand forms the surface, the soil is arid, and of difficult cultivation; and it is rich and fertile in proportion to the depth at which the sand lies below the vegetable deposit. Numerous beds of turf prove the ancient existence of marshes. The only mineral product of these provinces is clay, for the manufacture of tiles, bricks, pottery, and pipes. In some localities it contains oxide of iron. The sand stratum, in W. and E. Flanders is deep, and constitutes one fourth of the area. In deep wells, descending to the primitive granite, alternate beds of sand and clay are found mixed with marine shells, which are evidently deposits of the ocean, and prove that, in remote ages, this whole region was submerged under its waters. Four or eight feet below the surface, where it is of clay, are the beds of peat or turf, varying in depth from 4 to 12 ft. To the poorer classes it supplies a cheap fuel, and its ashes, mixed with sand, are much used as a very successful manure for clover and grains. Turf is also produced plentifully in the province of Luxemburg and in several other parts of the kingdom. Silicious pebbles, agates, calcedons, and red cornelians, are found in the sand and clay of E. Flanders, and many vegetable and animal petrifactions. Among the latter are large antlers of deer and horns of oxen, with bones of the horse, ox, dog, and wolf. Vegetable fossils, consisting of various productions of the soil, are frequently obtained by the peasants for fuel. They include numerous trunks of the oak and ash, which are hard, black, and polishable, and yield red ashes in combustion. The geological character of the province of Antwerp and of the N. part of Brabant, is similar to that of the western region; and the ocean apparently once covered the whole northern half of the kingdom, as well as the plains of the W., for the hill on which Brussels is built contains many marine remains.

The rock strata of Hainault exhibit three successive formations: the first, or lowest, is composed of porphyry and quartz; the second of calcareous earths, coal, and schist; and the third comprehends argillaceous earth, with deep deposits of sand, and various débris.

In the high southeastern districts strata of red sandstone and limestone, containing organic remains, are incumbent upon rocks of granite, quartz, and slaty schist, which have generally an inclination or dip from N.E. to S.W. Descending thence towards the N.W., the rocks of sandstone, limestone, quartz, and schist, containing vast beds of anthracite, form a basin extending about 40 m. around the city of Namur. The strata of these rocks are often nearly vertical, so that the large coal pits in the vicinity of Namur and Mons require to be worked by shafts resembling wells. Namur produces, besides coal, abundance of carbonated lime, silex, excellent clays for the manufacture of porcelain, common pottery, and pipes, and a sand from which crystal is obtained. Pebbles susceptible of a beautiful polish are found about Fleurus. The S. and E. portions of Belgium, comprehending Hainault, Namur, Luxemburg, and Liege, are especially interesting to the mineralogist, as containing almost every article in the geological inventory, especially iron, coal, marble, various kinds of stone and slate, copper, lead, zinc, manganese, calamine, sulphur, alum, &c. Curious animal fossils are found in the province of Liege, where numerous caverns in the hills furnish bones of the bear, hyæna, elephant, rhinoceros, and fragments of the

human skeleton. Near Maestricht is a subterranean labyrinth, extending several miles in length and breadth, in rocks of soft yellow stone under the hill of St. Peter, where are found the shells of large crabs and turtles, and the bones of gigantic lizards above 20 ft. in length. The numerous rocky valleys, by which the south-eastern half of the territory is intersected, have apparently been formed, not by the corrosive action of water, but disruption of rocks, which subsequently afforded channels for the present rivers and streams. At the village of Han, on the river Lesse (Hansur-Lesse), in the S.E. of Namur, an immense cavern extends nearly a mile through the limestone rock, and forms the subterraneous channel of the Lesse. The numerous and spacious compartments of this remarkable cavern are naturally ornamented with clusters of glistening stalactites, and offer combinations of the grotesque and wonderful that remind the spectator of the celebrated grotto of Antiparos. Scientific descriptions of it have been given by Quetelet, Kikx, and Vander Maelen.

The working of mines constitutes a most important part of the national industry of Belgium. The mining districts form three divisions of the territory. The first is in the province of Hainault, and contains 155 mines, occupying an area of 102,415 hectares; the second, in the provinces of Namur and Luxemburg, contains 59 mines, covering an extent of 30,030 hectares; and the third, in the provinces of Liege and Limburg, comprehends 138 mines and 32,777 hectares: total 352 various mines, occupying 165,222 hectares, or 66 square leagues of 5000 mètres. In estimating the relative value of the mineral products of Belgium, coal must be considered first in order, and of the highest national importance, as furnishing the greatest amount of advantages to the country. This branch of industry is in full prosperity, and its immense produce amply supplies the manufacturing and domestic consumption of the kingdom, and is largely exported to France. The annual quantity extracted from the coal fields of Hainault alone is larger than the whole produce of France.

The three great centres of the coal mines, which are at Mons, Charleroy, and the city of Liege, produce annually 3,200,000 tons, besides other considerable mines in Namur and in Limburg, where, at Kerkraede, the value of the annual produce of one mine is 240,000 francs. In 1836 the extraction of coal was carried on in Belgium in 457 stations, established on 250 mines, which employed the labour of 31,190 workmen, and produced 22,000,000 hectolitres, worth, at least, 32,000,000 francs. In France, at the same time, the number of coal mines in operation was 108; workmen, 17,500; quantity produced, 20,000,000 hectolitres; and value, 19,000,000 francs.

Previously to 1836 the maximum price of a ton of coals at Charleroy was 8 francs, and in 1837 it was 19 francs. The words *houille* and *houillières*, the common Belgic expressions for coal and coal pits, are derived from Houille, the name of a blacksmith, who, in 1798, first discovered coal in the province of Liege.

Mines of iron are numerous, especially in the district between the Sambre and the Meuse; and many are worked in the provinces of Luxemburg, Liege, and Limburg. In quality the metal resembles that of France, but the price is lower. In 1836, the forges of the country wrought up 456,000 tons of prepared ore, which corresponds to double that quantity, or 912,000 tons, as taken from the mines.

Copper is found in the provinces of Hainault and Liege; and lead in Liege, Namur, and Luxemburg. The lead mine of Longvilly, in Luxemburg, is the largest in the kingdom. Zinc is obtained in Namur and Hainault; manganese in Liege; and pyrites, calamine, sulphur, and alum, in Namur and Liege.

The region included between the frontier of France and a line drawn from Ostend to Arlon, in the S. of Luxemburg, abounds in excellent materials for building — freestone, limestone, granite, paving slabs, slates, &c.: there are also many quarries of excellent marble of various kinds. The black marble of Dinant is highly valued, and a species called *petite granite*, in which are found many marine organic remains. Superior large slates are quarried in the provinces of Namur and Luxemburg. At Herbemont, a little to the W. of Dinant, is the most important slate quarry in the kingdom, producing annually above 8,000,000 slates. The price at the quarries is about 14 francs per thousand. Sandstone is quarried in Liege and Limburg, but chiefly in Hainault. Ample supplies of excellent millstones, grindstones, whetstones, &c. are furnished from the stone quarries of Liege and Luxemburg; and the hones from the quarries near Spa are not exceeded in quality by any in Europe, to all parts of which they are exported.

Mineral Waters.—Belgium possesses several springs of medicinal mineral waters. Those of Spa, on the S.W. of the city of Liege are celebrated throughout Europe. They issue from seven different sources, of which the one named the Pouhon is the principal. The water is perfectly clear, but gives, after standing, a slight deposit of ochre. It has an acid, ferruginous taste, and bubbles of gas continually escape at the surface. The quantities of iron and carbonic acid which it holds in solution are greater than in any other known mineral water. Its temperature is 50° Fahr., and the specific weight 1·00098. Numerous maladies are believed to be removed by using it for drinking and bathing. About a thousand bottles of it are daily sent to foreign parts, and the annual number of visitants at the spring amounts to between two and three thousand. The establishments for their accommodation are convenient and elegant; and the scenery of the vicinity affords ample amusement for the admirers of the picturesque; but as Spa is the favourite resort of speculating and reckless votaries of fashion, it is too true that the authorised system of gambling produces a great amount of evil to oppose to the good effected by the virtues of the water.

The hot springs of Chaudfontaine, in the same locality, but nearer to Liege, are also much visited, and others at Morimont, near Namur. At the ancient town of Tongres, near Maestricht, is a mineral fountain of a temperature about 60°. Pliny thus describes it, and it still retains its ancient properties: "Tungri, civitas Galliæ, fontem habet insignem, pluribus bullis stillantem, ferruginei saporis quod ipsum non nisi in fine potûs intelligitur. Purgat hic corpora, tertianas febres discutit, calculorumque vitia."

Animal Productions.—All the domestic animals of the other countries of Europe are found in Belgium. Among the wild animals are a few boars, roebucks, bears, and wolves, which still find refuge in the immense forests of Luxemburg. Foxes are not numerous, but all the common kinds of game, quadrupeds and birds, are plentiful in the woody parts of the country; especially in Namur, Luxemburg, Liege, and Limburg. The heaths of Verviers, in the province of Liege, are believed to be the only spot in Europe where the great heath cock, *grand coq de bruyère*, can be found.

Horses.—Flanders has long been famous for its breed of work-horses, and by their frequent importation into England the English draught-horse breed has been much improved. The Suffolk punch-horse very nearly resembles the species most common in Flanders. The colour of the Flemish horses generally is chestnut, in all its shades, and roan. They are of the true working character, remarkably docile, and possessed of superior bulk and strength. The chief defect occasionally observable in their form is a want of depth in the girth, and a dip behind the withers, but in all other respects they are finely shaped. A small head and pricked ear, rising neck and crest, short back and couples, great strength over the loins, round hips and lengthy quarters, open chest, a good arm, short legs of powerful sinew, short pasterns, semicircular hoofs, with a round frog and open heel—these points, comprised in a compact form, with a height of about 15 hands, constitute a work-horse of great merit, which, when three years old, can be purchased at £20 or £30. They are kept in excellent condition, and are shod with so much care that a defective foot or lame horse is never to be seen. A dietary system is observed with great precision and regularity. Chopped straw is invariably given with oats, and the water is always well whitened with meal of rye, oats, or barley. Clover is the common fodder in summer, and carrots in winter, never omitting the chopped straw and meal water. Of late, the Belgic horses have been materially improved by propagating from select breeds, and judicious crossing. Every farmer in Flanders breeds his own work-horses; but the business of breeding is only a subordinate and accessory branch of husbandry. The polders and prairies of Antwerp afford pasturage to numerous Flemish horses; and there are in E. and W. Flanders a great many fairs, at which they are sold for exportation to France and England. Belgium produces several other varieties of the horse, among which the Luxemburg cob is a valuable breed, and has been imported into England for its excellent qualities, as a very compact and powerful little horse, short-legged, well-boned, about 13 or 14 hands in height, and equal to carrying the heaviest rider, as well as fit for hard work in harness. The Belgic government, with the view of improving the native breeds of horses by crossing them with those of England, has formed, at Tervueren, a beautiful stud of about forty stallions, and appointed stations for them in all the provinces. The beneficial result of this expedient, which has been in operation since 1834, is already apparent in the production of a very superior race of horses, which, in future, will prevent the necessity of importing, as hitherto, the greater part of those required for the road and saddle. The government also awards premiums to the proprietors of winning horses at the public races.

In Flanders, the eager thriftiness of the farmer induces him to put his colts to hard work often at the age of eighteen months, which is long before the requisite strength is acquired; and the consequence is very injurious. Horses

are employed for all kinds of work in harness; but the peasantry commonly prefer making use of asses for riding, especially in the sandy districts along the sea shore. At an average of the last fourteen years, the horses in each province were:

Antwerp .	. 14,206	Liege .	. 23,618
Brabant .	. 31,604	Limburg .	. 25,030
W. Flanders	. 23,985	Luxemburg	. 34,266
E. Flanders	. 27,475	Namur .	. 21,947
Hainault .	. 47,203		

In 1830, the number of draught horses in the whole kingdom was 213,512.

Horned Cattle.—The breeding and management of all kinds of live stock in Belgium are much less exemplary than the culture of the soil. The cattle are the short-horned Dutch breed, but they are not in general so well formed as in Holland. Indeed, but little attention appears to have been devoted to the niceties of breeding, and the advantages of selection. The colour is, for the most part, black, and black and white. Flanders, W. and E., contain more than 252,000, many of which are fattened and sold. The oxen are larger than the cows, and weigh, when fattened, from 6 to 8 cwt.; but the same eagerness for gain which occasions the too early working of the horses, induces the farmer to hurry his oxen to market at about two years of age, before they are perfectly fattened. The same penurious spirit is apparent in the practice of having, in general, only one bull to 150 cows, and in some localities, to upwards of 200. Numerous herds of cattle are reared on the wild herbage of the large forests in the central, S., and E. parts of the kingdom, and are finally fattened on oil-cake, at a very small expense. No part of Belgium produces better oxen and calves than the prairies of the great Campine plain, between Antwerp and Maestricht. Cows are kept in great numbers on the pastures about Furnes and Dixmude, in W. Flanders, and a large quantity of butter is made for exportation. In their cow stables, the Flemish farmers preserve the temperature of the month of May; indeed, so much attention is paid to the state of these places that Mr. Ratcliff, in his *Agricultural Survey of Flanders*, speaks of having taken coffee in one of them, with the proprietor, in the middle of winter, without having been in the least incommoded by cold, dirt, or offensive odour. For the preservation of cleanliness, they adopt an odd expedient, which is very common in Holland, keeping the cows' tails erect, by means of a cord which passes over a pulley in the roof. The usual food in summer is chiefly clover; and in winter, turnips, which are rather poor and small, with carrots, potatoes, a very little hay and straw, and the white soup which is given to horses; consisting of tepid water, thickened with oat, rye, or barley meal, and a small portion of oil-cake. However, not only the breed, but the treatment of cows in Flanders is regarded, by English writers, as very inferior. They are constantly confined to the stalls; and, as the clover and other forage crops are there consumed in their green state in the summer, a deficiency of roots in the winter reduces their diet to dry straw, so that, as M. Vandermaelen remarks, they are often so emaciated in the month of May as barely to be able to walk; and Mr. Pryse Gordon, in his work on Belgium, states, that their wretched condition in the spring is almost incredible: that they resemble those of Shetland, which, in scanty seasons of the year, are fed on dried stockfish; or the cows of the N. Cape, which are occasionally kept alive on pickled salmon! In the forest of Soignies, and other parts of Brabant, the cattle are large and coarse. The Belgians, in fact, do not yet appear to be generally aware that animals of a moderate size are more profitable than those of larger dimensions; that light, compact, and short-legged horses are most enduring for work requiring not strength alone, but activity; and that small and slight-framed cows, such as the Alderney, Suffolk, and Ayrshire breeds, produce more and richer milk than many larger kinds.

The Belgic government has, for some years, taken much pains to introduce superior breeds of cattle; and the proprietors are gradually becoming convinced of their interest in effecting a change in their kinds of stock, though the characteristic tenacity with which they cling to old-established notions still greatly retards the beneficial accomplishment of the government plans of improvement.

On an average of the last fourteen years, the annual produce of cattle in the whole kingdom was 898,076; and, on the same average, there were in each province the following numbers:

Antwerp .	. 88,412	Liege .	. 83,576
Brabant .	. 98,234	Limburg	. 104,340
W. Flanders	. 132,096	Luxemburg	. 120,360
E. Flanders	. 120,317	Namur .	. 58,327
Hainault .	. 92,414		

In 1830, the number of draught oxen employed in agricultural labour was 28,169.

Sheep.—On the farms of Belgium, the sheep stock is generally a secondary object of attention. There are two principal indigenous breeds, the Flemish and the Ardenne. The indigenous Flemish sheep is a tall, thin, long-eared animal, furnishing a coarse, long wool, and the worst kind of mutton. The Ardenne breed is smaller, and, from ranging over the sweet wild herbage of the hills of Liege and Luxemburg, the mutton acquires an excellent flavour, but the wool is not of superior quality. The mode of feeding sheep in Flanders accounts for much of their bad qualities: they are housed at night, and during the day are followed by the shepherd and his dogs along the lanes, pathways, and margins of arable fields, where they barely pick a subsistence, and never enjoy the range of a sweet and wholesome pasture. In winter they are let out, for a short time, but once a day, and are fed upon rye, straw, and hay; and, though three or four years would be required to fatten them, they are slaughtered at one year old, in a condition, says Mr. Ratcliff, very nearly that of carrion. The sheep which are fed on the prairies of the Campine plain produce the best wool of the kingdom; and that of the Ardenne breed is next in quality. The wool and mutton of the flocks of Namur are considered comparatively good. Some fine specimens of the Leicester and Cotswold breeds, which have recently been imported from England, are expected to produce a much improved race, that will supersede the present inferior kinds. The total number of sheep in the kingdom is about 750,000; but the country is capable of feeding a much larger number; for, while subject to the dominion of the French empire, when agriculture suffered great disadvantages, it possessed upward of a million.

The following are the numbers of sheep in each province, on an average of the last ten years:

Antwerp .	. 23,719	Liege .	. 115,149
Brabant .	. 34,884	Limburg .	. 127,942
W. Flanders	. 39,673	Luxemburg	. 184,929
E. Flanders	. 36,393	Namur .	. 109,800
Hainault .	. 79,884		

Swine.—The Belgic swine are similar to those of France, and have more resemblance to the greyhounds than the hogs of England. Their long and thin bodies are mounted upon fleet and lengthy legs, and the ridge of their backs describes the arc of a circle. Herds of these animals are turned into the forests, where they feed abundantly upon the beech mast and acorns that strew the ground. They make very good pork and bacon after having been long and well fed; but this kind of meat is the dearest in the market. Better breeds have been imported from England; and, from the prolific nature of the animal, they will probably soon become numerous and beneficial. A few pigs are reared by every farmer in Flanders for domestic supply of pork, which is the common animal food of the working classes; but the markets are supplied by distillers and millers, who have great facilities for feeding with the refuse of their establishments.

Fish.—Fresh-water fish abound in most of the larger streams. Those of the finest quality are found in the S parts of the kingdom. The principal kinds are pike, trout, carp, perch, tench, eel, lamprey, sturgeon, salmon, barbel, shad, gudgeon, whitebait, anchovy, and ecrevisse or fresh-water lobster.

In the fishery off the sea-coast, and in the mouth of the Scheldt, are taken skate, plaice, bret, soles, turbot, dab, angels, whiting, smelts, lobsters, crabs, pilchards, shrimps, &c.; and from the deep sea fishery are supplied cod, herrings, oysters, muscles, &c. The dog-fish (*chien de mer*) commits so much injury to the fishery of the Scheldt, that the government gives a reward for its destruction. About 200 boats are employed in the cod and herring fisheries, the produce of which has always been the subject of a considerable commerce. In 1837, the importation of cod at the port of Ostend was 8175 tons. The national fishery is rapidly increasing, and premiums, amounting to 40,000 francs, are annually awarded by the government for its promotion.

Agriculture.—In consequence of the new political system adopted in Belgium since the Revolution of 1830, every branch of industry has been greatly improved and extended. The construction of numerous roads, railways, and canals, has produced an enormous increase in the value of land and buildings, amounting, in several whole districts, to ¼th of former estimates; and the government has established an especial council, charged with the care of ascertaining the means of promoting the interests of agriculture. At Brussels has been formed a veterinary and agricultural college on a large and liberal scale, which is expected to effect many beneficial improvements, especially in the breeds of live stock. The natural soil of Belgium is composed of mere sand and clay, combined in various proportions. The clay alone contains the nutritive properties required for the

support of vegetation, but without a due admixture of sand, to render it porous and friable, it is perfectly sterile, from its too great adhesiveness, retention of water, and liability to become baked by the sun. The artificial soil, in Flanders and many other highly-cultivated parts of the country, is rich, black, and loamy, and possessed of great fertility, through the vast quantities of manure, vegetable and animal, which for ages have been constantly intermixed with the natural sand and clay. Although in Belgium the cultivation of the earth is carried to a great extent, 1-11th of the whole surface remains still uncultivated: 1-8th consists of grass-lands, the best of which are in the two Flanders; and the arable lands occupy one half. The best are in the two Flanders, Hainault, and Brabant. In these provinces no waste land whatever is to be seen; but in Antwerp, Limburg, and Luxemburg, it covers a large extent of country. However, commercial associations are already formed for the purpose of cultivating the waste lands of the great Campine plain in Limburg, and for clearing some of the forests of Luxemburg.

Agriculture of the Polders.—The name polders is given to tracts of low alluvial soil, artificially gained from the sea or the Scheldt, by lofty embankments, and drained by numerous intersecting ditches, from which, in some instances, the superfluous water is continually pumped by the agency of windmills. These embanked enclosures are highly cultivated, and form an extensive chain of square green islands along the muddy banks of the Scheldt and its affluent the Rupel, in the provinces of Antwerp and E. Flanders, and on the sands of the sea-shore. Twice a day the tides reach the broad and high digues or embankments which bound, on each side of the Scheldt, a wide extent of alluvial ground, and protect the adjacent country from inundation; and while the waters remain upon this surface they deposit a fine argillaceous and calcareous mud, the *débris* of various vegetable and animal substances, collected in their drainage of the loose and rich soils of Flanders, and brought from the ocean. These alluvial accretions, when first enclosed by dykes, become naturally covered by a fine, tender grass, and are called in Flemish *schors*. They are first sown with *colza;* that is, oleaginous colewort, *Brassica oleracea arvensis*, not the *Brassica Napus* of Linnæus, but the *Brassica campestris* of De Candolle. The crops of this vegetable on the polders are always very abundant. When these enclosures have been completely brought into cultivation, which requires several years, they consist partly of natural meadow, affording excellent pasturage for numerous herds of cattle, and partly of arable lands, on which are raised the finest crops of all kinds of grain; especially barley, eight or ten quarters per acre, and oats ten or twelve quarters per acre. Two crops in the year are commonly obtained; no repose is given to the soil, and it needs no manuring; but in the course of time it becomes too compact and adhesive, and greatly decreases in fertility, if not renovated by artificial assistance, so that the older lands of this description are fallowed once in six years, and the rotation is winter barley, beans, wheat, flax, clover, and potatoes. The colour of the soils, in their primitive state, is a bluish gray, which is owing to the presence of a considerable quantity of the oxide of iron. The embankments are made in some instances by the government, in others by companies or individuals, under a grant and tenure of the enclosures, from government, for about twenty years, either rent free, or for small annual payments. It is calculated that about 4-5ths of the surface which, in the sixteenth century, was submerged by the Scheldt and the sea, now produces agricultural crops, and is studded with numerous farm establishments. The area of each polder, the chemical analysis of their soils, and various other particulars, are given in M. Vandermaelen's *Geog. Dict. of the Provinces of Belgium.* They vary from 20, 50, and 100 acres, up to 1000. The polder of Snaerskirke, on the sea-coast, near Ostend, contains 1300 acres, divided by ditches into rectangular fields of 13 acres each. The bank or dike is 15 ft. high, 30 ft. in breadth at the base, and ten ft. at the top. The fatal devastations which have been occasioned by the concurrence of high winds and tides in rupturing the dikes that are reared as barriers to the rivers and the sea, render it an object of great importance with the government to superintend the maintenance of their efficiency. A system of public regulations for this purpose is therefore enforced with great vigilance and promptitude.

Agriculture of the Bruyères.—The sterile heaths which extend over the N.E. parts of the provinces of Antwerp, and the N.W. of Limburg, as well as over many sq. m. of the surface of the S.E. portion of the kingdom, are called *bruyères*, from the fact of their chiefly producing the heath-plant, bruyère, *Erica Brabantica.* It grows spontaneously and abundantly in the most arid sands, as well as in humid marshes; and it naturally possesses so much vitality and prolificness that its complete eradication cannot be effected without considerable trouble. In summer, its profusion of flowers very agreeably varies the dreary aspect of the level wastes on which it flourishes; and they also afford plenty of food for the bee, but the honey it produces is not of a good description. The plant is browsed by sheep, gathered for littering cattle, used in tanning, and applied to several other useful purposes. The great obstacle to the cultivation of the heath lands, or bruyères, is the frequent occurrence of beds of ferruginous turf and stiff clay near the surface; however, many extensive tracts have been brought into profitable cultivation by the plentiful application of rich manures, and the laborious attention and management for which the Belgic husbandman is so proverbially distinguished. The surface on which he begins to operate is a very thin external coat of black mould, consisting of vegetable putrefactions. This, in some parts, is sufficiently deep to recompense the labour of ploughing it into the subjacent sand, with copious quantities of dunghill manure; and from this combination are obtained crops of potatoes, barley, oats, clover, and buckwheat. Sheep are remarkably fond of the scattered blades of natural grass on the bruyères, and cattle are fed in great numbers on those parts of them which are laid out in pasture, consisting for the most part of spurry, *Spergula arvensis*, which is their favourite food.

Agricultural Produce and Practice.—Corn, flax, hemp, and timber constitute the most important materials of the agricultural wealth of Belgium. The soil, artificially enriched, produces commonly more than double the quantity of corn required for the consumption of its inhabitants, which is computed at six millions of hectolitres (each 2⅞ bushels) per annum. The annual quantity of grain sold in the markets throughout the kingdom represents a value of two millions of francs. The following table exhibits the quantity and medium price per hectolitre, of grain and potatoes, sold at the principal markets in 1835.

	Hectolitres.	Francs.
White wheat	371,025	14·03
Red wheat	478,181	15·08
Rye	395,437	9·04
Buckwheat	76,185	10·02
Oats	336,445	6·57
Barley	244,506	8·86
Potatoes	208,756	3·90

The medium price of wheat throughout the year 1836 was 15 fr. 15 ct.; and of rye, 10 fr. 5 ct. per hectolitre.

The kinds of agricultural produce in Belgium are very numerous, including the following grains and plants, all of which are cultivated in Flanders: Wheat (white and red), rye, barley, oats, colza, buckwheat, hemp, flax, potatoes, tobacco, hops, turnips, red carrots, parsnips, peas, beans, clover, spurry, lucerne, madder, saintfoin, chicory, beet, woad, and poppies.

The central part of the kingdom, contained within a line passing through Mecklin, Termond, Tournay, Mons, Namur, and Louvain, includes much of the richest portion of the soil; but it does not, on the whole, exceed the average fertility of the inland counties of England, and must decidedly be considered inferior to the rich alluvial soils denominated the carses, in Scotland. The land in general is not so neatly tilled as in the best English agricultural counties. The husbandry of the central parts differs considerably from that of Flanders. The farms are larger, and less carefully cultivated. The spade is less used in the fields, and they have, consequently, not the same resemblance to gardens. In Hainault and Antwerp the cultivation of flax and hemp is becoming a primary object; but these valuable crops are produced to far greater extent in the two Flanders, the agriculture of which is so highly reputed as to require a separate notice, which hereafter is given. In the richer parts of Brabant, flax, hemp, and colza are extensively cultivated, with much manuring, and a succession of wheat. Rye, in this province, is always a large crop, for bread and distillation. The oleaginous plants flourish in all the provinces, and the culture of hops is very successful in Brabant, Flanders, and along the valley of the Meuse, in the province of Liege. Maize has been partially introduced, and found to succeed. Madder is grown chiefly in Flanders and the province of Antwerp. Most of the principal farms throughout the kingdom possess distilleries, and the stalled cattle are fed upon the refuse wash. With the exception of Flanders, no particular rotations of crops are adhered to. The fields are cropped according to the wants of the farmer, and the state of the land. An abundance of manure allows of rapid returns of white straw crops. All the clover, and other forage crops, are used green, in the stalls and stables, as food for cattle and horses. Little hay is made in proportion to the number of cattle kept throughout the winter; so that, on the failure of green food, the chief recourse is to roots, namely, turnips, carrots, and potatoes. The stall-fed cattle furnish ample supplies of manure, the liquid part of which is collected in large tanks of brickwork, and is either carried out and poured over the

land, or is used to moisten and accelerate the fermentation of the dry dung-heaps and composts.

Implements of husbandry are few, and of simple construction. The light Flemish swing plough is generally used, and also the old, heavy, and clumsy turnwrest, or Walloon plough, which is still retained from a prejudiced preference of antiquated disadvantages. The harrows are triangular, with wooden tines, set at an angle of 45 degrees. A stone roller is used for breaking the argillaceous clods; and the machine for winnowing grain is similar to those commonly used in England. The mouldebaert is noticed in the following account of Flemish agriculture, which includes many particulars equally appertaining to the other Belgic provinces.

Flemish Husbandry.—Flanders, in consequence of its great commercial prosperity, was remarkable for the advanced state of its agriculture long before improvements in this important art was observable in any country N. of the Alps and Pyrenees. Bruges and Ghent were important commercial towns in the 11th century, and supplied the various courts of Europe with the rich silks and tapestries which then were their chief luxuries. The commerce and agriculture of Flanders grew together; and in order to account for the remarkable excellence of the Flemish husbandry, which has been celebrated for upwards of 600 years, it is necessary to keep in view the close connexion which in that country exists between the farmer, the manufacturer, and the merchant; and the efforts of a continually-increasing population, in stimulating the exertions of those who provide the necessaries of life. In Flanders, as in every country densely populated, where the villages are thickly scattered, and where, by means of water carriage on rivers and canals, manure can be transported to the land at a trifling expense, fallowing and laying down to pasture are necessarily superseded by increased tillage and manuring. It is remarkable that, in China, where a similar density of population exists, there prevails the same anxiety as in Flanders to collect every substance and liquid that can possibly serve to increase the fertilizing powers of the soil; and that in both these countries ordure of all sorts is carefully collected, sold as a most valuable article of commerce, and applied in the fields and gardens as the *ne plus ultra* of stimulating manure. Were the whole of Flanders laid out in large farms, and a third or fourth part fallowed every year, or a half left in natural grass, the population could not be fed; and instead of exporting agricultural produce, as at present, a great importation would be requisite, to supply the demand of internal consumption. Besides, the poor soils of Flanders could never be recruited by such a course. Without repeated manuring there could be no vigorous vegetation; and the land, left to nature, would return to its original state of heath. The necessity of providing for constantly increasing numbers of inhab. produced the agricultural perfection for which Flanders has long been renowned; and the demands of commerce and manufactures have so multiplied the objects of cultivation, that flax, hemp, the oleaginous seeds, and various other plants required for the arts, very often produce a greater profit to the former than the farinaceous grains. The very large produce obtained by the Flemish farmer is solely attributable to indefatigable industry, for the soil is naturally poor, and the climate is by no means especially favourable, the winters being longer and more severe than in England. Three or four ploughings, and two or three harrowings, are commonly bestowed upon each crop. The collection and application of manure is also a great principle of Flemish husbandry. In Flanders, nothing can be effected without abundance of manure; and, consequently, the greatest care is taken to procure it. The maxim is, no forage, no cattle; without cattle no manure; and without manure no crops. The stall-fed cattle are the principal source of supply, but every expedient is resorted to in order to increase the quantity and improve the quality. All kinds of animal and vegetable matters are carefully collected in pits walled with brickwork, where they undergo the putrefactive process, by being mixed with substances already partially decomposed. Another indispensable and universal auxiliary of the Flemish farmer is the tank of liquid manure, collected from the drainings of the stables, cow-stalls, and dung-hills, and from sources which in England fill the cesspool (*vidange*). In Ghent, the sum received by house servants for liquids collected for manure often amounts to as much as their wages. The liquid manure is carried to the field in water carts, and carefully distributed over the surface of the land shortly previous to the sowing of seed, especially that of flax. Every farm-yard possesses one of these tanks, which are commonly of large dimensions—about 40 ft. in length, by 14 in breadth, and 8 in depth; and usually constructed beneath the stalls for cows. An acre of land destined for flax receives very commonly 2500 gallons of this animal liquid subsequent to an abundant application of solid manure, which is deeply ploughed into the soil. The efficacy of the liquid is often heightened for flax, by dissolving in it large quantities of rape cake. Every distillery of moderate extent has fifty or sixty head of cattle constantly stalled, and fed upon the grains and refuse wash. These establishments were formerly very numerous; but the duty on spirits, and the interference of the government, have much reduced their number, and consequently occasioned a deficiency of manure and of crops; as it is estimated that every beast produces annually 10 or 12 tons of solid, and 26 hogsheads of liquid manure. Large quantities of peat ashes, imported from Holland, are used as a dressing for clover; and lime, powdered bones, marl, and the dung of pigeons, &c., are used in particular districts.

The Flemings boast of no great discoveries in the art of tillage. Their usages are referred to time immemorial, and they possess neither record nor tradition of the introduction of any particular article of produce, except the potato, which is believed to have been received from England. Clover, rape, and turnips have been cultivated for several centuries in Flanders, whence they were brought into Britain. The progress of agriculture has been slow and gradual; and while other countries have been constantly adopting new modes and implements of culture, the Flemings have proceeded without any deviation from the old beaten track.

Very few books on husbandry have been published in Flanders; and were there many, they would not be read; for adherence to old-established methods, and repugnance to what is new, are characteristic of the Flemish farmer. No practice has been altered, nor has any new produce been generally introduced since the potato, except the white beet, from which sugar is made. None of the modern complicated machines have been adopted. There are no threshing-machines, drills, scarifiers, or horse-hoes; and the common fan and riddle are much more frequently used than the winnowing-machine. The spade is one of the most important implements in Flemish agriculture, and is used to a much greater extent than in any other country. The trenching-spade is constantly employed on all the light lands, and the blade of the Flemish hoe, a most efficient instrument, resembles and operates as a substitute for that of the spade. Indeed, the *garden* has evidently been the original model of the Flemish farms, and those of forty or fifty acres must still be regarded as enlarged gardens. In comparing the cultivation of land in Flanders with that of England, we can only adduce the large gardens in the neighbourhood of London, where the common kinds of vegetables are raised for supplying the markets; where green crops are cut early for horses and cows [illegible] in London, and where the soil is continually enriched with the manure London supplies. By the prosecution of spade husbandry, an industrious Fleming, with his fifteen acres of good light land, brings up his family in decent independence, and in the course of his life accumulates sufficient means to put them in possession of a little farm of their own. There are many small proprietors who have risen slowly by the labour of their own hands; and their habitations show, by the great care and neatness observed in every particular, that an honest pride is felt in possessing this reward of industrious exertion. Incessant labour of the body, and occupation of the mind, are not regarded by the Flemish peasant with discontent, for to the one they are found to secure good health, and to the other tranquillity.

The farms in the Pays de Waes, between Ghent and Antwerp, are cultivated with astonishing method and neatness, and afford the most perfect specimens of field culture on the principles of gardening. The soil is artificial, and the result of centuries of systematic manuring, which has converted a barren sand into a rich black loamy mould. The fields, as in all parts of Flanders, are enclosed by hedges, and they are remarkably small—from half an acre to an acre; every part of them is kept perfectly free from weeds, and they are elevated in the centre, so as to have a gently-inclined slope towards the extremities, where ditches carry off excessive rain, and prevent injury and reduction of the soil. Nearly similar care and preciseness are observable in the whole of W. and E. Flanders; but, while the Flemish farmers are greatly superior to the English, in minute attention to the qualities of the soil and to circumstantial particulars of cultivation, in the systematic economy of land and the judicious succession of crops, they are much inferior in amount of capital, in varied and improved implements of tillage, and especially in the choice and breeding of cattle and sheep.

Agricultural implements are of rude and clumsy construction, the only objects desired being strength and cheapness. Two kinds of ploughs are in use; the old Walloon plough, resembling the heavy turn-wrest wheel plough of Kent; and the light single-handed Belgian swing plough, which has been the model of the Rotherham and other improved swing ploughs adopted in England. The harrows are of light construction, with wooden tines pointing for-

ward at half a right angle with the frame. The *traineau*, or sledge, is an instrument peculiarly Belgian. It consists of a heavy triangular boarded frame, which is drawn by a pair of horses over the surface of the ploughed land, to smooth it, to break the clods, and to press in the seed. The efficiency of its performance is much assisted by the weight of the driver, who generally stands upon it, and keeps it level. Another instrument peculiar to the agriculture of Belgium and Holland, and used for levelling, is the mouldebaert, which is a large wooden, iron-edged shovel, in the form of an English tin dust-pan, with a stout handle about 6 ft. in length. A pair of horses draw it by chains fixed at the middle of the sides. It takes up more than 5 cwt. of earth at a time, and, without stopping, the load is discharged in the proper place by letting go the handle, which is pulled back by a rope affixed to its end. In some districts the corn is threshed by a grooved block of hard wood, having a long handle. The Hainault scythe has often been described in agricultural publications. It has a broad blade about 20 inches in length, and resembles the fagging hook employed in Surrey and Middlesex, except that it allows the workman to stand upright. It is commonly used for cutting corn; but the cradle scythe is considered a preferable instrument in the hands of a skilful mower.

The *extent of farms* in Flanders, and throughout Belgium, very rarely exceeds 100 acres. The number containing 50 acres is not great, but those of 20, 15, 10 and 5 acres, especially between 10 and 5, are very numerous. The extensive manufactures which formerly flourished in Belgium collected a dense population of artisans in the neighbourhood of the great towns; but when the busy scene of manufacturing industry was transferred to other countries, this population was deprived of its means of handicraft employment, and was obliged to resort to the cultivation of the soil for subsistence. Such appears to have been the chief, though possibly not the sole, origin of the still prevalent system of small farms, which are generally cultivated by the holder and his family without any other assistance. Some particulars of this class of peasant farmers are given below. Although the soil of Belgium, and especially of Flanders, is remarkable for the number of its minute divisions, it is stated by M. Vandermaelen, in his geographical description of the country, that "the prevalent opinion among the most intelligent Flemish agriculturists is in favour of *large* farms, as requiring, in proportion to their extent, a less establishment of buildings than the smaller ones." Indeed, most of the principal writers on agriculture have expressed a decided preference of farms containing several hundred acres, it being obvious that many very important means of facilitating the progress of agricultural improvement are obtainable only by the command of capital and the exercise of that generous spirit of enterprise which arises from the possession of extensive knowledge and exemption from inherited prejudice. Agriculture always has been, and must be, indebted to the capitalist for the prompt and judicious introduction of new improvements in farm economy, in modes and objects of culture, in the application of the auxiliary sciences of chemistry, geology, botany and mechanics, and for many valuable practices derived from distant and foreign parts. There is also great advantage in the acquisition of that skill in each department of agricultural business which results from the necessary division of labour, where numerous hands are systematically employed under the intelligent management and supervision of one well-informed directing head. A large farm requires a large capital; and unless accurate accounts are kept of money paid and received, of work done, of fodder consumed, and of the distribution of the labour of men and horses, so as immediately to detect any extravagance or error, and at all times to show the profit or loss, there can be no inducement to apply capital to the cultivation of land. The most universal disadvantage of small farmers in every country is their contracted range of observation, and consequent inveterate retention of local and hereditary usages, however unfavourable to their own interests, or opposed to the facts of modern improvements. In Flanders, for instance, where the small farm and cottage system is conspicuous, no new facilities, inventions, or scientific discoveries are ever introduced or attended to: on the contrary, every alteration, however obviously for the better, is invariably regarded with the greatest repugnance. The natural barrenness of the soil has compelled its cultivators to have recourse to indefatigable industry, and their meritorious exertions are amply rewarded by the very superior state of its present artificial fertility; but there are many important particulars in which the adoption of new and improved practices would greatly benefit the farmers and the nation. Turnips, for example, are a very extensive and necessary crop in Flanders, but from being always raised as a second crop after rye or barley, and sown, not with the drill, as they ought to be, but broadcast, and being weeded with the hand instead of the hoe, the produce is singularly small, compared with the extent of surface from which it is obtained, and the root is much inferior to that cultivated in England by the drill. Agricultural weeding in general is performed, not with the hand hoe and horse hoe, but by the hands of women and children, who crawl over the fields upon their knees. Several clumsy and awkward implements of husbandry might, with great advantage in expedition and efficiency, be replaced by modern and more scientific instruments; and, were it only for humane considerations, the farmers' horses might well be released from the burden of massive wooden collars, which are five times larger and heavier than is either reasonable or useful. But such is the pertinacity with which old-established customs are adhered to by the small Flemish farmers, that they are often not only willing and content, but determined, to experience every disadvantage that belongs to the routine of comparatively ignorant ages; and this aversion to change has a great influence in retarding the beneficial effects of the efforts of the government to introduce into Belgium the superior English breeds of agricultural animals. Count de Lichtervelde, in his *Mémoire sur la Flandre Orientale*, produces a series of arguments in favour of small farms requiring only one plough and two horses, which are sufficient for about 44 acres; and he more especially insists upon the difficulty of one person supervising the labours of many, so as to secure the requisite assiduity and attention. He also observes, that the best cultivated farms in Flanders are those of about 20 acres. To these objections it may be answered, that abundant experience proves the possibility of many operatives in different localities being very efficiently directed and visited by one intelligent and active proprietor: and that the 20 acre farms in Flanders are more properly extensive gardens, chiefly cultivated, as other gardens, by the spade.

Crops in Flanders.—Great attention is bestowed upon the preparation of the soil, so as to secure the most abundant crop from the smallest quantity of seed. About one third less is used in Flanders, for broadcast, than in England for drilling.

Rye is a very luxuriant, and a principal crop, as it forms an important article of consumption for bread among the working classes. The crops of wheat are uniformly fine, and free from smut and mildew, which are effectually prevented by carefully selecting the seed, by changing it every second year, and by steeping it in a solution of blue vitriol, or copper (sulphate of copper); four ounces in four gallons of water, for three bushels of grain. After thoroughly stirring, skimming off the light grains, and remaining half an hour, the grain is strained off in baskets, washed in pure water, and, when dried, is ready for sowing. It is steeped by some in brine, and dried by sifting lime upon it. One bushel of seed wheat produces above twenty bushels. Barley is a crop of much importance, malt liquor being the common beverage of all classes of the population. The winter barley, or sucrion, is the favourite kind. It is sown in autumn, and reaped in July. Oats thrive well, with little manure, in almost every soil of Flanders. Buckwheat is raised chiefly as food for poultry and pigs, and for distillation. Peas, beans, and tares, are commonly cultivated as fodder for cattle. Clover is the glory of Flemish farming, and in no country is it found in such perfect luxuriance. Repeated ploughings, rich manuring, and a vigilant prevention of weeds, serve to produce a vigour and weight of produce which is truly surprising; and to the English farmer the wonder is much increased by knowing that such prodigious crops are raised from six pounds of seed per acre. Peat ashes from Holland, about forty bushels per acre, are invariably used as a dressing for clover. From Flanders this valuable grass was first introduced into England. It is a crop of great value, and indispensable to the Flemish farmer, who ploughs all his land, and feeds his cows and horses on green food brought to the stall. The common red species is more cultivated in Flanders than the other varieties. The liquid manure from the tank is believed to produce a strong taste, with which the cattle are disgusted. The potato crop, at the season of its full growth, also exhibits a remarkable luxuriance. The stalks exceed a yard in height, and their tops form a surface as level as the land from which they rise. The produce is often ten tons per acre, and it constitutes one of the principal articles of food of all classes of the population, and of the farmer's live stock, especially cows and horses. This useful root was introduced into Flanders from England at the end of the sixteenth century, and it has long appeared in each rotation of the Flemish crops. Turnips and carrots are extensively cultivated for stall-fed cattle, after rye and barley. The turnips, in size and weight, are much inferior to those of Norfolk, and the carrots also yield a comparatively poor return. The cultivation of the white and yellow beet, for the extraction of sugar, is continually becoming more extensive, and several large factories have been established for the manufacture of this important article of commerce. The

chicory-plant, of which the root, when properly torrefied, is a very good substitute for coffee, is raised in large quantities in Flanders, where establishments are formed for its preparation. The flax crop is an object of the greatest care and exertion. Its cultivation is thoroughly understood, as well as every process of its preparation for the loom; and the land which produces this plant exhibits all the neatness and precision of a carefully-managed garden. Flax is a staple commodity in Flanders; it serves to employ a great portion of population, and it is largely exported. The town of St. Nicholas, between Ghent and Antwerp, is considered the largest and best flax-market in Europe. The finest description is raised in the neighbourhood of Courtray. The value of an acre is about £25, and the seed about £5 or £6 additional. Crops of flax produced from native seed are found to be superior in quantity, but inferior in quality, to those produced from the seed of Riga, which is, therefore, procured by the Flemish farmers every year. Hemp is cultivated with great care, but not to the same extent as flax. Colza (*Brassica campestris*) and a species of poppy, the *oilette* (*Papaver somniferum*), are extensively cultivated for the oil contained in their seeds. Woad is raised for its dye of blue, weld for yellow, and madder for red. The two Flanders, and the province of Antwerp, produce a considerable quantity of madder, but the whole annual produce of the kingdom is insufficient to supply a fourth of the quantity consumed at one of the large factories of cotton and woollen: those of Ghent alone make use of madder to the value of six millions of francs per annum. Woad thrives best on gravelly and sandy soils; but madder requires land of the best description, and abundance of manure. The cultivation of tobacco was common several years ago in nearly all the provinces, but at present it is confined to Flanders; and the produce now is reduced to about one tenth of its former amount. The best tobacco is raised and prepared at Werwick, in the neighbourhood of Ypres. An acre produces about 4000 lbs. The culture of this plant requires a great amount of labour, attention, expense, and manure. Hops are grown in small patches on almost every farm in Flanders. Pastures of grass are scarcely to be met with, except in the polders, and the vicinity of Dixmude and Furnes, where they are most luxuriant, and afford grazing for numerous cows: stall-feeding, however, is universally practised. One beast for every three acres of arable land is a common proportion, and where spade husbandry prevails, a larger number are found. Chopped turnips, carrots, and potatoes, boiled up with the meal of beans, rye, or buckwheat, constitute the usual food of cattle, and it is called *brassin*. Large quantities of good butter for home consumption and exportation are produced from the milk of cows thus fed, with the addition, in summer, of clover and other green fodder, cut and brought to the stalls. The churns are ingeniously worked by a horse. Cheese rarely is made in Flanders, almost all the demand for it being supplied by importations from Holland. Some account of the live stock of the Flemish farmers is given under the divisions relating to horses, horned cattle, sheep, and swine.

Rotation of Crops in Flanders.—Experience has long convinced the Flemish farmers of the great advantage of frequently changing the crops on the same land; so that, in the course of time, a system of rules has been established from which they seldom venture to deviate. They have been rotation farmers for centuries; and the properties and present capabilities of every cultivated acre in Flanders are matters perfectly well known and appreciated. The order of succession of each kind of crop depends upon the nature of the soil, and upon various modifying circumstances, which, however, are so clearly understood and estimated, that no confusion is known to arise. Every field is successively cropped according to principles discovered by ages of experience and careful attention to different results. It is not possible, in the present place, to present the numerous series of rotations adopted on different soils, and for different purposes; they will be found well explained in a recent work on Flemish husbandry, published by the Society for the Diffusion of Useful Knowledge.

The following is the *average produce* of the principal crops per acre, in the Waes country, the most fertile and highly cultivated part of Flanders: wheat, 20½ bushels; rye, 25½ bushels; oats, 41 bushels; clover, 13 tons; potatoes, 10 tons; flax, 483 lbs. of yarn, and 6½ bushels of seed.

The *land* in Flanders is generally freehold, or the property of civil or religious corporations. The estates are small, and if not cultivated by the proprietor himself, which is more frequently the case, they are let on leases generally of seven, fourteen, or twenty-one years' duration. The occupier is bound to live on the premises, pay taxes, effect repairs, preserve timber, not sub-let without a written agreement, and to give certain usual accommodations to the next tenant at the end of the lease. The farm establishments are always convenient, and generally more ample, in proportion to the extent of the land, than in England and Scotland. In addition to the usual accommodations, the larger farms are commonly provided with a distillery, a crushing-mill for the preparation of oil from the colza and poppy, and sometimes a mill for grinding corn.

Peasant Farmers.—The small farms, between five and ten acres, which abound in many parts of Belgium, have much resemblance to the small holdings in Ireland; but while the Irish cultivator exists in a state of miserable privation of the common conveniences of civilized life, the Belgian peasant farmer enjoys, comparatively, a great degree of comfort. His cottage is built substantially, with an upper floor for sleeping, and is kept in good repair: it has always a small cellarage for the dairy, a store-room for the grain, an oven, an out house for potatoes, a roomy cattle-stall, a piggery, and a loft for the poultry. The furniture is decent, the bedding amply sufficient, and an air of comfort and propriety pervades the whole establishment. The cows are supplied with straw to lie upon; the dung and its drainings are carefully collected in the tank; and a compost heap is accumulated from every possible source. The premises are kept extremely neat, with a constant observance of the most rigid economy, industry, and regularity. No member of the family is ever seen ragged or slovenly; but all are decently clothed, though it be with the coarsest materials. The men universally work in linen canvass frocks, and both women and men wear wooden shoes. Rye bread and milk principally constitute their diet. Mashed potatoes and onions, with occasionally slices of bacon, are the usual articles for dinner. The great superiority of the Belgian over the Irish peasant farmer is owing not to any advantages of soil or climate, but to a better system of cultivation, and especially to established habits of sobriety, forethought, and prudent economy. The points of his superiority consist—1st, in his keeping as many stall-fed cattle as possible, to secure a supply of manure; 2d, in carefully collecting, and skilfully applying, manure; 3d, in adhering to an advantageous rotation of six or seven crops, by which is obtained the utmost amount of produce without any fallowing. On farms of six acres are found no horse, plough, nor cart: the only agricultural implement, besides a spade, fork, and wheelbarrow, is a light wooden harrow, drawn by hand. The whole of the land is dug and deeply trenched with the spade, and the whole farm work is carried on without any assistance beyond that of the family. The live stock commonly consists of two cows, a calf or two, one or two pigs, a goat or two, and some poultry. All the different kinds of crops which have already been noticed are cultivated upon these small establishments with the same care and success as on the finest farms in the kingdom. The common rent of land is about 20*s.* an acre, and the weekly pay of a day labourer 5*s.* (*Mr. Nicholl's Report on Holland and Belgium*, passim.)

Horticulture.—Numerous and extensive gardens are cultivated in various parts of the kingdom for the supply of the town markets with culinary vegetables, and the common hardy fruits, which are produced in great abundance and excellence. The annual value of this kind of produce is estimated at 8,000,000 francs. Apples and cherries are especially good and plentiful, and are found in every farm-house garden in the kingdom. The culture of the vine is attended with considerable success in several elevated localities on the banks of the Meuse; and some of the wine there produced is far above mediocrity. From Belgium England obtained the cabbage, lettuce, and gooseberry.

Floriculture.—In Belgium the culture of flowers is an object of as much gratification as in Holland, and the climate is far more genial for bringing forth the beauty of these amiable ornaments of civilized life. The last classification of the Belgic population in 1836 shows that, in the whole kingdom, there were then 100 professional florists, of whom two thirds were in E. Flanders and Brabant. The tulip, carnation, and wall-flower, were brought into England from Belgium.

Manufactures.—*Wool*, in Belgium, is the object of an immense industry. The manufactures of all kinds employ a quantity of foreign wool, of which the annual value exceeds 14,000,000 francs. It is imported from Saxony, Prussia, Silesia, Poland, Bohemia, Hungary, Moravia, and the southern provinces of Russia. The annual production of the indigenous wool, of pure and mixed breeds, scarcely amounts in value to 200,000 francs.

Woollen cloths form one of the most important branches of manufacturing industry, and they are greatly superior in quality to those produced in France. The dye of the black cloths, which are made in large quantities, is considered to be more permanent, deep, and beautiful, than that of the best English cloths. The casimirs of the Belgic looms are also as excellent as those of France. The chief seats of the woollen manufacture are at Verviers, Liege, Dolhaim, Limburg, Hodimont, Stavelot, Thuin, Ypres, and Poperinghe.

According to a report of the chamber of commerce of Verviers, in 1833, the woollen manufactures of that city and

its environs employed alone a population of 40,000 operatives. They produce annually about 100,000 pieces of cloth, worth 25,000,000 francs, and the capital employed in the purchase of raw material, manual labour, interest of machines, and buildings, &c., is estimated at 75,000,000 francs. The number of looms is double that in 1812; which, considering the introduction of mechanical improvements, implies an amount of production triple that of the time when the whole of Europe was supplied from this locality. However, the cloth manufacture underwent some reduction in 1835-36. Woollen stuffs, such as flannel, coverlets, serge, bolting-cloth, camlet, &c., are made in all the provinces of the kingdom, but principally in Antwerp and Hainault.

Carpets.—The carpet manufactory of Messrs. Schumacher and Co. at Tournay, is the most extensive and important in Europe. It produces all kinds of what are called *Brussels* carpets, from those which adorn the sumptuous palaces of kings, to such as are used for the floor of the cottage. Constant employment is given to 1600 workmen, who occupy from 80 to 100 looms, and produce annually about 120,000 mètres of carpeting, seven eighths of which are exported. Besides the principal manufacture at Tournay, there are several others of secondary rank in the same town; in Brussels, Antwerp, Ghent, Bruges, and Courtray.

Flax and Linens.—Belgium produces a large quantity of flax. The annual value of that of Flanders amounts to nearly 40,000,000 francs. The various manipulations to which this product of the soil is submitted form one of the most ancient and important sources of the manufacturing wealth of the kingdom. The mode of culture, the order of crops, the preparation of the soil, the system of manuring, the careful cultivation of the plant, and the process of steaming, are so well understood in Belgium, that its flax is always in great demand throughout Europe. England and France buy nearly all the flax which is produced in the provinces of Hainault, Brabant, and Namur. The two Flanders supply a very large quantity to the English market.

The linen cloths of Belgium have long been highly reputed. Their excellence consists in the goodness of their quality and the evenness of their tissue. The most esteemed are those of Ghent, St. Nicolas, Termonde, Alost, and Lockeren. The damask table linens of Courtray are universally acknowledged to be superior to those of every other similar manufactory in Europe; they are also made of great beauty at Brussels, Bruges, and Neuve Eglise. The towns of Ninove, Audernarde, Renaix, Grammont, Thielt, Roulers, Tournay, Enghein, Ath, Mechlin, and Turnhout, are renowned for their manufactures of linens, in which they carry on a considerable commerce.

A society has recently been established for the spinning of flax by machinery, and M. Cockerill possesses already, at Liege, a large flax spinning-mill, worked by a steam-engine of ninety horse power. The only manufactory of lawn is at Saintes, in Brabant. In France, the hand-loom linens of Belgium are always in much demand, though in competition with fabrics supplied by machinery; but in Italy, Spain, and America, where they were exclusively preferred during several centuries, they have now given place to supplies from England and Germany. In 1836, there were sold in the seven markets of East Flanders 127,871 pieces of linen; a quantity which surpasses by 20,000 pieces the sales in 1834 and 1835. Valued, on an average, at 120 fr. per piece, these sales gave motion to a sum exceeding 15,000,000 francs, not including at least an equal quantity sold directly, without appearing in the public market, or consumed by the producers. In the same year, there were sold in the market of Bruges 21,962 pieces of linen; at Courtray, 19,218; at Thielt, 87,860; and at Roulers, 24,078. Total, 153,118 pieces; representing a value of 15,000,000 to 20,000,000 francs. Adding the produce of Brabant and other parts of the kingdom, the whole amounts to nearly 750,000 pieces annually, worth about 100,000,000 francs, and affording occupation to more than 400,000 persons in spinning, weaving, and bleaching. The process of bleaching linen has been carried to a high degree of perfection. Bleach-fields of great excellence are very numerous in the two Flanders, Brabant, and Hainault.

In the province of Antwerp is an establishment for bleaching by steam, the most important in the kingdom.

Cotton.—The cotton manufacture in Belgium represents a capital of 60,000,000 francs, in buildings and machinery; and the number of hands employed is at least 122,000. Ghent, St. Nicolas, Antwerp, Turnhout, Mechlin, and Lierre, contain the principal cotton factories of every description. They produce annually 1,500,000 pieces of calico, and 400,000 pieces of printed cottons, worth, together, nearly 84,000,000 francs. Two thirds of this produce, are consumed in the kingdom. On the 1st of Jan., 1835, there were in Belgium 81 steam machines in operation, in the manufacture of cotton; 363,330 spindles, 82,175 of which were inactive; and 23,309 handlooms, of which 6703 were inactive. E. Flanders is the principal seat of the cotton manufacture. In 1835, this province contained 60 steam machines in full activity, of 900 horse power; 15,272 looms, and 280,000 spindles. The most considerable establishment in the kingdom, in this branch of industry, is that of MM. Rosseel & Co., at Ghent.

Silk.—The production and manufacture of silk promise to become an important source of Belgic industry. Already the annual exportations to France exceed the importations from that country. The breeding of the silkworm was introduced into Belgium in 1826, and this department of business is continually increasing under the fostering care of the government. The mulberry appears to thrive in the soil of the country, and the number of young plants now cultivated exceeds two millions. In the opinion of the best judges, the Belgic silk is quite as beautiful and valuable as the choicest kind produced in the French provinces of Piedmont and Dauphine, which, in fact, is the finest in the world. The most extensive establishments for rearing the silkworm are at Meslin l'Evêque, near Aith, and at Uccle, near Brussels. The quantity produced in 1837 was 2000 kilogrammes, and the value 10,000 francs. Antwerp, which is the principal centre of the manufacture, contains 12 establishments for the production of various kinds of silk fabrics. The factory of M. Duysters, at Lierre, employs 50 looms, which are about to be increased to 600. Velvets, satins, gros de Naples, and other stuffs, obtained formerly from Naples, are made with a beauty of tissue and tints that cannot be surpassed. The silk factory at Uccle is remarkable for excellent dyed and printed fabrics.

Lace.—The manufacture of lace, though now less prosperous than formerly, has nothing to fear from foreign competition. "Brussels lace," the thread of which is made of the finest flax of the country, is superior to every other description made in Belgium or in foreign countries, and the demand for it is kept up in all parts of the world. Its peculiar qualities are delicate fineness, and a great elegance and variety of design. The patterns are all worked separate, and are stitched on. The flax employed grows near Hal, and the best at Rebecque. The finest description costs from 3000 to 4000 fr. a pound, and is worth its weight in gold. The spinning is performed in darkened rooms, with a beam of light admitted only upon the work, through a small aperture. The most beautiful specimens of this exquisite article are produced by the houses of MM. Tardent-Piriet, and Ducpetiaux, at Brussels. The lace of Mechlin is second in rank, with respect to richness and elegance.

It is made also at Antwerp, Lierre, and Turnhout. The cities of Bruges, Menin, Ypres, Courtray, Ghent, Alost, and St. Nicolas, employ a great number of hands in the manufacture of Valencien point. Mons contains a school for special instruction in the art of making the finer kinds of lace.

The principal manufactures of *tulle* are at Ghent, Termonde, Mechlin, Brussels, and at Bouillon, where one establishment furnishes about 200,000 mètres per month. The excellence of the Belgic embroidery on tulle is universally acknowledged, and the number of females employed in this art is estimated at nearly 50,000. The daily earning of each is about 50 centimes.

The manufacture of *gold and silver lace* was formerly a considerable source of wealth, but it is now much reduced by foreign competition. However, the qualities of this article still produced in Brussels are fully equal to those of the best description manufactured in Paris.

Ribands of every species are made principally at Antwerp, Tournay, and Ypres. This branch of industry formerly employed 1000 looms, and 12,000 persons, and produced annually about three thousand million yards of riband; but the manufacture, in consequence of large importations of cheaper kinds from France and Germany, has very considerably decreased.

In 1830, the manufacture of elastic stuffs in *caoutchouc* was introduced by M. Vandermaelen. More than 100 looms are employed by a company formed for the purpose, and various articles are produced, as elegant and substantial as those of France and England.

Fabrics of *hair* are produced in Brussels in great perfection.

The manufacture of *hosiery* employs about 50,000 persons. Its principal centre is in the arrondissement of Tournay, where 2500 looms are kept in activity. About the same number are found in other parts of the kingdom. The coarser articles are most successful, and are partly exported. Finer kinds are imported chiefly from Saxony. At Arendonck, in the province of Antwerp about 200,000 pairs of woollen hose are annually manufactured, and the most beautiful articles of knitting and netting are produced at Brussels and Tournay.

Hats of felt, or beaver, are made sufficiently good to meet the competition of foreign manufacturers, and those of silk are of very superior quality. The latter kind are made in nearly every city in the kingdom, so that the manufacture

of beaver hats has consequently much decreased. Straw hats are abundantly made in Brussels, Ghent, and Antwerp. In the province of Liege this species of industry occupies 6000 persons, and employs a capital of 2,000,000 of francs.

Leather.—The preparation and various manufactures of leather are carried on with undiminished success. The principal tanneries are at Stavelot and Liege; there are also many at Brussels, Namur, Antwerp, Ghent, Ypres, and Tournay.

Oil-cloth is made as good in every particular as in France and England.

Paper factories exist in every province, and the manufacture of this important article is progressively improving. The produce at present is insufficient for the home supply, so that paper for hanging is imported chiefly from Paris; but the rapidly increasing manufactures of Belgium will soon enable it to possess this and every other article of use and ornament without resorting to foreign countries.

Printing, &c.—All impressions are made upon paper, and with types, manufactured in the kingdom. The typographic art is, therefore, an important department of national industry. In Brussels, and several of the other large towns, printing is carried on to a great extent, and with very superior skill. In fact, the printing of Belgium is in no respect inferior to that of Paris in beauty and neatness of execution, or correctness of text. The Belgic press is principally occupied in producing reimpressions of French works published in Paris. However, the number of original works increases every year. One printing establishment at Brussels now produces more than all the presses of the country in the time of its subjection to the French government; and this remarkable increase arises from the extensive system of reprinting the best works of France, which immediately appear in Belgium commonly at about half the original price. The injury sustained by the French authors and booksellers has induced those parties to form a combined opposition, supported by a large amount of capital, but hitherto no success appears to have attended these efforts. General complaints have been made in France, and that government has strongly remonstrated with the Belgian authorities on the injustice of this literary piracy.

Lithography has attained a high degree of excellence, and some of the productions of Brussels will bear a comparison with the finest specimens of German artists. The celebrated geographical establishment, founded at Brussels by M. Vandermaelen, possesses a good press for lithography, maps, and charts.

Bookbinding is executed in Belgium in the best Parisian style, and firmness and neatness have the additional recommendation of cheapness.

Cabinet-making is a source of employment to numerous skilful operatives. Brussels alone contains above 100, and many of their articles of furniture are exported to Germany, England, and America.

The only establishment for the manufacture of *clocks* is at Chenée, near Liege. The machinery is moved by steam. But all kinds of time-pieces are supplied chiefly from France and Switzerland; and with the view of promoting the home production of these useful instruments, the government annually awards premiums and medals for the most perfect specimens produced by native artists.

Mathematical instruments are made with great perfection, especially by MM. Themar and Sacré of Brussels, whose reputation in this department of art has created a demand for their productions in Germany, Holland, and England.

Musical instruments, that is, pianos and wind instruments, are very skilfully manufactured at Brussels. The former are preferred to those of Germany, and the latter, which are issued from the establishment of M. Sax, who employs 100 workmen, have an European reputation for tone and elegant appearance.

Articles of gold and silver work, bronze and jewellery, are for the most part imported from France.

Metallurgy.—The abundance of metals and combustibles in Belgium has occasioned the establishment of several extensive forges for the melting and manufacture of iron, copper, and tin. There are three principal groups of forges. 1. On the banks of the Meuse, extending from its entrance into Belgium to the limits of the Namur and Liege. 2. Between the Meuse and the Sambre; and 3, at Charleroy. Besides these principal groups, there are numerous forges, foundries, and tin works, along the banks of the Hoyoux, the Ourte, and its affluents.

In 1837, there were in the kingdom 23 coke furnaces, and 66 of charcoal, each of the former yielding from 3 to 5 times the produce of one of the latter. Since that period the number of coke furnaces has probably been at least doubled, as 26 were then in preparation, of which 6 at Liege were to be of more enormous dimensions and power than any in Europe. The annual produce of the Belgic foundries is estimated at 150,000 tons, which is half that of France, and one fourth of the produce of England. The average price of iron during the 7 years, from 1830 to 1836, was 416 francs per ton, first quality, and second quality, 330 francs. The largest iron-works on the continent are those of M. Cockerill near Liege, where 16 steam engines of 900 horse power are constantly in operation, and from 3000 to 4000 workmen are employed, at wages which average 3 francs per day, showing the employment of a capital of two or three millions of francs per annum. Copper, as well as iron is worked in this establishment, and not only massive materials for the engineer, and machines of the greatest power and dimensions are constructed, but various delicate and exact mechanical instruments. The enormous colossal lion which supports the triumphant pyramid on the battle-field of Waterloo was cast in the foundry of M. Cockerill. His numerous and various works extend above a mile along the banks of the Meuse, and occupy the site of the palace grounds of the prince prelate of Liege.

The royal cannon foundry at Liege is a magnificent assemblage of the requisite apparatus for manufacturing the largest pieces of artillery in iron and bronze. It consists of 2 large foundries, surrounded by 12 reverberating furnaces, 2 extensive forging factories, containing 15 fires; 5 steam-engines, &c., &c. Establishments for the construction of steam-engines are principally at Liege, Brussels, Charleroy, Tillemont, and Bruges. During the period from 1829 to 1835, the number of steam-engines constructed in the province of Liege alone was 281, of 5400 horse power.

Nail-making is an important branch of metallurgy at Liege and Charleroy. In the latter place, about 5,500 hands are employed in this business throughout the winter. Liege is also the centre of a manufacture of *fire-arms*, which is universally renowned. About 50 factories of these articles are constantly active, and their produce is largely exported to America, Egypt, Turkey, Germany, Italy, and Spain. In the United States of America, the rifles and fowling-guns of Liege are preferred to those of Birmingham. From 25,000 to 30,000 guns are annually exported to Brazil alone. The principal kinds manufactured are, 1. Single and double barrelled guns for sporting; 2. Muskets for military use; 3. Common guns for various purposes; 4. Pistols, which, as well as the best description of guns, are made and finished with great care and skill. The number of guns of different kinds manufactured at Liege in 1836 was 256,979, and of pistols 92,400; total, 349,379. The value of these is estimated at nearly 7,000,000 francs. The produce of the gun factories of Liege exceeds that of the whole of France, and in the number of articles it is superior to that of Birmingham.

Cutlery forms a considerable object of manufacturing industry in the province of Namur, occupying about 5000 hands. Other establishments of this nature are in operation in Brussels, Ghent, Mons, Leuze, and Ath.

Steel implements and edge tools are made in several localities, but the main supply of the kingdom is from Germany and England. From the latter market the annual number of clasp knives imported exceeds 40,000.

Iron and copper utensils, agricultural implements, and saddlery, are manufactured throughout the kingdom.

Carriage-building is well executed at Brussels, with respect to strength and cheapness, but elegance of design is very generally deficient.

Porcelain manufactories exist in Brabant, Hainault, Namur, and Luxemburg. At Sept Fontaines, in the last-named province, at Brussels, Andennes and Tournay, are produced articles which, in delicacy and beauty, may vie with those of every foreign manufacture, excepting Sèvres.

The different kinds of *glass*, in plate and vessels, are made in large establishments at Namur, at Liege, at Val-St.-Lambert, where about 1000 hands are employed, and at Charleroy, where there are 44 furnaces, employing from 1800 to 2000 hands, and producing annually a value of nearly 50,000,000 francs. Four fifths of the produce are exported to Germany, Holland, North and South America, and other countries. Crystal is manufactured at the glass-houses of Namur and Val-St.-Lambert, and is beautifully cut and fashioned in Brussels. Casting of glass employs about 600 hands, at Oignie, in the province of Namur. The same district contains several factories for the preparation of *white lead;* and at Brussels, Antwerp, Ghent, Mechlin, Courtray, and some other cities, are establishments for the preparation of the various chemical products required for the useful arts and manufactures. *Candles* of tallow are manufactured chiefly in Antwerp and Hainault, and of wax at Ypres and Tournay. Lamps are made principally at Brussels and Liege, but they are now greatly superseded by the introduction of gas, which for some time has been used for lighting the streets and shops of all the large towns. Soap factories are numerous in Belgium, and increase continually. The soap of Tournay

is not inferior to the finest soap of Marseilles. Alost, Ninove, Roulers, and other towns of Flanders, possess a great number of mills and presses for the preparation of all kinds of oil, which are partly exported to Germany and England.

In Belgium every circumstance apparently concurs for the successful culture of *beet*, and the extraction of sugar from its root; but, owing to some mismanagement, the labour and capital devoted to this undertaking have not invariably produced an adequate profit. However, about 50 establishments are in full activity, and their produce is highly appreciated for its superior qualities. Fifteen factories, in 1836, produced above 2,000,000 kilogrammes. There is a very extensive establishment for beet sugar at the village of Waterloo. The kingdom contains about 70 refineries of sugar, foreign and indigenous, producing 25,000,000 kilogrammes per annum. Half of the whole number are in the city of Ghent, which, in 1836, exported nearly 4,000,000 kilogrammes. *Café Chicorée* is prepared principally in 20 manufactories at Roulers, in W. Flanders.

Salt refineries are numerous in the provinces of Antwerp, Hainault, and East Flanders. The best are in the cities of Antwerp and Ghent.

The *breweries* in different parts of the kingdom amount to nearly 2800, besides 150 malt kilns. Beer is the common beverage of all classes; and the best is produced in Brussels, Louvain, Diest, and Haegaerde, in Brabant. Louvain alone has 40 breweries, and produces annually about 200,000 tons of white beer, *bierre blanche*; a kind for which there is always a great demand.

In 1836, the whole number of distilleries for the extraction of alcohol from grain was 1065. They abound most in the provinces of Antwerp, Hainault, and the two Flanders; and their produce, under the appellation of *eau de vie*, or gin, forms an important item in the export trade of the kingdom to every quarter of the globe.

In order to encourage and facilitate improvement in manufactures and industrial pursuits, the government has instituted public exhibitions where only the products of the country and its inhabitants are admitted. The first was opened in Brussels, in 1835, when 2727 objects were exhibited, and a distribution was made of numerous medals of gold, silver-gilt, silver, and bronze.

Patents.—A very considerable part of the revenue of Belgium is derived from a tax on patents, no one being allowed to exercise any trade or profession without a patent, the price of which depends upon the amount of profit obtained. Reports of income are required from each individual engaged in business, and the government assessors exercise inquisitorial power in assigning the citizens to classes of different degrees. The number of patents granted by the government in 1837, for new inventions, was 71; for improvements, 21; for importations, 37.

Since the establishment of Belgium as an independent kingdom, a very rapid progress has been observable in almost every department of manufacturing and commercial industry. In proof of which it is alone sufficient to adduce the following record of the number of licenses granted for the establishment of new factories, machinery, and other apparatus for carrying on each process of the industrial arts:

Provinces.	Period.	New manufacturing establishments.	New steam engines.
Antwerp	1832 - 36	171	
Brabant	1831 - 37	236	24
West Flanders	1833 - 36	205	15
East Flanders	1833 - 36	165	49
Hainault	1830 - 37	150	150
Liege	1830 - 37	230	81
Limburg	1831 - 37	129	
Luxemburg	1836	20	
Namur	1834 - 36	37	20

The mines of iron and coal are wrought with increased activity, and the great extent of commercial speculation is shown by the following official account of capital embarked by different companies from 1833 to 1838:

Coal-mines and iron-works	40,540,000
General societies	45,000,000
Glass-works	8,000,000
Sugar-works	8,130,000
Insurance companies	71,200,000
Roads	3,500,000
Loan societies	43,000,000
Miscellaneous companies . . .	26,321,000
Total	Fr. 245,691,000

Steam Power.—By a calculation, more approximative than rigorously exact, the steam-engines actually in operation in Belgium represent a force exceeding that of 20,000 horses; and the mechanical power developed by a horse being about seven times greater than that of a man, it follows that steam replaces, in Belgium, the labour of 140,000 men. In France, in 1835, there were 946 steam-engines, of 14,051 horse power.

		Engines.		Horse power.
The province of Hainault possessed, in 1837,		344	of	12,447
Liege		235	"	6,032
Brabant		42	"	472
Namur	in 1836,	31	"	378
Antwerp		9	"	127

The numbers in the other provinces are not exactly ascertained.

The *Commerce* of Belgium at present extends its relations to numerous parts of the world, and includes every species of indigenous and foreign production. The average annual value it represents may be estimated at 360,000,000 francs; that is, 210,000,000 of imports, and 150,000,000 of exports.

The following results, deduced from the official tables of imports and exports, will serve to convey a general idea of the foreign commerce of Belgium:

The total value of importations, in 1834, was 212,734,132 francs, and of exportations, 135,790,426 francs; in 1835, the value of importations was 212,396,446 francs, and of exportations, 160,705,447 francs. The amount of importations includes that of the merchandise remaining in bond at the close of each preceding year; namely, for 1833, 19,824,706 francs, and for 1834, 13,426,772 francs. The bonding yards are at Antwerp, Bruges, Brussels, Courtray, Ghent, Liege, Louvain, Mechlin, Mons, Nieuport, Ostend, Ruremonde, Tournay, and Venloo.

Of the foreign merchandise imported, the value of the amount consumed in the kingdom was, in 1834, 174,855,797 francs, and in 1835, 163,890,346 francs; and of that exported to foreign countries, the value of Belgic produce was, in 1834, 118,540,917 francs, and, in 1835, 138,037,695 francs; whence it results, that the value of foreign produce consumed in Belgium exceeded that of the native produce exported by 56,314,880 francs in 1834, and 25,852,651 francs in 1835.

The external commerce of Belgium suffered greatly by the revolution in 1830, as Holland has since retained and monopolized the trade with all the colonies which belonged to the kingdom of the United Netherlands. However, it appears from the following account of commercial shipping, that the number and tonnage of vessels which entered the great port of Antwerp in 1837, are nearly double those of 1829, the year previous to the revolution.

The articles which Belgium supplies to England, are oak bark, flax, madder, clover seed, spelter, and sheep's wool; in return for which England sends various kinds of East and West India produce, and manufactures to the value of about a million annually, consisting principally of brass and copper manufactures, cotton fabrics and yarn, hardware, earthenware, salt, sheep's wool, worsted, woollen yarn and woollen fabrics. A large portion of the cotton yarn, cotton cloths, and tobacco, which are exported from England to Belgium are there smuggled across the French frontier by means of large and sagacious dogs, which are carefully trained for the purpose, by being pampered in France and half-starved and ill-treated in Belgium. They are taught to avoid all public roads, and when they find themselves noticed, they slink away with their burdens, and lie concealed in the nearest covert until they can venture again on their journey. A reduction of the high rates of English import duties would be of much benefit to Belgium. On linen, furniture, and toys, it is 20 per cent.; on bobinet, 30 per cent.; and the rates are very high on hats, paper, sewing silk, books, stationery, apples, pears, mustard seed, nuts, and the oils from linseed, rape, and hemp. The commercial and manufacturing cities of Belgium are, Brussels, Ghent, Liege, Namur, Tournay, Ypres, Mons, Louvain, Verviers, Mechlin; to which are to be added the maritime cities, which are Antwerp, Ostend, Nieuport, and Bruges. Some notice of the great extent of the Belgic commerce in the middle ages is given under the head of *History*; but for more particular accounts of its astonishing prosperity at that remote period, reference must be made to the articles ANTWERP, GHENT, and BRUGES.

Commercial Shipping.—Belgium communicates with the sea by Ostend, by Antwerp, by Nieuport, by the canal of Bruges to Oostburg, by the canal of Dunkirk to Furnes, by the canal of Ghent to Terneusen, by the canal of Termonde to Hulst, by the Scheldt from Flessingue to Antwerp, by the Scheldt and the canal of Willebroek from Brussels to Antwerp, and by the canal of Louvain and the Scheldt from Louvain to Antwerp.

The principal ports are Antwerp and Ostend. The former is one of the finest in Europe, and affords reception to vessels of the largest tonnage. The situation of Antwerp, between the N. and S. countries of Europe, and the establishment of a railroad communication thence to Cologne, seem to promise to this port a future accession of great European importance.

The number of merchant vessels belonging to the ports of Belgium in 1838, not including those of the fisheries, was 137; of which the tonnage was 19,535, and the number of men composing the crews, 1093. Vessels are built at all the sea-ports, and premiums are given by government for the construction of ships for sea navigation.

Steam-boats are increasing, and it is proposed to establish them on all the principal lines of communication by water, as well within the country as to foreign ports. At present, the commercial shipping of Belgium is not more than about one nineteenth of what it ought to be; for it is calculated that the kingdom requires 2700 vessels, each, on an average, of 140 tons, to export its indigenous products, and to import, by means of its own ships, the foreign produce which it annually consumes.

Among the indications of increasing commerce in Belgium must be remarked the progressive activity of the port of Antwerp. The number of vessels from all parts of the world, which entered there, and their tonnage, during the four years 1834-37, were as follows:

1834	1,065 vessels	138,206 tonnage
1835	1,196	153,764
1836	1,250	176,461
1837	1,426	225,759

The number of passengers who arrived at Antwerp in 1837 by seven steam packets, six of which were English, was 4000. At Ostend, in the same year, 550 vessels entered, and 2000 passengers by the English steamers; and at Bruges, 143 vessels entered, of 18,000 tons.

Money.—The franc is the monetary unit of Belgium, and its divisions are made according to the decimal system. There are eleven different Belgic coins; namely, two of gold—the piece of 40 francs, and the piece of 20 francs; five of silver—pieces of 5 francs, 2 francs, one franc, half a franc, and a quarter of a franc; four of copper—pieces of 10 centimes, of 5, of 2, and of 1 centime. The florin of Brabant is worth 1 franc 81 centimes, and it is divided into 20 sous, each sous being again divided into 12 deniers.

The *Hôtel des Monnaies* is at Brussels. The value of silver and copper coins which were thence issued, during the period 1832-37, was 16,041,668 francs. The monetary capital existing in Belgium is estimated at 200,000,000 fr. The ancient coins of the Pays Bas are still in circulation, but their number daily diminishes.

The value of the English sovereign in Belgic money is 25 francs 20 centimes; and the English shilling, 1 franc 16 centimes.

Banks and Commercial Societies.—Belgium possesses several large financial establishments, devoted to industrial and commercial operations, which render an immense service to the manufactures and commerce of the country. At Brussels an association was formed, by royal authority, on the 28th of August, 1822, with a charter for twenty-seven years. It is entitled the *Société Générale pour favoriser l'Industrie*, and its object is to develope the resources, and promote the prosperity, of agriculture, commerce, and manufactures. Its capital consists, 1st, of 50,000,000 florins (105,820,000 fr.), of which 20,000,000 are vested in real property, and 30,000,000 in 60,000 shares, each of 500 florins, at an interest of 5 per cent.; 2dly, of a reserved fund, formed of a third of the dividends, and which, in 1836, amounted to 20,000,000 francs. It issues notes to the amount of 40,000,000 francs, for sums of 50, 100, 500, and 1000 francs; and its general operations consist of the discounting of commercial bills, receiving deposits, making loans and advances, and in various ways affording accommodation to facilitate commercial transactions. The administrative body is formed of a governor, who is nominated by the king, six directors, a secretary, and a treasurer.

The *Bank of Belgium*, at Brussels, was instituted by a royal decree of the 12th of Feb., 1835, with a charter for twenty five years. Its capital is 20,000,000 francs, in 20,000 shares, each of 1000 francs. The rate of interest is five per cent. It operates at once as a bank of deposits, of circulation, of discount, and of accommodation to the commercial classes similar to that afforded by the society just described. A director and four administrators are nominated by the king, and the accounts are annually audited by a general assembly of the holders of ten shares.

Among the dependencies of the *Société Générale*, are the *Society of Capitalists*, with a capital of 50,000,000 francs; the *Society of Commerce*, capital 10,000,000; and the *National Society*, with a capital of 15,000,000 francs.

The Bank of Belgium has formed a *Society of United Shares*, with a capital of 40,000,000 francs. Under the same patronage was established, in 1835, the *Bank of Liege*, for forty years: it has a fund of 40,000,000 francs, in shares, each of 1000 francs. In 1837, a great financial society was founded, under the title of the *Commercial Bank of Antwerp*; its term is for twenty-five years, and its capital 25,000,000 francs, in shares, each of 1000 francs. Numerous other institutions of this nature exist in different parts of the kingdom. The amount of capital possessed by anonymous societies authorized by the government since 1833 exceeds 300,000,000 francs. The conditions of success to these societies are that they confine their competition to such industrial operations as the manufacture of the metals and other substances of intrinsic and permanent value.

The amount of property insured against fire, in the year 1837, by eleven insurance companies of Belgium, was 1,786,832,222 francs; in addition to which, an amount, estimated at 200,000,000 francs, was insured by foreign companies.

Weights and Measures.—Belgium has adopted the weights and measures of the French metrical system; the fundamental principle of which is the measure of length. Its unity, the mètre, is the ten-millionth part of a quadrant of the meridional circle of the earth. The length of the *mètre* is nearly an inch less than an English yard and half a quarter; that is, 3·280992 ft. The unit of superficial measure, the *are*, is a square, of which the side is 10 mètres. The unit of the measure of capacity, the *litre*, is a cube, of which the side is the tenth part of a mètre. The *stère* is a cubic mètre. The unit of the measure of weight is a *centimètre* cube of distilled water; that is, a cube of which the side is a hundredth part of a mètre. The itinerary measures are the *décamètre*, *kilomètre*, and *myriamètre*; that is, measures containing severally 10, 1000, and 10,000 mètres. Measures of length are the *mètre*, or lineal unity, the *decimètre*, *centimètre*, and *millimètre*; which severally represent the tenth, hundredth, and thousandth parts of a mètre. Land is measured by the *hectare*, containing 10,000 square mètres; the *are*, containing 100 square mètres; and the *centiare*, which is one square mètre. For liquid and dry measure are used the *litre*, which, as already described, is a cube, of which the side is the tenth part of a mètre; and the *décalitre*, *hectolitre*, and *kilolitre*—decimal multiples of the litre, or 10, 100, and 1000 litres. The *décalitre* is a tenth part of the litre. For solid measure are used the stère and décistère; that is, a cubic mètre and its tenth part. For the measure of weight are used the *gramme*, already explained; the *décagramme*, or 10 grammes; the *kilogramme*, or 1000 grammes; and the *quintal*, or 100 kilogrammes. The *décigramme* is a tenth part of the gramme. It may be useful to add the correspondent value of a few of these measures with those of England, and, for more elaborate explanations, a reference may be made to the *Annuaire de l'Observatoire de Bruxelles*, par M. Quetelet, 1838 and 1839.

Belgic.		English.	Belgic.		English.
Mètre	=	3·280 feet	Hectare	=	2·473 acres
Millimètre	=	0·039 inch.	Litre	=	1·760 pint
Centimètre	=	0·393 inch.	Décalitre	=	2·201 gal.
Decimètre	=	3·937 inch.	Hectolitre	=	22·009 gal.
Myriamètre	=	6·213 mil.	Gramme	=	15·438 g. tr.
Mètre carré	=	1·196 sq. y.	Kilogramme	=	2·680 lbs. t. 2·205 lbs. a.
Are	=	0·098 rood			

The ancient provincial measures which are still partially used, are too numerous for explanation.

Roads of the first class, paved or macadamized, and numerous others of secondary character, intersect the Belgic provinces in every direction. After England, Belgium, in fact, is the next country of Europe in which lines of roads exist in the greatest number, and are kept in the best condition. They are broader and more regular than those of England, and are infinitely better managed than the roads of France: they are also capable of sustaining the greatest extremes and changes of weather, without undergoing any injury worthy of notice. The highways of the state, of the first class, have a width of 19 mètres, 50 centimètres; those of the second class are made 13 mètres, 60 centimètres, in width, if they traverse woods and thickets, if not, 11 mètres, 70 centimètres. Provincial roads have a width of 9 mètres, 75 centimètres. In these dimensions, the lateral banks or ditches are not included. The whole surface occupied by the roads of Belgium is estimated at 70,000 hectares, or 210,000 English acres. Those of the first and second class are made and maintained by the state; the provincial roads are the affair of the provinces; and the smaller byways belong to the communes. It is calculated that, in Belgium, a league of road, or 3 m. English, costs in construction 150,000 francs. Besides several new state roads in course of execution, about thirty new provincial roads have been planned and undertaken; and a company has been formed for the opening of 300 m. of roads, railways, and canals, on the plain of the Campine.

Belgium is the first state in Europe in which a general system of *railways* has been planned and executed by the government at the public cost; and certainly it is an honourable distinction to have given the first example of such a national and systematic provision of the means of rapid communication. The undertaking was first projected in 1833, and the object proposed was to unite the principal

commercial towns on one side with the sea, and on the other with the frontiers of France and Prussia. In this respect Belgium is most favourably situated for the experiment of a general system of rail-roads. It is compact in form, of moderate extent, is surrounded on three of its sides by active commercial nations, and on the fourth by the sea, from which it is separated only by a few hours' voyage from England. On the W. side are the two large and commodious ports of Antwerp and Ostend, and its E. frontier is distant only a few leagues from the Rhine, which affords a connexion with the nations of central and S. Europe. It is, therefore, in possession of convenient markets for its productions, and of great facilities for an extensive transit trade. The physical nature of the country is also most favourable, being, for the most part, very flat, and requiring but few of those costly works of levelling, tunnelling, and embankment, which serve to increase so enormously the expense of similar undertakings in England. The government first employed skilful engineers to survey the kingdom, and to determine the main lines, with regard not only to the physical circumstances of the surface, but to the interests of the large towns and their various relations, internal and foreign. In May, 1834, a law was passed for the prosecution of the plan proposed, and the city of Mechlin was made the centre of the system, with four principal branches extending, N. to Antwerp; E. to Louvain, Liege, Verviers, and the frontiers of Prussia, to be continued by a private company to Cologne; S. through Brussels and the province of Hainault, to the French frontier near Valenciennes; and W. by Dendermond, Ghent, and Bruges, to Ostend. By adopting the lines that concentrate at Mechlin, a larger number of towns are passed than by taking Brussels for the central station, and the distance from Antwerp to the E. frontier is considerably less; but some regret has been expressed that Brussels, the metropolis of the kingdom, was not chosen as the centre of the system. The Belgian government merely requires that the undertaking should pay its own expenses—that it should be neither a burden nor a source of revenue. The expenses consist of the cost of maintenance and repairs, the payment of interest upon, and the gradual redemption of, the capital invested. For the last object, a profit of five per cent. per annum is expected upon the original outlay, beyond the current expenses. Besides, it may confidently be anticipated that the increase of commercial traffic throughout the kingdom will repay the outlay of the government by increasing the amount of its revenue. All the rail-roads established by the government of Belgium have been formed for a double line of rails; but, except in partial instances, only one line is laid down; it being intended to add the other when required. A similar plan of commencing with a single line is generally adopted in the United States of America. The cost of construction in Belgium has varied from £5000 to £10,000 per mile, which is much below the rate of expense incurred in England and France. The Manchester and Liverpool line, and many others, cost about £40,000 per mile; the short line from London to Greenwich £200,000 a mile; and the estimated cost per mile of the lines projected from Paris to Havre varies from £15,000 to £21,000. In the United States of America, the expenses fluctuate between £2000 and £6000 a mile. It is worthy of remark, that the actual cost incurred in Belgium has exceeded the estimate of the engineers by only eight per cent.; while in England, the estimates, for instance, of the London and Birmingham, and of the Great Western railways, have been exceeded in the cost by 100 per cent. In cheapness of fares, the Belgian rail-roads far surpass those of England. The length of the line between Antwerp and Brussels is 27¼ miles; the fare, in a first class carriage, 2*s.* 6*d.*; while a nearly similar distance in England, from Liverpool to Manchester, is 5*s.* 6*d.* In Belgium there are four kinds of rail-way carriages; the Berlin, diligence, char-à-banc, and wagon. The charge in the two first is at the rate of 1½*d.* a mile, and they answer to the English mail and coach, for which the rate of charge per mile is 2½*d.*, or nearly double. The chars-à-banc, which are used by great numbers of the poorer class, are but three farthings a mile, and the wagons are only one halfpenny.

That the adoption of a system of low fares is beneficial to the managers of railways, may clearly be seen in the fact that, in Belgium, where the charges are only one half, or a third of those in England, the proportion of the population who travel is five times greater; for, according to official documents, it appears that the number of travellers on the Liverpool and Manchester line, compared with the population of the towns along its course, gives one trip to each person in a year; while a similar comparison of the travellers and population on the line between Antwerp and Brussels shows the average number of trips to each individual to be five. Since the establishment of railway communication between these two cities, and the consequent reduction of the expense of travelling to one half of the previous charges on the common road, the intercourse has become nearly ten times greater, and it appears that the difference is mainly occasioned by the poorer classes being enabled to avail themselves of this means of locomotion, both for business and recreation; an advantage of which the same classes in England are unfortunately deprived, by the amount of railroad fares being kept above their reach. The rate of charge per ton for extra luggage and merchandise on the Brussels and Antwerp line is less than 6*d.* a mile; and on the London and Birmingham line, 1*s.* 2*d.* Another point in which the Belgian railway carriages surpass those of England is, that of evenness and uniformity of motion. They move without that offensive thumping and swinging for which the English vehicles of this kind are distinguished; they are also much neater and better finished; and their velocity varies from 20 to 30 miles an hour. The beneficial effect of the government's undertaking the establishment of a general system of railways, is obvious in the introduction of this important means of communication much earlier than could have been accomplished by the separate operations of private companies; and to the objection that the government may exercise a too despotic influence over public travelling, it may be replied that, from the experience afforded by the chartered railroads of England, it is not likely that the control of the state will be more absolute than that of the directors of private companies: and as a proof that the Belgic government offers no discouragement to private speculations of this nature, it may be stated that, in 1838, there had been 36 applications granted by the government for numerous branch railroads, many of which are opened, and others in active preparation.

Canals.—The length of the course of canals in Belgium amounts to 460,220 mètres, and that of the navigable rivers to 962,746 mètres. Hence the total extent of inland navigation is 1,422,966 mètres, or 854 English miles. The facilities thus afforded for the transport of heavy merchandise and agricultural produce between the principal places in the kingdom is a great advantage to the prosecution of all industrial and commercial business. The following table exhibits the name, direction, and length of each canal in Belgium.

	Metres.
Basin of the Scheldt.	
C. of Bois le Duc to Maestricht	22,800
Bruges to l'Ecluse	10,600
Bruges to Ostend	23,300
Caramann—Hainault	800
Ghent to Bruges	42,375
Ghent to Terneuzen	21,000
La Lieve—Flanders	41,100
Louvain—Brabant	29,500
Moerdyck—W. Flanders	10,800
Moerwaert—E. Flanders	21,171
Mons to Condé	17,889
Passchendael to Neuport	21,255
Pomereul to Antoing	23,051
Stekenen—E. Flanders	4,720
Willebroek to Brussels	30,000
Basin of the Meuse and Scheldt.	
Charleroy to Brussels	74,529
Basin of the Aa.	
Boesinghe—W. Flanders	6,460
Bergues to Furnes	13,500
Dixmude to Handzaeme	11,500
Dunkirk to Furnes	8,370
Furnes to Nieuport	10,590
Loo—W. Flanders	14,920
	460,220
New Canals not Completed.	
Chimal to c. of Charleroy	65,000
C. of Espierres from the Scheldt to the Marck	8,550
The north from the Scheldt to the Meuse	103,000
Diest to Trois-Fontaines	46,000
Junction from the Scheldt to the Lys	35,944
The Meuse and Moselle, near Liege	279,712
Lierre towards Zammel	28,700
Zelzaete to the sea	50,900
Mons to the Sambre	30,000

[See *Rivers.*]

Population.—The population of Belgium, by the last census of Dec. 31, 1836, amounted to 4,242,600. It belongs to three principal races, the Germanic, which comprehends the Flemings and Germans; the Gallic, to which belong the Walloons; and the Semitic, which comprehends only the Jews. The Flemings, who speak in general a dialect of the Dutch language, form the population of the arrondissements of Brussels and Louvain, in Brabant, and that of the provinces of Antwerp, the two Flanders, and the greatest portion of the province of Limburg. The Germans occupy a part of the provinces of Luxemburg and Limburg. The Walloons, who amount to about 1,300,000, speak a dialect of the ancient French, and inhabit the

provinces of Liege, Namur, Hainault, the arrondissement of Nivelles, in Brabant, and a part of the province of Luxemburg. The Jews are distributed throughout the kingdom.

The French language is used in public affairs and by all the educated and wealthy classes. Among the Flemish, and German inhabitants, nearly all speak French, or at least comprehend it. The amount of population in each province, in Dec. 1836, was as follows:

	Inhabitants.	No. of inhab. per 100 hectares.	Inhab. of towns.	Inhab. of country.	Relation of town to country Inhab. as 1 to
Antwerp	360,180	126·8	124,257	235,923	1·90
Brabant	592,250	180·4	164,577	427,673	2·60
West Flanders	627,128	191	166,994	460,134	2·76
East Flanders	758,906	253.2	184,941	573,965	3·10
Hainault	631,823	175·4	131,829	499,994	3·79
Liege	390,715	135·4	95,425	295,290	3·09
Limburg	331,305	76·9	46,901	284,404	4·16
Luxemburg	323,219	47·8	32,848	290,371	6·59
Namur	227,074	62·5	33,372	193,702	5·80
Total in the whole kingdom	4,242,600	125	981,144	3,261,456	3·22

It appears from this table that the population is very unequally distributed throughout the territory. East Flanders, the richest and best cultivated province, contains, in proportion to its extent, the greatest number of persons. The density of its population is twice as great as that of Antwerp or Liege, four times greater than that of Namur, and six times that of Luxemburg. The Pays de Waes, in the arrondissement of Termonde, in the neighbourhood of Courtray, contains more inhabitants than are to be found in any part of Europe on the same extent of surface. It is calculated by M. Quetelet that the number of men in Belgium capable of bearing arms is 778,381.

The following is the number of inhabitants in the chief towns of each province, taken at two points of times, separated by an interval of eight years.

	1 Jan. 1830.	1 Jan. 1838.
Antwerp	77,199	77,182
Brussels	93,279	104,409
Bruges	42,198	44,874
Ghent	88,789	91,798
Mons	23,110	20,444
Liege	58,087	62,854
Namur	21,471	20,480
Hainault	7,368	8,228
Arlon	3,257	4,083

In 1836, the total number of births in the towns was 32,644; in the country, 111,570. The number of marriages was 31,441; divorces 15. The number of deaths in the towns was 25,855; and in the country, 75,379.

The number of children found abandoned by their parents (*enfans trouvés*); the number of deaf and dumb; the blind; and the proportion of paupers (*les indigents*) to the whole population, in 1836, are shown in the following columns, with regard to each province:

	Children found.	Deaf and Dumb.	Blind.	Paupers to 100 inhab.
Antwerp	1,118	102	288	7·9
Brabant	2,261	240	514	21·1
West Flanders	388	281	544	20·1
East Flanders	980	312	814	13·8
Hainault	1,548	331	715	21·8
Liege	210	194	403	17·2
Limburg	253	173	298	10
Luxemburg	32	127	197	0·7
Namur	607	140	219	4·4
Whole kingdom	8,907	1,900	4,117	14·8

The annual number of foundlings has continued nearly the same since 1833. Of the 1960 deaf and dumb, 1493 were from birth, and 407 from accident; and 960 of the blind were cases of military opthalmia.

The following general observations express the results deduced from an examination of several statistical documents respecting the population of Belgium in 1836: The whole male population may be considered as consisting of two parts, equal in number, namely, those under and those above the age of 23. The same is true of the females, except that the point of division is the age of 25. Of the unmarried, male and female, the number under and over the age of puberty is equal. In the country population, the two sexes are very nearly equal in number; in the towns, there is a uniform excess of females. The proportion of the married to the whole population is as 1 to 2. The proportion of unmarried to married, in an equal number of each, is comparatively greatest among males in the country. The number of widows is double that of the widowers; and this excess is much larger in the town than in the country populations. In 100 houses in the country there are 106 families. In the towns there are 466 persons to 100 families, or something above 4½ to each family; in the country, 503 persons to 100 families, or 5 to each family. The births to the whole population are, in the country, as 1 to 29·9; and in the towns, 1 to 27·7. The deaths to the whole population are, in the country, 1 to 44·3; and in the towns, 1 to 34·9. The total marriages to the total population are as 1 to 134.9; the number divorced, as 1 to 282·84. The proportion of the population of towns to that of the country is as 1 to 3·22. The marriages in the towns are, to those in the country, as 31 to 100, or 1 to 3; which proportion is identical with that between the two kinds of population. The average proportion of births to marriages in the whole population is as 4·6 to 1; and of deaths to births, 1 to 1·48 in the country, and 1 to 1·26 in the towns. The excess of the numbers of births to the deaths is 42·960, or 33½ per cent. The greatest number of births was in March, 14,583; the least number, in August, 10,993: the greatest number of deaths was in January, 10,186; the least number, in July, 7921. The illegitimate births are to the legitimate as 1 to 12 in East Flanders, the richest province; and 1 to 33 in Luxemburg, the poorest province in the kingdom: the general average is 1 to 21. The medium duration of life in Belgium is 31 years. The probable duration of life, immediately after birth, is, males, 24 years in the country; 21 years in the towns: females, 27 years in the country; 28 years in the towns. At the age of 5 years, it is, males, 51 years in the country; 48 years in the towns; females, 51 years in the towns; 48 years in the country. At 40 years of age, 27 for both sexes, in town and country: at 60, 12 to 13; and at 80, only 4. The number of paupers (*les indigents*) constitute 14·8 per cent., or 1 in 7 of the whole population; and it is remarkable that in those provinces where industry and commercial enterprise have produced the greatest wealth and improvement, the proportion of paupers exceeds 21 per cent.; while in Luxemburg, the poorest province of the kingdom, it is only 0·7, or less than 1 per cent. The operative classes form three fourths of the whole population. The number of insane persons, of whom more than one half are paupers, are as 1 to 1000 of the whole population; and maniacs, to the other classes of insane, as 1 to 5. Of 10 insane persons medically treated, scarcely 1 is cured. The number of deaf and dumb is as 1 to 2193. The number of blind, 1 to 1012. On an average in 1000 born, 543 are vaccinated; 22 have the small-pox, of which 2 die.

The government census of the population of Belgium is conducted with the most exemplary attention to systematic method. All the useful points of inquiry are included, so that the results exhibit a most valuable assemblage of scientific data, which in satisfactory completeness and precision are not surpassed by similar documents of any other country. A particular of great importance in the calculations of life insurance—the ages of the living and dying, which in many enumerations of the inhabitants of other countries has been omitted, is ascertained with great care in the population inquiries of Belgium.

Manners and Customs.—The Belgians have been successively subjected to the influence of so many different governments—French, Austrian, Spanish, Dutch—that they consequently possess no distinctive and peculiar national character. The apathy and persevering industry of the Dutch is blended with the vivacity and self-assurance of the French, without producing an agreeable compound. The different provinces exhibit some variety of character and manners. On the borders of Holland the people are generally similar to the Dutch, and adopt their customs, amusements, and dress; but in the southern districts they differ but little from the French in appearance, habits, costume, and language. The Belgians have always displayed a passionate fondness for social liberty—an impatience of control that embroiled them with all their different rulers, and involved them in ruinous disasters during many successive centuries. Writers of all ages agree in describing the Belgians as the most restless, unruly, tumult-loving mortals in existence; always treating their best rulers the worst, while the bad overawed them. In the history of no other country do we find such unbounded liberty with such an invincible disposition to abuse it. The Flemish burghers no

sooner emancipated themselves from the despotism of their feudal lords, than jealousy of each other's power engaged them in frequent and fatal hostilities; so that "liberty," says Mr. Hallam, in his History of the Middle Ages, "never wore a more unamiable countenance than among these burghers, who abused the power she gave them by cruelty and insolence." They confirmed every compact with ceremonious oaths, and then broke them one after another—always complaining of encroachments upon their liberties; and this characteristic deficiency of good faith appears to have been transmitted to the present descendants of the Belgians of the middle ages. Major Gordon, in his useful "Advice to Settlers in Belgium," has candidly put this failing on record, and the fact is reasserted by an able writer and admirer of the Belgians (in the *London and Westminster Review* for April, 1839, p. 377) who says that "a facility for making promises and breaking them runs through the Belgian people, in all the channels of business, wholesale or retail, of the bureau or in the workshop." The same author remarks that "this general want of veracity does not extend into the great national transactions, nor into the proceedings of diplomacy." The most obvious peculiarity by which the Belgians are distinguished is their devout observance of religious rites and ceremonies. Long and imposing processions of the priesthood in their sacerdotal dresses are frequently parading the streets of the principal towns. Every native salutes the consecrated host with the deepest reverence as it passes by, and it would be dangerous for the traveller to manifest, even by a gesture, the slightest disposition to ridicule. It is evident, indeed, in the whole conduct and customs of the Belgians, as described by writers of every party, that the higher classes are greatly influenced by bigotry, and the lower classes by superstition. In the rural districts the clergy are regarded with fanatical veneration, and they everywhere exercise, and endeavour to maintain, a powerful dominion over the great mass of workmen and peasants. The churches are all open at five or six o'clock every morning, when every good Catholic attends to repeat his prayers before entering upon the business or pleasure of the day, and the afternoon and evening of every Sunday are enlivened by the entertainments of tavern gardens, grounds for shooting with the cross-bow, ball-rooms, theatres, and other public places of amusement. Another remarkable and very general trait in the Belgic character is a pertinacious adherence to long-established notions, habits, and customs, with an aversion to proposed improvements, however worthy of consideration and adoption. This, however, is more especially true of the rural population, for the middle classes of the towns are distinguished for a zealous spirit of enterprise, and extreme readiness to act upon every suggestion of advantage and additional facility, in the prosecution of industrial and commercial business; and upon this important and highly intelligent portion of the population depend the present and future elevation and prosperity of the whole kingdom. The wealthy inhabitants of the cities have very generally adopted the language, fashions, dress, manners, and amusements of the French, so that Brussels may be regarded as Paris in miniature, with much of the dulness of a mere provincial town.

Music and dancing are very favourite amusements, especially with the middle and lower classes. On every fine summer evening balls are given at the tavern gardens, which are numerous in the outskirts of every large town. The price of admission varies from three or four sous to a franc. Musical festivals are celebrated every year at Bruges, Ghent, and Antwerp, by amateur performers, who are emulated by enthusiastic ambition to win numerous prizes, which are awarded to the best performers. The musical skill exhibited on these occasions is truly astonishing; and the trial of the comparative ability of the natives of particular localities is regarded with intense excitement, which is manifested by marching the performers to the contest in stately processions, accompanied by party banners, and thousands of spectators. Music, in fact, is so commonly and carefully learned, even by the labouring classes, that the harmony of the airs which are sung by groups of peasants while at work, is often delightful to the most cultivated musical ear. The national taste for music is strongly manifested in the numerous and singularly-excellent chimes of 50 or 100 bells, called *carillons*, which are placed in the church steeples and towers of the town halls. Those in the large cities are not always played by means of a revolving barrel worked by machinery, but by keys, similar to those of an organ, though of far greater dimensions. The performer, an accomplished musician, is paid a considerable salary for amusing the citizens during an hour or two every day, with the finest musical compositions. His hands are cased with thick leather, and the physical force required is so severe as to exhaust the strength of a powerful man in a quarter of an hour. In some localities, the different chimes are so numerous as scarcely to leave an interval of silence, day or night. At a distance, the sounds float as softly as the notes of an Æolian harp, or melodious organ. The half Dutchman of the province of Antwerp loves to indulge his constitutional apathy in sedately sitting over his pitcher of beer, and watching the circles of smoke that issue from his pipe of tobacco. He is roused to extravagant mirth only once in the year, when the carnival licenses every one to commit any kind of foolery for three days, under the disguise of masks and harlequin dresses. In winter, the wealthy classes are fond of driving about in ornamental sledges, constructed in very fanciful forms, and painted with the gaudiest colours. The *treckschuit*, or canal fly-boat for passengers, is also a peculiar picturesque object in the scenery of Belgium, as it glides, gorgeously painted, between vividly-green banks, shaded with rows of beautiful trees. A common recreation throughout the country is shooting with a cross-bow at a wooden bird, fixed upon the top of a lofty pole. The rustic inhabitants of the great plain of heathy sand, between Antwerp and Maestricht, are lower on the scale of civilization than similar classes in the western and central districts of the kingdom. The necessity for ceaseless manual toil precludes all opportunity of mental culture: and leaves them rude, rough, and ignorant. Their food consists wholly of potatoes, buttermilk, and the coarsest rye bread. Of a similar character are many portions of the numerous Walloon population, inhabiting the country S. of a line drawn from Courtray in the W. to Maestricht in the E. Their language, a vulgar patois derived from the old French of the 13th century, is called by themselves *Kœter Walech*, and is not understood by the Flemings, Dutch, or French of the present age. These hardy and illiterate people have a natural propensity for war, and in former times they served, like the Swiss, in the armies of Austria, Spain, and France. They are now chiefly employed in working the mines of the hilly districts in which they live. Their coarseness of character, and deficient sense of delicacy, especially of females, have often been observed by Englishmen who have had opportunities of making observations upon their habits. The disgust of travellers in Belgium has also been frequently excited by a barbarous but common practice of throwing domestic slops from the upper windows in the town and city streets.

In general, the labouring classes in Belgium are ruder and less instructed than in Holland, but industrious and provident habits are observable in every part of the kingdom, especially in Flanders. The Flemings possess the distinctive characteristic of the Saxon race: talents for agriculture and commerce, perseverance without vivacity, and a spirit of enduring courage in war. An account of the character and condition of the small peasant farmer has already been given. The following description of the domestic economy of the superior class of Flemish farmers is condensed from the Agric. Survey of Mr. Ratcliff: It is pleasing, he says, to observe his laborious industry recruited by decent and comfortable refreshment, and his farm-servants treated with kindness and respect. He does not aspire to be a gentleman, and his servants feel the benefit. They uniformly dine in a plentiful and orderly manner with the farmer and his family at the same table, which is covered with a clean cloth, and well supplied with spoons, four-pronged forks, and every other convenient article. A standing dish is soup, composed of buttermilk boiled, and thickened with flour or rye bread. Potatoes, salt pork, salt fish, various vegetables, and eggs are the articles of daily consumption, with occasionally fresh meat and fresh fish, and always abundance of butter or rendered lard. All these provisions are made palatable by tolerable cooking. The potatoes are always peeled, and generally stewed in milk. A kind of kidney-bean, sliced and stewed in milk, is a constant dish. No respectable farmer is without a well-cultivated garden, full of the best culinary vegetables and apples, all of which appear at his own table. He is particularly attentive to the preservation of a neat and comfortable appearance, personal and domestic. Health and cleanliness are greatly promoted by an ample supply of good linen apparel: and few, even of the labourers, are without several changes. In home work, the farmer wears a blue linen frock. His house is ornamented outside by flowering creepers, or fruit trees trained against the walls: and within, the neatness of every arrangement is highly pleasing. Each article of furniture is highly polished; the service of pewter is displayed in glittering rows, and the tiled floor is kept perfectly clean by frequent ablutions. The Flemish farmer seldom amasses riches, and as rarely is afflicted by poverty. Industry and frugality secure for him the enjoyment of moderate comforts, and beyond these he has no anxiety. He abstains from the excitement of spirituous liquors, though easily procured; he never exceeds his available means; punctually pays his rent, and, in case of emergency, he has always something at command beyond his necessary expenses.

Sciences and Arts.—Since the provinces of Belgium have

formed an independent nation, a great spirit of emulation, and a desire of improvement, have arisen among all classes of the population. Energies have been awakened that already have achieved much in the cause of social and intellectual advancement, and that promise to accomplish far more in the same honourable career. Not only the physical, but the intellectual resources of the country are becoming more and more developed. It appears, from a work published in 1837 (*Dictionnaire des Hommes de Lettres, des Savans, et des Artistes de la Belgique*, par M. Van der Maelen), that there are in Belgium 1096 persons, of whom 613 are men of literature and learning, professors, &c., and 483 artists, all born in the kingdom, or permanently settled, especially at Brussels, Ghent, Antwerp, and Liege. Among the most eminent artists at present are Wappers, Verbeckhoeven, De Keyser, in painting; Geefs, in sculpture; De Beriot, Servais, Vieuxtemps, and Batta, in instrumental music. Original works, and compositions of high character, are constantly contributing towards the formation of a national literature. The government sustains and encourages the progress of science, learning, the fine arts, and literary taste: pensions are given to talented young men to enable them to develope the powers of their genius in foreign countries, by studying the works of the great masters; and a national exhibition is opened every year, in which are displayed the paintings, sculptures, engravings, and designs of the best artists. It is alternately held at Brussels, Antwerp, and Ghent, so that each of these cities becomes a centre of attraction to the lovers of art every third year. The exhibition at Brussels in 1836 was formed of the contributions of more than 160 artists, nearly all natives of Belgium. The most meritorious performances are rewarded by medals of gold, silver, and bronze.

Architecture has been carried to its highest degree of perfection in the construction of the cathedrals and town-halls of Belgium, which display the finest specimens of the ornamental Gothic style of the middle ages. The cathedrals of Antwerp, Ghent, and Mechlin are magnificent Gothic structures. The open-work tower of the latter is of the 15th century, and, though unfinished, it is higher than the dome of St. Paul's. In England, Gothic architecture is chiefly confined to churches, but in Belgium it is shown to be equally suitable to civic edifices and private houses. Fronts richly decorated with quaint and fantastic sculptures, lofty sloping roofs, full of windows, pointed gables, castellated towers, battlements, and projecting windows, combine to produce a general effect which, from its grandeur and intricacy, delights and amuses the spectator. The town-halls, or, rather, municipal palaces, of Brussels, Louvain, Ghent, Ypres, and Bruges, are unequalled in magnitude and elaborate ornament by any similar edifices in Europe.

Belgium possesses several public *libraries*, containing rich collections; and the government exerts the greatest care to increase and preserve them. At Brussels, the library of Bourgogne, founded about 1560, consists exclusively of a collection of 1500 manuscripts. The Town Library possesses 140,000 printed volumes. The National Library, founded by the government in 1837, contains 60,000 printed volumes, and 1000 manuscripts. At Louvain, the University Library consists of about 105,000 printed volumes, and 250 manuscripts. At Liege, the library of the university has 60,000 printed volumes, and 440 manuscripts. At Ghent, the University Library contains 51,600 printed volumes, and 556 manuscripts. The public library in the town-house of Antwerp contains 15,000 volumes. At Tournay, the Town Library, opened to the public in 1818, contains 27,000 printed volumes, and 58 manuscripts. The state also possesses several valuable depôts of archives. That at Liege includes the archives of the ancient principality of Liege, which are very numerous and interesting. In the depôt of Mons are the ancient archives of the sovereign court of Hainault, and other curious antiquarian documents. That of Tournay includes the archives of the ancient provincial council and states of Tournay. The depôt of Ghent is very extensive and important, as containing many historical documents, such as the charters of the counts of Flanders, of the abbeys of St. Bavon, &c. &c.

Learned societies devoted to general or particular objects are very numerous. The most important, as well as the most ancient, is the Academy of Sciences and Belles Lettres of Brussels, the operations of which commenced in the reign of Marie Thérèse.

Among the establishments which have taken an honourable place in the annals of science is the Observatory of Brussels, the construction of which was projected before the revolution; but its execution and efficient operation are attributable to the present government. The precise geographical position which it occupies is in N. lat. 50° 51′ 10·6″, and its long. E. from Paris 8′ 7″. The ground-floor is 58 mètres above the level of the North sea. This observatory is furnished with the most excellent instruments; and, under the able direction of M. Quetelet, it is highly useful, not only in the practice and improvement of the science of astronomy, but in affording advantages for the study of other mathematical and physical sciences, as meteorolgy, navigation, geography, and especially dialling, and the exact notation of time. With the view of precisely determining the measure of time, a small lunette meridian has been constructed in each of the cities of Antwerp, Ostend, Bruges, Ghent, and Liege; and grand meridians are placed in the walls of the cathedrals and hôtels de ville, or other public edifices of numerous other cities. These arrangements have served to furnish an assemblage of astronomical observations in Belgium that are not known in other parts of the world. The Observatory publishes annually a scientific annuaire, similar to that of the Bureau of Longitude in Paris.

The geographical establishment of Brussels is a private institution, unique in its kind. Its founder, M. Vander Maelen, to whom geographical science is much indebted, is connected with the principal scientific societies in Belgium and other countries. The edifice is beautifully placed in the centre of pleasure-grounds, and the interior contains a rich library, a museum of natural history, magnificent conservatories, replete with rare and curious plants; and a large school, in which is taught the whole process of drawing and engraving maps. Many valuable publications have issued from this institution; namely, elaborate geographical dictionaries of the Belgic provinces, a cadastral or statistical atlas of Belgium, a large map of the environs of Brussels, a geometrical plan of Brussels, a topographical chart of Belgium, &c. &c.

Public Instruction.—Belgium possesses four universities, devoted to the higher range of scientific and literary studies; two belonging to the state, at Ghent and Liege; the Catholic university of Louvain, founded by the clergy; and the free university of Brussels, founded by association. In the 16th century the university of Louvain was the first in Europe as a school of Catholic theology, and was attended by 6000 students. Besides the usual faculties of law, medicine, science, philosophy, and literature, the university of Liege contains a school for teaching the useful arts, manufactures, and mining. That of Ghent gives a course of civil engineering; and the university of Louvain a course of theology. Each of the universities possesses a chemical laboratory, cabinets of physical science, of mineralogy, zoology, and comparative anatomy, a theatre of anatomy, botanic garden, and chambers for clinical practice. The number of students who attend the collegiate courses at Liege is usually about 400, at Ghent 300, and at Brussels about 320. The largest classes are those of law and medicine. About 420 students of divinity attend the Catholic university of Louvain, which is opposed to the liberal university of Brussels.

Academical Degrees.—Belgium has established a system for examining students and conferring degrees, similar to that lately adopted by the university of London. A body of examiners, composed of professors and other highly distinguished men of learning and science, holds its sessions in Brussels, and awards honourable certificates and titles to those possessed of the greatest scientific and literary knowledge and ability, without inquiring whether these requisite qualifications have been acquired from professional teachers in the public halls of a chartered college, or from solitary perseverance in a private study. To ascertain and reward the highest merit is considered, as in reason it ought to be, sufficient for the purpose of encouraging the pursuit of useful knowledge: the questions about *where* and *how* being relatively unimportant.

There are two degrees in each department of knowledge —*candidate*, or graduate, and *doctor*, which is understood and applied simply in its original and abstracted signification of a person competent to teach; that is, learned. The body of examiners consists of several separate committees or juries (*jurys d'examen*), each composed of seven examiners and seven supplementary members (*suppléants*). The class of moral and mental philosophy, and that of polite literature, have each a jury appropriated to examine and confer degrees, as have also those of law and medicine. The members of the examining body are appointed for one year: two of each jury are nominated by the chamber of representatives, two by the senate, and three by the ministers of the government. In 1838, the four universities of the kingdom were represented in the examining body as follows:

	Examiners.	Supplementary.	Total.
University of Liege	7	12	19
Ghent	8	10	18
Louvain	10	3	13
Brussels	5	3	8
Total	30	28	58

There are two sessions in each year. Those of 1837 con-

ferred degrees upon 414 students, of whom 124 belonged to the university of Liege, 79 to that of Ghent, 94 to that of Louvain, 76 to that of Brussels, and 41 had prepared themselves by private study. Classical studies are discouraged throughout Belgium, with a disposition to banish them for more obviously useful acquirements.

A *military school* at Brussels annually furnishes well-instructed officers to the army; and the government has taken measures for the reorganization of this establishment, in order to form it into a polytechnic academy.

There are two *veterinary schools*, one at Brussels, the other at Liege. That at Brussels belongs to the government; and although it is designated a veterinary school, its arrangements afford the means of complete instruction, not only in that department of science, but in all the different branches of agricultural knowledge, theoretical and practical; together with the chemical principles of brewing, distilling, &c. &c.

Several of the larger towns possess each an *Athenæum* or a *gymnasium*, for supplying a middle course of instruction between that of the school and the university, comprehending, however, the ancient and modern languages, history, geography, and the elements of the mathematical and physical sciences. The Athenæum at Brussels has a theatre for lecturing capable of accommodating 1200 persons. Each student has a furnished room, at the expense of the government; and all the lectures are gratuitous.

Besides these establishments, which are supported by the state or by the communes, some of the provinces have *Catholic colleges*, which, as well as the university of Louvain, are under the direction of the clergy. Four of these ecclesiastical institutions are possessed by the corporation of Jesuits; namely, one at Brussels, one at Namur, one at Alost, and one at Ghent. There is also a theological seminary in the diocess of each Catholic bishop; that is, at Mechlin, Bruges, Ghent, Liege, Namur, and Tournay; and smaller schools of the same nature in each diocess: at Mechlin, Roulers, St. Nicolas, Rolduc, Bonne-Esperance, Bastogne, and Floreffe. Belgium may, therefore, be considered as amply provided with the means of maintaining and propagating ecclesiastical doctrines.

Industrial and commercial schools are established at Brussels and at Verviers, where courses of instruction are given in mathematics, mechanical science, chemistry, geography, book-keeping; in short, in every department of science and practical knowledge that is or may be subservient to the purposes of commerce and the manual arts. At Tournay, a school has been especially formed for teaching the most useful arts and trades; and in the cities of Mons and Namur, schools are opened for giving instruction in the various operations appertaining to mining. The fine arts are still an object of much emulation in Belgium, and academies of painting are very numerously attended in Brussels, Antwerp, Liege, Ghent, Louvain, and Tournay. The total average number of young men who are constantly receiving gratuitous instruction in the different academies of painting and schools of design throughout the kingdom is 3550, and their numbers, with regard to each province, are as follows:

Antwerp	1065	W. Flanders	886
Brabant	991	Namur	80
Hainault	460	Limburg	30
E. Flanders	1100	Liege	900

The Royal Academy of Fine Arts at Antwerp is the principal school of painting, and it produces every year several artists of the highest distinction. It is supported by the public, and is usually attended by at least a thousand students.

Belgium has had the rare honour of producing two different *schools of painting*, known by the appellation of "Flemish." The first arose under Hubert and John Van Eyck, or John of Bruges, about the year 1440. To the latter artist is attributed the discovery, or at least a remarkable improvement, of oil painting; and the remaining specimens of his skill display a most wonderful richness and brilliancy of colouring. In the days of the Van Eycks, the Flemish painters were enrolled in a guild at Bruges, and exceeded 300. The works of this early Flemish school exhibit generally a great stiffness and formality of design, and deficiency of good taste and refinement; but their representation of truth and nature, their skilful execution and vivid colouring, with the fact of their being the earliest efforts of original art, unassisted by the relics of classical antiquity, give them a very peculiar interest. A long succession of artists, of whom the principal were Hans Hemling, Quentin Matsys, Floris, De Vos, the Breughels, and Otto Vennius, extend to the commencement of the second school of painting, the ruling spirits of which were Reubens, and his pupil Vandyke. The style of Reubens resembles that of his predecessors in brilliancy and contrast of colouring, but he is no less remarkable for liberty and facility of drawing, than they for confinement and difficulty. All his principal paintings exhibit the power of very superior genius, in spite of many faults, one of which is, that of women without beauty or grace; and the concourse of strangers who visit the galleries, churches, and public halls, in which his works are exhibited, at Antwerp, and the other great cities of the kingdom, are a source of considerable wealth to the inhabitants.

Brussels possesses a royal establishment for *lithography*, and an excellent school of engraving, where designing is taught, and the different kinds of engraving on copper and wood.

Belgium is remarkable for its large and numerous schools of music, called *conservatoires*. The most important is that of Brussels, which is commonly attended by 400 pupils; and the most ancient is at Liege, with 200 pupils. The Ghent Conservatory of Music, though a very recent establishment, contains above 160 pupils. There are several others, numerously attended, at Mons, Louvain, and Namur. The Grand Harmonic Society of Brussels, which is accounted the first of the kind in existence, includes among its best performers many who were taught in the Brussels conservatory.

Schools for teaching navigation are established at Ostend, Antwerp, and Nieuport. The one at Ostend has about 60 students.

Primary instruction in Belgium has made no perceptible progress during the last nine years, that is, since the revolution by which the Belgic provinces became independent of the Dutch government, an event which, however beneficial and desirable for other national objects, has, doubtless, been greatly injurious to the cause of national education. The *compulsory* and *normal* system of Holland was then rejected by the Belgic authorities, who adopted in its stead the *voluntary* principle; but this has not secured either the competency of teachers or the attendance of scholars; so that general confusion and ignorance have succeeded to that order and intelligence which was steadily extending under the dominion of the Dutch. The Catholic clergy and monastic orders have made energetic and very successful exertions to possess the ground which the Belgic government left unoccupied, especially the Brotherhood of the Christian Doctrine.

Public instruction in the Belgic provinces, down to the time of their union with those of Holland in 1815, was in a very backward and depressed state. Primary education had been systematically and very successfully established in Holland since 1805, and it is due to the government of that country to acknowledge that its anxious attention was at once bestowed upon the great deficiencies and abuses of the school system of Belgium, on its union with Holland. In 1817, the Dutch normal and compulsory system first began to operate generally throughout the southern provinces of the kingdom of the Netherlands, now constituting Belgium; and during the twelve years from that time to 1829, the progress and value of primary instruction was far greater than at any period before or since. The number of children who attended the elementary schools in the winter of 1817 was 152,898, and in the winter of 1828 they amounted to 247,496, being an increase of 94,598. In 1817, the salaries paid by the government to teachers in the rural communes was 157,580 francs; in 1828 it was 488,150 francs, showing an increase of 330,570 francs, appropriated to the support and extension of the Dutch normal and compulsory system. In that period, there were 1146 school-rooms, and 668 houses for teachers, newly erected, or refitted; and 1977 male, and 168 female teachers received certificates of competent qualification. Well arranged schools, and able teachers, were established in almost every commune, and improvement was rapidly and universally extending. Antiquated and awkward routine was replaced by more rational and advantageous methods of teaching; uniformity was observed in the use of class-books; normal schools were opened for the instruction and training of masters; courses of lectures were given in the principal towns on the required qualifications and duties of teachers; funds were supplied in advance for the construction of school-houses; societies of masters were formed for circulating useful books and professional knowledge. Other important societies were established for the purpose of extending, in various ways, the beneficial effects of the normal system; and fines were inflicted upon any persons who presumed to teach without the requisite testimonials and certificates of competency. In short, the whole plan of proceeding fulfilled the most desirable conditions of securing the regular attendance of children, and the able and efficient performance of the duties of teachers, by the responsible superintendence of government, frequent inspection, examinations, reports, and full publicity. Notwithstanding the obvious advantages of this system, a spirit of opposition began to be generally manifested in 1828, and it appears to have been mainly attributable to ecclesiastical partisanship. The people and institutions of Holland are chiefly Protestant, while those of Belgium, with little ex-

ception, are Catholic. The Belgians are, moreover, most rigid adherents to the rights and dogmas of the church of Rome, and are remarkably subject to the influence of their spiritual pastors. They consequently never heartily concurred in the establishment of the educational system introduced by the Dutch, and eventually they charged it with being instrumental in propagating Protestant doctrines, at variance with those of the Catholic Church. The refusal of several Catholic congregations to submit to the rules respecting examinations and certificates, which led to their proscription by the government; the rebellious disposition of teachers, who would not, or could not, undergo the required proof of their qualifications, and the offence often unavoidably given by the district inspectors, in the execution of their functions, served at length to create an amount of opposition and perplexity that induced the government to propose, in 1829, before the revolution, a return to the principle of "freedom of teaching." Since 1830, as stated already, the adoption of that principle, whatever may be its ultimate effect, has been productive of great immediate injury to the primary schools, a large number of which have fallen back to the use of bad old methods and the employment of miserably incompetent teachers. A few primary schools receive subsidies from the present government, but most of the excellent societies which arose under the normal system for the encouragement of good teachers, the use of superior books, and the adoption of improved methods, have disappeared, and the government neither exercises any superintendence, nor makes any inspection, even of the mode of appropriating the insufficient sums which are voted by the legislature for the schools still dependant upon the national funds. A comparison of the returns for 1826, when the Dutch system was in operation, with those for 1836, when it had been discontinued six years, shows that the schools had increased to more than double the number, in consequence of no test of qualifications being required for becoming a teacher; but the proportion of scholars to the population remained exactly the same, and the instruction received may safely be considered as not half so good. The total number of schools, in 1826, was 2541, and the scholars 353,342; in 1836, the schools were 5622; and the scholars 421,303. In 100 scholars, the average number of boys is 57, and of girls 43.

A comparison of the number of scholars, with the population of each province, gives the following results:

Provinces.	1826	1836.
	One scholar to	One scholar to
Antwerp	10·0	9·7
Brabant	11·5	9·4
E. Flanders	12·3	12 6
W. Flanders	10·0	13·9
Hainault	9·0	9·5
Liege	14·0	10·2
Limberg	16·6	10·2
Luxemburg	9·4	7·1
Namur	8·7	8·8
Whole kingdom .	10 7	10 7

The following ratios of scholars to inhabitants, in several other countries, are stated on the authority of M. Ducpetiaux, and will afford the means of comparing the state of popular instruction in Belgium:

Countries.	Years.	One scholar to
Holland	1835	8·8
England	1833	11·0
Ireland	1831	13·2
Scotland	1834	8·0
France	1834	16·3
Austria	1833	10·0
Switzerland	1834	9 0
Norway	1834	7·0
Denmark	1834	7·0
Prussia	1831	6·0
Saxony	1834	5·5
New-England States .	1834	4 0

The results of numerical documents relating to primary instruction in Belgium exhibit the following facts: The number of scholars is far from being equal to that of the individuals requiring elementary education: with regard to which the population may be divided into four parts. The *first* consists of children under the age of two years, who form about *one eighteenth* of the whole population, and whose education is merely maternal. The *second* consists of children between the ages of two and six years, who form about *one twelfth* part, and who ought to be, for the most part, committed to the guardian or asylum schools, to be prepared to receive instruction. Schools of this description are at present established only in some of the large towns, and the total number of children belonging to them does not exceed 3000, which is scarcely a hundredth part of the requisite amount. The *third* part consists of children between six and fifteen, who form about *one sixth* of the whole pop., and should all receive the instruction which is afforded in primary schools, but it appears that only about one half this class have that advantage. The *fourth* and last part comprises all above the age of fifteen. In 1836, more than half the young men who were enlisted for the militia in the metropolitan province of Brabant were entirely unable to read. Applying the same proportion to the other provinces, it results that about 1,500,000 young men in Belgium are wholly destitute of the simplest elementary knowledge of reading. It farther appears that the total mass of individuals destitute of primary instruction, consisting of adults and children above two years of age, is to the whole pop. as 53 to 100, or more than one half. The instruction given to children is far from being adequate to their wants; it is limited to reading, writing, and a very little of arithmetic. The scholars are often merely kept in charge, and learn nothing; and commonly, in the country districts, the attendance of more than one half is discontinued throughout the summer, in order that something may be earned by their services in the fields. The education of girls is more neglected than that of boys, and both sexes are generally taught together on the same benches, by male teachers. Two thirds of all the schoolmasters in the kingdom are self-appointed, and unwarranted by any certificate of competency.

Catholic Sunday schools for religious instruction are very numerously attended in the provinces of Flanders and Antwerp. The principal Sunday school in Ghent contains about 3000 children—1400 boys and 1600 girls; and the annual cost of its maintenance is defrayed by voluntary contributions to the amount of 8500 francs. Evening schools for the working classes are established in several of the principal towns, and also some excellent institutions for instructing the deaf and dumb.

Religion.—The Roman Catholic religion is professed by nearly the whole population, which, in 1836, was 4,242,600. The Protestants do not amount to 13,000, and the Jews are about 1100. The fullest liberty is allowed in the expression of religious opinions, and the choice of modes of worship. The incomes of the ministers of each denomination of religionists are derived from the national treasury. In 1834, they amounted to 3,427,900 francs, or £137,116; namely, £134,116 to the Catholics, £2600 to the Protestants, and £400 to the Jews. The Catholics are under the spiritual charge of the Archbishop of Mechlin and of five bishops, namely, of Bruges, Ghent, Liege, Namur, and Tournay. The salary of the archbishop is 100,420 francs, or £4016. The salaries of the bishops vary from £2252 to £3092. From these incomes, large payments are made to vicars, canons, and ecclesiastical schools, which reduce the annual income of the archbishop to £840, and those of the bishops to about £580 each. Catholic rectors of the first class receive annually from the public treasury £82, and the second class £55. Of the first, there were 80 in the year 1836, and of the second 170. The number of the inferior clergy is 4370; and their annual allowances vary from eight to thirty guineas. The Catholic clergy is also composed of a great number of men and women belonging to endowed religious houses, and whose lives are devoted to pious contemplation, teaching, and visiting the sick. The number of convents inhabited by these classes is 333, of which 42 are for males, and 291 for females. The Protestant ministers amount only to 28; their annual allowances from the treasury vary from 16 guineas to £168; the greater number have about £84. The sum of 12,000 francs has been granted by the government for the celebration of worship according to the church of England. The general consistory of the Jews is held at Brussels. The high priest receives from the public treasury £96 per annum, and each of the priests £50. The Béguinage, or convent of Beguin nuns, at Ghent, is of great extent, comprising streets, squares, and gates, surrounded by a wall and moat, and containing 600 of the sisterhood. The Beguins are not bound by any vow, but no sister ever quitted the order. They visit the sick and afflicted, attend the poor at the hospitals, and seek to alleviate misery as the pitying ministers of religious consolation.

Public Charities.—Belgium possesses a great number of charitable institutions, consisting of richly-endowed hospitals and alms-houses, for the relief of every kind of misfortune, misery, and want, and for individuals of all ages. The annual amount of money devoted to public charities exceeds 10,500,000 francs, as follows:

	Francs.
Hospitals or asylums for the poor and sick (1832)	4,246,503
Bureaux of charity (1832)	5,308,099
Institutions for foundlings (1834)	614,609
Poor-houses (1834)	421,644
Total . .	10,590,855

Each commune has its bureau of charity for the distribution of money, food, or clothing, permanently, to the sick poor, and occasionally to those in health. Private estab-

lishments are formed at Brussels, Verviers, and Liege, for the employment of indigent artisans. *Ateliers de Charité*, at Antwerp, Ghent, and other cities, afford work and maintenance to numerous destitute operatives. The one at Ghent constantly contains, on an average, 450 inmates. A particular account of this establishment is given in the proceedings of the Statistical Society of London, No. XIV. Asylums for the aged poor, and hospitals for gratuitous medical treatment, are found in every town, and lying-in charities in the principal cities: they are supported partly by the communes, and by means of private endowments. The amount of donations and legacies to hospitals and bureaux of charity, in the five years from 1830 to 1834, was 2,131,004 fr. There are 318 hospitals for the poor; and the average annual number of individuals maintained therein, during four years, from 1831 to 1834, was 22,880; which is 1 to 182 of the total inhabitants; and the average expense of each person was 186 francs. The annual average number of persons relieved by the bureaux of charity, in the same period, was 617,128; and the average expense of each 8·60 francs.

Numerous hospitals and asylums for lunatics are established in the principal cities of the kingdom; and, in general, the arrangements and the treatment, physical and moral, are very judicious and commendable. It is estimated that the total number of lunatics in the asylums of Belgium amounts to 2000, and that this is about half the number existing in the kingdom. There are several ancient endowed institutions for the maintenance of orphans; and in Antwerp, Flanders, Brabant, and Hainault, are several foundling hospitals. During the ten years from 1821 to 1832, the average annual number of children found abandoned was 8849. In 1836, the number was 8207. The annual average expense of maintaining each child is 79·40 fr.

The number of *Monts-de-piété*, or establishments for lending money upon the security of pledged property, amounted, in 1838, to twenty-three. The following table exhibits the progress of their operations during the five years from 1832 to 1836:

Years.	Amount lent.	Amount of Pledges redeemed.	Average Amount of each Loan.
	Fr.	*Fr.*	*Fr.*
1832	8,336,972	6,692,912	7·40
1833	7,218,172	6,326,464	6·20
1834	7,340,282	6,930,536	6·42
1835	10,692,462	7,111,213	8·85
1836	8,716,658	7,582,544	7·23

In 1831, immediately after the revolution, the amount advanced was 6,916,620 fr., and the average upon each pledge 5 fr. 90 cent.; and it is worthy of remark, that in that year, when all industrial and commercial operations were stagnant and suffering, the recourse to this means of assistance was far less than in 1835 and in 1836, when trade and manufactures were flourishing in the highest state of activity. Besides provident institutions, which exist in various localities, there are banks for savings in almost every town, which are connected with a central savings bank for the whole kingdom, established in Brussels by the general society for the encouragement of industrial pursuits. The deposits, which, in 1833, were only between 3,000,000 and 4,000,000 fr., amounted, in 1835, to 13,707,348 fr.; of which 10,170,385 fr. were from 8480 private individuals, averaging each 1200 fr.; 3,457,715 fr. were from public offices, and 79,948 fr. were from the inmates of prisons. The amount of deposits has subsequently undergone a considerable increase. In March, 1838, it was 40,000,000 fr.

Poor.—Belgium has five great work-house establishments, for the reception, confinement, and maintenance of the poor. They are situated at la Cambré, near Brussels, for the province of Brabant; at Bruges, for the two Flanders; at Hoogstraeten, for the province of Antwerp; at Mons, for Hainault, Namur, and Luxemburg; and at Reickheim, for the provinces of Liege and Limburg; and they are not only asylums for indigent persons either sick or in health, but prisons for condemned vagabonds and beggars. It is stated by Mr. Nicholls, in his Report on the condition of the poor in Holland and Belgium, that, under the present regulations, these provincial work-houses, or *dépôts de mendicité*, are very defective institutions—nurseries of idleness and promoters of pauperism; and that hence the necessity arose for resorting to more rigorous measures, which ended in the establishment of the poor colonies, to which all persons found begging are sent, if able to work, and are compelled to labour for subsistence, under strict discipline and low diet. He remarks that, had the old work-houses been rendered efficient by the introduction of regulations calculated to make them tests for distinguishing between *poverty* and *destitution*—providing only for the latter—there would have been no necessity for the poor colonies, where the test of strict discipline, hard labour, and scanty diet is so applied, as to be held in the greatest dread by the vagrant classes. All beggars are apprehended by the police. If able to work, they are sent to the penal colony; if aged or infirm, or unable to perform out-door work, they are sent to the work-houses; and although the discipline of the latter is defective, and their management in many respects faulty in principle, they serve, with the aid of the coercive colonies, to secure the repression of public mendicity. The establishment at la Cambré, near Brussels, is superior, in its internal arrangements, to the great work-house at Amsterdam, particularly in the separate classification of the aged, the children, and adults, and also in the good arrangement and cleanliness of the sleeping-rooms. The sexes are strictly separated in all the Belgic institutions of this nature. By the penal code, a mendicant once condemned to the work-house for public begging may be kept there during the remainder of his life; but in practice he is allowed to leave it whenever the commission of superintendence are satisfied that he is disposed and able to labour for his subsistence without resorting again to mendicancy.

The pauper colony of Belgium is near Hoogstraeten, in the N. extremity of the province of Antwerp; it was established in 1823, by a charitable society, which entered into a contract with the government at that time, to provide for 1000 mendicants, on receiving for each 35 florins per annum, or £2 13*s*. The tract of bruyère, or poor heathy land, which the society purchased to form the colony, extends to about 1800 acres in the communes of Merxplas and Rykevorsel.

The cultivation of this land is carried on by the paupers, and its crops of potatoes and other vegetable produce are generally as abundant as those of the surrounding communes. The buildings are spacious and well ventilated, and the arrangements and discipline are such as to secure the general healthiness of the inmates. There is a school for elementary instruction, an infirmary, with various work-shops, stores, and machinery for spinning and weaving. One ward is used in common as workshop, refectory, and dormitory. The inmates sleep in hammocks, and are clad in a very coarse uniform. They labour with the spade in the fields, or in making bricks, or at manufactures in the house, under the superintendence of an inspector. All particulars respecting the work, food, clothes, and expenses of each individual are entered daily, in books kept in the military manner. Mounted guards patrol the boundaries of the colony, to prevent the escape of deserters, and rewards are given for bringing back those who succeed in getting away, for each is compelled to remain at least one year. These rigorous measures for the suppression of mendicancy have been adopted in the absence of any acknowledgment of a right to relief, and notwithstanding that a large portion of the relief actually administered arises from endowments and voluntary contributions. No right to relief exists either in Holland or Belgium, yet in both these countries mendicancy is suppressed. The following table shows the number of pauper colonists at Hoogstraeten, during four years subsequent to the revolution in 1830, with the amount of receipts and expenses of the establishment.

	Paupers.	Receipts.	Expenses.
1831	465	174,770 fr.	286,573 fr.
1832	412	200,873	263,394
1833	342	153,751	234,800
1834	255	175,343	274,269

The number of inmates of all the work-house establishments in the kingdom during the same period, and their expense, were as follows:

	Inmates.	Expenses.
1831	2,996	477,948 fr.
1832	3,258	494,709
1833	2,647	480,455
1834	2,575	421,644

Which shows that the average cost of each inmate is 163·54 fr. per annum, or £6 16*s*. In November, 1831, there were, in all the work-houses, 1871 voluntary inmates, and 657 by order—1138 men, 1018 women, 372 children; 1502 unemployed, and 1026 employed.

Prisons and Criminals.—In Belgium, the punishments of death and of branding, although still written in her laws, are practically abolished. Criminals are placed in four central prisons; namely, at Ghent, for those condemned to forced labour; at Vilvorde, solely for confinement; at St. Bernard, near Antwerp, for correction; and at Alost, for military offences. There is also in the chief town of each prov., having a court of assize, and of each arrond., a prison for persons arrested, or condemned to less than six months' confinement, and for debtors. The number of these places in the whole kingdom is 149. A separate penitentiary for female criminals is about to be established at Namur, and a school of reform for criminals under the age of eighteen. Hitherto the superintendence and instruction of female prisoners have been confided to the religious order of the Sisters of Providence. The average pop. of the four cen-

tral prisons in each year, from 1831 to 1836, was as follows:

Years.	Prisoners.	No. kept at work.
1831	3,417	2,501
1832	3,318	2,726
1833	3,185	2,587
1834	3,444	2,957
1835	3,639	3,137
1836	3,691	3,366

The average total expense of each prisoner to the state is 150 fr. per annum. They work exclusively for the equipment of the army, and for the supply of necessary clothing, &c., for prison use. The annual number of articles manufactured exceeds 1,000,000. Criminals, on their liberation, are placed under the inspection of the prison commissioners, in order to facilitate the obtainment of honest occupation, and prevent a relapse into crime.

In Belgium, the amount of crime with regard to the pop., and to the criminal records of France and England, is comparatively small. M. Ducpetiaux, in a work published in 1835, entitled *Statique comparée de la Criminalité en France, en Belgique, en Angleterre, et en Allemagne*, gives the following results of the several official returns: of England, from 1827 to 1833, taking the pop. at 13,500,000; of France, from 1825 to 1832, pop. 32,500,000; and of Belgium, from 1826 to 1832, pop. 4,000,000:

Countries.	Annual Average.			Pop. to 1 accused.
	Total accused.	Acquitted.	Condemned.	
England .	16,924	3,556	13,368	797
France . .	7,340	2,954	4,386	4,427
Belgium .	766	142	624	5,222

In Belgium, the annual average number of persons accused and arraigned, during the period subsequent to the revolution, from 1831 to 1834, was only 620, or 1 in 6724 of the whole pop.; and it certainly redounds highly to the honour of the moral character and governmental institutions of that kingdom, that the proportion of criminal offenders is constantly diminishing, while in England it is greatly augmenting.

The proportion of accused to the pop. varies very considerably in the different provinces, but all have experienced a diminution, as exhibited in the following table:

Provinces.	Pop. to 1 accused.		Dimin. per cent.
	1826–1829.	1831–1834.	
Brabant . .	3,266	5,617	42
Limburg . .	3,568	5,924	40
Namur . .	3,976	6,369	36
Antwerp . .	4,229	6,136	31
Liege . . .	4,928	5,440	11
W. Flanders .	5,252	6,656	21
E. Flanders .	5,410	5,734	5
Luxemburg .	8,072	8,407	4
Hainault . .	11,346	17,111	34

With respect to the relative amount of different offences, a comparison of the returns for the period 1826–29 with those for 1831–34, shows that, with the exception of an increase of two in the annual average number of murders, and of three in that of forgeries of money, there had been a diminution in every species of criminal offence, from 9 to 47 per cent.

In general, there is in Belgium, 1 person accused of crime among 5000 inhabitants, and 1 of misdemeanour among 170. In 100 accused of crime against the person, 20 are acquitted; and of the same number accused of crime against property, 15 are acquitted. The number of crimes against property is three times greater than that of crimes against persons.

The amount of military offences in 1837 compared with that of 1836, shows a considerable decrease of acts of insubordination and quarrelsome assaults, but a slight increase of robberies, and more than double the number of desertions. From the reports of the central prisons in 1832, it appears that in 100 individuals there confined, 61 were utterly ignorant of reading and writing, 15 could read only, but were otherwise extremely ignorant, and 24 could read and write with some degree of facility.

Government.—Belgium is governed by a constitutional monarchy, under a dynasty freely elected by the constituents of the nation. Its independence was first proclaimed, in an absolute manner, by a provisional government, on the 4th of Oct., 1830, and on the 18th of the following Nov., it was again proclaimed by the national congress. By the terms of the treaty of the 15th of Nov., 1831, Belgium forms a state perpetually neuter with regard to all other states. The Belgian constitution, decreed by the national congress on the 7th of Feb., 1831, places all governmental power in the nation, operating by means of the representative system. It establishes individual liberty, the inviolability of every man's house and property, the perfect liberty and independence of religious worship and opinions, the right of assembling and associating, the liberty of the press, the liberty of teaching, ministerial responsibility, and the independence of the judicial power. In short, the whole system of government is based upon the broadest principles of rational freedom and liberality. The entire draft of the constitution is too long for insertion in this place, but the following particulars comprise all the most essential points of this admirable document. A copy of the original, in the French language, is inserted in the *Annuaire Historique Universel*, for 1831. The order of the several subjects is as follows; Territory and divisions. Rights of Belgians. Powers of government. Legislative chambers. Senate. King. Ministers. Judiciary powers. Provincial and communal administration. Finance. Military and police forces; and finally, various general and temporary arrangements, and provision for the future amendment of the constitution. It declares that no distinction of orders shall be observed—that Belgians are all equal in the presence of the laws. Individual personal liberty is guaranteed. No one can be prosecuted, nor have his house entered, but by the authority and forms of the law. Punishment by death is abolished, and cannot be re-established. Universal toleration, liberty of public religious worship, and the liberty of publishing opinions on all subjects, are guaranteed. No state church is recognised, and no one can be compelled to conform in any way whatever to the forms and ceremonies of any ecclesiastical system, nor to observe any of the holy days which they enjoin. The state has no right to interfere in the nomination or appointment of the ministers of any religious denomination, nor to prevent the publication of their acts, except as far as it is responsible for the preservation of the liberty of the press from obvious abuse. The form of marriage, as a civil compact, is required to precede the act of religious benediction. Liberty of teaching is established. (Vide *Primary Education*.) No persons can be prevented from giving instruction, but their misdemeanours, as teachers, are cognizable by the law. The press is free, and no censorship can be established. When the author is known, and resident in Belgium, the publisher, printer, or distributor, cannot be prosecuted. Belgians have the right to assemble peaceably and unarmed; but assemblages in the open air are subject to the laws of the police. The right of associating cannot be annulled by any preventive measure. Every one can address petitions to the public authorities, signed by one or more persons. The post-office is responsible for all letters committed to it, and the contents of letters are inviolable. All power emanates from the people, and must be exercised in the manner established by the constitution.

The legislative power is exercised collectively by the king, the chamber of representatives, and the senate. Each branch possesses the power of first moving the adoption of laws; but such as relate to the state expenses and receipts must be first voted by the chamber of representatives. The interpretation of the laws, with respect to authority, belongs only to the legislature. The executive power is exercised by the king, as directed by the constitution, and the judiciary power by the courts and tribunals. All decrees (*arrêts*) and judgments are executed in the name of the king. Questions relating exclusively to provincial and communal matters are determined by the councils of the provinces and communes.

The members of the two chambers represent the nation, and not merely the province or subdivision of a province by which they are nominated. The sittings of the chambers are public, but each chamber can form itself into a secret committee on the demand of its president and ten members. Members of either chamber cannot receive any pension, or hold any paid office under the government, and during the session they cannot be arrested or detained, except for any flagrant misdemeanour. The chamber of representatives is composed of deputies chosen directly by citizens who pay taxes to the amount of at least 20 florins, about 33 shillings. The number of deputies cannot exceed the proportion of 1 to 40,000 inhabitants. To become a deputy, it is necessary to be a Belgian by birth or by naturalization; to be in possession of the civil and political rights of the kingdom; to have attained the age of twenty-five; and to be resident in Belgium. No other condition of eligibility can be required. The representatives are elected for four years, and one half of the whole are renewed every two years. On a dissolution, the whole chamber is renewed. Each representative, except those who live in Brussels, receives 200 florins (16 guineas) each month of the session, as indemnity of expenses. The senate is composed of half as many members as the chamber of representatives, and they are elected by the same citizens for eight years. Half are renewed every four years, and the whole on a dissolution. The qualifications are the same as for the representatives, except that the age must be at least forty years, and the amount paid in direct taxes must be at least 1000 florins (£84). The senators receive no payment, on account of indemnity of expenses.

The session of the chambers must last at least forty days. The number of representatives is 102, and of senators 51. The constitutional powers of the king are hereditary in a direct male line, natural and legitimate, in the order of primogeniture, to the perpetual exclusion of females and their descendants. In default of male issue, the king may nominate his successor, with the assent of the two chambers, and if no nomination be made, the throne is vacant. The person of the king is inviolable. His ministers alone are responsible. No act of the king is valid unless countersigned by a minister, who thereby becomes responsible. The king nominates and dismisses his ministers at will, confers gradations of rank in the army, and appoints all persons employed in the general administration, with some exceptions indicated by the law. He sanctions the laws, and issues the orders and decrees for their execution, without possessing any power either of suspending the laws themselves, or of dispensing with their execution. He commands land and sea forces, declares war, negotiates treaties of peace, of alliance, and of commerce; but treaties of commerce, and others involving important consequences, are of no effect without the sanction of the chambers. The king may especially convoke or adjourn and dissolve the chambers, and he can mitigate or remit the sentences of punishment pronounced by the judges. He can also confer titles of nobility, but he has no power to attach to them any privileges whatever, all Belgians being absolutely equal in the eye of the law. The nobility enjoy only a personal title, without constituting a social order. No member of the royal family can be a minister, and no one who is not a Belgian by birth or naturalization. Ministers have no deliberative voice in the chambers unless they are members. They can enter, however, and demand a hearing; and the chambers can demand their presence when required. They are liable to be accused by the chamber of representatives, who can bring them before the court of cassation, which alone is empowered to judge them. The king cannot withdraw a minister from responsibility, nor pardon him when condemned, without a demand for pardon from one of the chambers. There are five ministers; namely, a minister of justice, of the interior, of foreign affairs, of public works, of war, and of finance. The king is declared of age at eighteen years. Before he can exercise the functions of royalty, he must take the following oath in the presence of the two legislative chambers: "I swear to observe the constitution and the laws of the Belgian people; to maintain the independence of the nation, and the integrity of its territory." Judges receive their appointments directly from the king, and hold them for life, so that they cannot be superseded but by their own consent, or by a judgment and for reasons pronounced in open court. The trial by jury is established for all criminal and political charges, and for offences of the press. No extraordinary judicial commission or tribunal can be created under any denomination whatever. No taxes can be levied by the state unless ordained by a law of the legislative chambers; and all taxes, as well as the extent of the army, must be voted annually. The civil list is fixed for the duration of each reign. For that of the present king it is 2,751,323 francs, besides the appropriation of the royal edifices.

The number of citizens registered in the electoral lists in 1833 was 47,853, of whom 14,835 were in the cities, and 33,018 in the rural communes. It hence results that, in Belgium, there is one representative to 39,958 inhabitants, and to 478 electors; one senator to 79,325 inhabitants, and to 972 electors; and one elector to 85 inhabitants. To a thousand inhabitants there are 16 electors in the city, and 11 in the country. Great Britain has one representative to 36,520 inhabitants, and France one to 70,980. Belgium, with respect to electors, is between Great Britain, which, in 1832, had 1 to 29, and France, which, in 1834, had 1 to 177 inhabitants. The national arms are the Belgic Lion, with the motto, *L'union fait la force*, and the national colours are red, yellow, and black, in three vertical divisions. Two decorative orders have been instituted—the civil and military order of Leopold, and the order of the Iron Cross. The first was created in 1832 to recompense all eminent services to the country. It has four classes, consisting, in 1837, of 23 grands-cordons, 16 commanders, 109 officers, and 1091 chevaliers, or knights. The Iron Cross was instituted in 1833, to reward the patriotism of those who were signally distinguished in the revolutionary period from Aug., 1830, to Feb., 1831.

In each province a governor is appointed, directly amenable to the minister of the interior, for the purpose of superintending and securing the due execution of the laws, and each administrative arrondissement is superintended by a commissary, under the provincial governor. The exclusive interests of each province are committed to a provincial council, elected by the citizens, who elect the national representatives. The number of councillors in each province is from 50 to 70. Each commune has also its council to manage the affairs which belong exclusively to its inhabitants. The members are elected as those of the provincial councils, in the proportion of 1, on an average, to 187 inhabitants. The total number of communal councillors in the kingdom was, in 1838, 22,285. Each commune has from two to four bailiffs, and a burgomaster, who is the principal local officer for the administration of justice, and the direction of police affairs.

Judicial system.—A *tribunal de paix* in each canton, a *tribunal de première instance* in each arrondissement, and three courts of appeal—at Brussels, Ghent, and Liege—form three degrees of civil jurisdiction. Misdemeanours belonging to the correctional police are judged by a section of the *tribunal de première instance;* crimes and graver misdemeanours, political offences, and abuses of the press, are judged by a court of assizes in each province, with a jury of citizens possessing certain qualifications indicated by the law. A *Cour de Cassation*, or annulment, at Brussels, decides upon demands against judgments pronounced in the other courts and tribunals. Commercial affairs are judged by thirteen tribunals of commerce, in the principal commercial towns. Military laws are administered by councils of war, and by a high court at Brussels for final decisions. According to the *Annuaire judiciaire* of 1837, the number of legal advocates in Belgium was then 791.

The Court of Cassation pronounces only upon the validity of legal forms, and refers all cases of violation or misapplication of the law to another tribunal. The courts of appeal decide upon appeals respecting the judgments rendered in the tribunals *de première instance* in civil matters, and affairs of commerce and correctional police. The tribunals *de première instance* give definitive judgments upon all civil affairs involving sums over a thousand francs; and the tribunals *de paix* determine cases extending to 50 fr., or to 100 fr. with appeal to superior courts. The tribunals of municipal police are composed of a justice of peace, a commissary of police, and of the burgomaster or bailiff of the commune. The highest degree of judicial proceedings is exercised by the courts of assize, which, in the cities of Brussels, Ghent, and Liege, are composed of a president and four assessors, chosen from the councillors of the courts of appeal. In the other chief provincial cities they are formed of four judges *de première instance*, and a councillor of the courts of appeal as president. Twelve jurymen, chosen for each case by ballot, from qualified citizens, decide upon the question of guilt, and according to their decision the court acquits or applies the punishment which the law declares. It is calculated that the business of the courts requires annually the services of 2160 jurymen, and that the kingdom contains 26,350 citizens qualified as the law demands for the performance of that important office.

Finances.—The total revenue of Belgium for the year 1838, as shown by the *Budget Générale*, amounted to 94,606,326 fr. The average sum for each inhabitant, calculating the population at 4,250,000, was therefore 22 fr. 26 c. The amount of direct imposts was 76,967,236 fr., which gives an average of 18 fr. 11 c. as the sum actually contributed to the expenses of the state by each inhabitant. In 1829, under the Dutch dynasty, the average on each person was 30 fr. 67 c.; and according to the last budget of the Dutch government, the average in Holland is 42 fr. 32 c. In France it is 30 fr. 30 c.; and in England, 69 fr. 60 c.

The Belgic revenue, as stated above, was derived from the following sources:

Land-tax	18,261,236 fr.
Personal	8,272,000
Patents	2,833,600
Rents of mines	115,500
Customs	9,000,000
Excise	18,970,000
Bullion	150,000
Sundry receipts	29,000
Stamp duty	8,550,000
Domains, forests, &c.	10,786,000
Tolls, post, canals	6,080,000
Capital and revenues, railroads, forests, &c.	9,295,000
Reimbursements	2,264,000
Total receipts	94,606,326 fr.

The total expenses of 1838 were 95,291,052 fr. 10 c., which exceeded the amount of receipts by 684,726 fr. This excess appears to have been immediately removed by an increase in the amount of receipts in the custom and excise offices.

The expenses are classed as follows:

Interest on the public debt	9,356,900·06 fr.
Pensions	3,654,000·00
Deposit fund	513,000.00
Civil list	2,751,322·75
Senate	22,000·00
Carried forward	16,297,222·81

Brought forward	16,297,229·61 fr.
Chamber of representatives	409,830·60
Court of accounts	125,236·20
Minister of justice	6,345,875·00
" foreign affairs	721,000·00
" the interior	8,137,018·96
" public works	7,880,815·00
" the marine	649,351·00
" the war	42,087,786·35
" finance	12,645,846·78
Total expenses	95,291,052·10 fr.

The national debt consists, 1st, of 100,000,000 of fr., borrowed in 1831–32, at 5 per cent., for the organization of the army and other public services: 2d, of 30,000,000 fr., borrowed in 1836, at 4 per cent., for railways and other means of communication; 3d, of a floating debt of 25,000,000 fr., at 3½ per cent., chiefly for railways, roads, and other public works.

The pensions in 1838 were as follows:

Civic pensions	577,000 fr.
Military	1,550,000
Ecclesiastical	720,000
To retired finance officers	913,820
To widows of persons employed on public works	6,000
Pensions of the order of Leopold	30,000
Total	3,796,820 fr.

Army.—The quota of the Belgic army is determined every year by a law. Its strength has been fixed, for several years, at 110,000 men; that is, one soldier to 37 inhab. In France, the proportion is one to 106; in England, 1 to 229; in Prussia, 1 to 46; and in the German States, 1 to 100. It appears, therefore, that, in Belgium, the number of soldiers to the population is three times greater than in France and Germany, six times greater than in England, and that it even exceeds the proportion in Prussia. All statistical economists are agreed that a state cannot, without injury to its interests, constantly maintain an army which exceeds by one per cent. the totality of its population. The quota of the Belgic levy of 1838 was fixed at a maximum of 12,000 men. The expenses of the war department in 1830–31 were 86,643,275 fr. In 1838, it had gradually decreased to 42,078,786 fr., or less than half; and the average expense of each man was 382·50 fr. In France, it is 738 fr.; in England, 1604 fr.; and in Prussia, 370 fr. The following table exhibits the number of soldiers, including officers, in actual service or on furlough in 1838, in the different ranks and departments:

Department.	On service.	On furlough.
Etat-major générale	78	
Etat-major des places	162	
Intendance	30	
Etat-major particulier of artillery	98	
" " of engineers	99	
Infantry	33,368	47,384
Cavalry	7,768	588
Artillery	7,947	1,159
Engineers	18	400
Gendarmerie	237	
Service de santé	657	
Total	51,891	49,531

The army is furnished with 32 chaplains and curates: 5000 subalterns and privates receive pensions, averaging each about 200 francs. A general association for the encouragement of military service in Belgium has been founded under the protection of the king; and a permanent camp is established on the Campine plain, near the frontier of Holland. It extends over a larger surface every year, and will soon become a military town, advantageously situated and well built.

A civic or national guard of the kingdom is raised for the purpose of defending the constitutional rights of the monarchy and of the people, for the maintenance of order, for upholding the laws, and preserving the territory from invasion. The whole force consists of 500,910 men, divided into three bands, the first of which contains 89,000.

There are 257 legions, distributed as follows:

	Legions.	Men.
Antwerp	20	48,536
Brabant	27	82,166
W. Flanders	40	82,663
E. Flanders	38	108,206
Hainault	35	89,834
Liege	25	53,771
Limburg	24	49,793
Luxemburg	32	44,399
Namûr	16	31,542
	257	500,910

The colonels and lieut.-colonels are nominated by the king from among the majors and captains of the legions. The guard remains stationary: it is under care of the minister of the interior, and the government is empowered to call out the first van when occasion demands it.

Marine.—Belgium, on her separation from Holland, was left entirely without an armed navy. In 1838, she possessed only a small flotilla of gun boats, manned by about 600 seamen and officers. Several larger vessels were about to be constructed.

History.—In the ages immediately preceding and subsequent to the Christian era, much of the great plain which now comprises the provinces of W. and E. Flanders and Antwerp, was partially overflowed by the ocean. The soil was so marshy that an inundation or a tempest threw down whole forests, such as are still discovered below the surface. The sea and rivers had no limits, and the earth no solidity. Many of the inhabitants of this low plain lived in huts placed upon the mounds of sand, or elevated above the reach of the tides upon stakes. They had fish for food, rain-water for drink, and peat for fuel. (*Pliny's Nat. Hist.*, lib. 16.) The higher S. and E. parts, forming at present the Walloon country, were covered by the immense forest of the Ardennes, which extended from the Rhine to the Scheldt, and afforded shelter to numerous tribes of the German race (*Cæs.*, lib. 2, 4), who lived by hunting, and by rudely cultivating the earth. They formed a part of the third division of Gaul, which, by the Romans, was called Belgia, Belgium, or Gallia Belgica, and were the least civilized and most courageous of all the Gallic nations. (*Cæs.*, lib. 1, 1.) They had cities surrounded by lofty stone walls and fortified gates, requiring the use of the Roman battering-rams and moving towers. Their armies contained troops of cavalry: the country produced supplies of corn, and abundant herds of cattle. The people consisted of two classes, chiefs and slaves; and Druidism from Britain was universally predominant. Flanders was occupied by the Menapii and Morini, Brabant by the Atuatici, Hainault and Namur by the Nervii (who excelled in desperate courage), and Luxemburg and Limburg by the Eburones, &c. In the great confederacy of these clans against the Romans, they levied about 120,000 fighting men, 60,000 of whom were reduced by Cæsar to 500, in his battle with the Nervii near Namur, and of the Atuatici he sold 53,000 for slaves on taking the town of Tongres. (*Cæs.*, lib. 6.) In stature and bulk they surpassed the Romans (lib. 6, 30), whom they fiercely encountered, and nearly destroyed Cæsar's army of the best disciplined troops in the world. The highland tribes soon became amalgamated with their Roman conquerors, adopted their manners and language, and during the long dominion of Rome in those regions, they served in her armies, and were greatly distinguished for their intrepidity; so that many of Cæsar's subsequent victories, especially that of Pharsalia, were decided by the cavalry and light infantry of Belgium. The lowland people, on the contrary, continued faithful to their ancient manners, customs, and language, and sought only to secure national independence by maritime commerce, and agricultural industry. Pliny, who speaks from personal observation, says that, in his time, their fruits were abundant and excellent.

In the 3d, 4th, and 5th centuries, the character of the Belgic population was greatly changed by successive invasions of Salian Franks from the north, whose progress westward terminated in the establishment of the Frankish or French empire in Gaul, and under whose dominion the ancient inhabitants of the Ardennes were either destroyed or reduced to slavery. Christianity was introduced, and monasteries were founded in the immense forests and solitudes of the higher country, which the French nobles visited only for the sake of hunting bears. The maritime lowland descendants of the Menapii, now blended with Saxons and Frisians, and known by the name of Flemings, continued to prosper in commerce and agriculture. In the time of Charlemagne, A.D. 800, the physical state of the country had become much improved. In the W., embankments were raised against the encroachments of the sea, and in the E. large tracts of forest were cleared; but the fierce and valiant warriors who formerly occupied the soil, were succeeded by an abject race of serfs, who cultivated the domains of haughty lords and imperious priests. The clergy enjoyed immense possessions: 14,000 families of vassals belonged to the single abbey of Nivelle, and the income of the abbey of Alne exceeded 1,300,000 dollars. The Flemings formed associations called *Gilden* (the English guilds) for protection against the despotic violence of the Franks, as well as for social assistance. These were the origin of all the ancient municipal corporations, and within a century after the time of Charlemagne, Flanders was covered with corporate towns. At the end of the 9th century, the Normans, that is, rapacious inhabitants of Denmark, Sweden, and Norway, commenced a series of piratical irruptions into Belgium, and continued to plunder and

devastate the whole country during 150 years. In 1070, Flemish maritime commerce had made a great progress with Spain and England, from whence wool was largely imported. Woollen stuffs and the herring fishery were the principal source of wealth, with corn, salt, and jewellery. The men of Flanders were so highly reputed for martial spirit that many foreign sovereigns obtained them to form their best troops. They constituted an important part of the Norman army in the conquest of England; and a Flemish princess, daughter of Baldwin, count of Flanders, and wife of William the Conqueror, embroidered, with her own hand, the celebrated tapestry of Bayeux, which represents the whole history of that event.

The country had long been divided into provinces, belonging to different families, and governed by different laws. Hence the counties or earldoms of Flanders, Namur, and Hainault; the duchies of Brabant, Limburg, and Luxemburg; the principality of Liege; the marquisate of Antwerp; and the seignory of Mechlin. At the end of the 11th century, when all the states except Flanders were reduced, by the fierce quarrels of the feudal lords and prince bishops, to a cheerless waste of bondage, the fanatical phrensy of the crusades induced many of the nobles to part with lands, and to grant great privileges and political powers, in order to obtain the means of equipping armies to fight the Saracens. Their wealthy vassals, the Flemish burghers, were thus enabled to purchase independence, and a jurisdiction of their own. They consequently formed themselves into communes, elected bailiffs, directed their own affairs, and built magnificent town-halls with huge belfries, as temples and trophies of their liberties. The people, conscious of their power, gradually extorted from their rulers so many concessions, that the provinces formed, in reality, a democracy, and were only nominally subject to the monarch of France and his nobles. When the rest of Europe was subject to despotism, and involved in comparative ignorance and barbarism, the court of the counts of Flanders was the chosen residence of liberty, civilization, and useful knowledge; and when the ships of other nations scarcely ventured beyond the sight of land, those of the Flemish merchants traversed the ocean, and Bruges and Antwerp possessed all the commerce and wealth of the north of Europe. In this state the provinces long continued, until they came under the dominion of the Duke of Burgundy, about the middle of the 15th century. Previous to this event, we find only unconnected duchies, counties, lordships, and towns, with innumerable rights, claims, and privileges, advanced and enforced now by subjects and vassals against each other or against their lords; and now by lords and vassals against the monarch, without the expression of any collective idea of Belgium as a nation. Under the Burgundian dynasty the commercial and manufacturing towns of the low country enjoyed a remarkable prosperity. The famous order of the Golden Fleece was instituted in 1430; and before the end of the 15th century the city of Ypres had 4000 looms, and the city of Ghent 50,000 weavers. Bruges and Antwerp were the great marts of the commercial world, and contained each about 200,000 inhab. In the Flemish court of the Duke of Burgundy, named Philip the Good, about 1455, luxurious living was carried to a foolish and vicious excess. The wealthy were clad in gorgeous velvets, satins, and jewelry, and their banquets were given with almost incredible splendour.

This luxury produced depravity and crime to such an extent, that in one year 1400 murders were committed in Ghent, in the gambling-houses and other resorts of debauchery. The arts were cultivated with great success. Van Eyck invented the beautiful oil colours for which the Flemish school is renowned. Painting on glass, polishing diamonds, lace, tapestry, and chimes were also invented in Belgium at this period. Most of the magnificent cathedrals and town-halls in the country were built in the 13th and 14th centuries. History, poetry, and learning were much cultivated; and the university of Louvain was the most celebrated in Europe. In 1477, Belgium passed under the dynasty of the empire of Austria; and, after many years of contest between the despotic Maximilian and the democratic Flemings, the government, in 1519, descended to his grandson, Charles V., king of Spain and emperor of Germany. In his reign, the affluence of the Flemish burghers attained its highest point. The city of Ghent contained 175,000 inhabitants, of whom 100,000 were employed in weaving and other industrial arts. Bruges annually exported stuffs of English and Spanish wool to the value of 8,000,000 of florins. The Scheldt at Antwerp often contained 2500 vessels, waiting their turn to come to the wharves; her gates were daily entered by 500 loaded wagons; and her exchange was attended, twice a day, by 5000 merchants, who expended 130,000 golden crowns, in a single banquet given to Philip, the son of Charles V. The value of the wool annually imported from England and Spain exceeded 4,000,000 pieces of gold. This amazing prosperity experienced a rapid and fatal decline under the malignant tyranny and bigotry of Philip II., son of Charles V. The doctrines of the protestant reformation had found very numerous adherents in Belgium. Lutheranism was preached with phrensied zeal by several popular fanatics, who drew around them crowds amounting sometimes to 10,000 or 15,000. Parties of iconoclasts also appeared, and demolished the ornamental property of 400 churches. Protestant persecution by the Inquisition had been commenced by Charles V., but by Philip II. it was established in its most diabolical extravagance. He filled the country with Spanish soldiers, and commissioned the Duke of Alva to extirpate, without mercy, every protestant heretic in Belgium. Volumes have been written to describe the proceedings of this able soldier, but sanguinary persecutor, who boasted that in less than six years he had put to death 18,000 men and women by the sword, the gibbet, the rack, and the flames. Ruin and dread of death in its most hideous forms drove thousands of artisans to England, where they introduced the manufacturing skill of Bruges and Ghent. Commerce and trade in Flanders dwindled away, many of the rich merchants were reduced to beg for bread, the great cities were half deserted, and forest wolves often devoured the scattered inhabitants of desolated villages. Belgium remained under Spanish dominion until the memorable victory of Ramillies, in 1706, after which it was subject again to Austria; and having been several times conquered by, and reconquered from, the French, it was incorporated, in 1795, with the French republic, and divided into departments. By this union, Belgium secured a suppression of all the old feudal privileges, exemption from territorial contributions, the abolition of tithes, a more extensive division of real property, a repeal of the game laws, an admirable registry law, a cheap system of tax collection, the advancement of education in central schools and lyceums, a uniform system of legislation by the creation of codes, publicity of judicial proceedings, trial by jury, and the general use of the French language. In the centre of Belgium was fought the great battle of Waterloo, in 1815. It is not necessary to add a word upon this memorable event, except to remark, that Belgium has so often been the scene on which the surrounding nations have settled their quarrels, that it has long been styled the cockpit of Europe. By the congress of Vienna, the provinces of Belgium were annexed to those of Holland, to form the kingdom of the Netherlands, which existed until the revolution in 1830, when Belgium became an independent nation. Her union with Holland was one of convenience on the part of those by whom it was negotiated, and not attributable to any congeniality of the people joined together, who differ in national character, in religion, and in language. The Belgians complained of being forced into a union which they would not have sought, and that its terms were unequal. The French revolution, which had recently transpired, excited the predisposition to insurrectionary movement, and the result was a declaration, and, finally, a general recognition of independence. (Vide *Government*, *Constitution*, &c.)

Antiquities.—No part of Europe contains, within the same extent of area, so many objects, and furnishes so many associations to interest the antiquarian, the political, ecclesiastical, or military historian, the artist, and the poet. Numerous ancient cities and towns, some of which existed long before the Christian era, still are adorned with magnificent Gothic structures of the middle ages, that recall to the imagination the gorgeous pageantry of the days of chivalry; and on many a lone hill and forest solitude stand the ruins of castles, abbeys, and chateaux, whose lordly owners have been the heroes of romantic legends. In the S. and E. provinces are found lithoi, tumuli, and other remains of the Celtic Druids, to whom is attributed the excavation of numerous apartments and passages in several subterranean caverns, particularly that of the hill of St. Peter, near Maestricht, which contains above 100,000 different avenues, 12 ft. in width, and from 6 to 24 in height. Numerous coins and medals of the Romans have been found on the sites of their camps and roads; and Roman masonry, containing inscriptions in honour of the Mensapian divinities, has been discovered among the relics of ancient towns, in places now overflowed by the sea. Near Charleroy, in the midst of beautiful scenery, are the ruins of the celebrated Abbey of Aine, the cloisters of which were formed by 300 columns of the finest marble. But any attempt even to mention particular objects of curiosity would require more than allowable space. We will therefore only observe that the old castles of the 15th century, in the neighbourhood of Liege, are described in Sir Walter Scott's novel of Quentin Durward.

It would be equally impracticable to enumerate the eminent and remarkable individuals who have received their birth, or have flourished in Belgium throughout the course of her history. It is the land which furnished many of the

ablest generals and most valiant soldiers of the emperor Charles V., who himself was born at Ghent; the land where the noble counts Egmont and Horn were beheaded by Spanish tyranny for defending social liberty; and where William Tyndale was strangled and burned by Catholic bigotry for translating the Gospels. It is the birthplace of Scaliger, Lipsius, and Van Helmont; of the geographers Ortelius, and Mercator; of John of Gaunt, or Ghent; of Perkin Warbeck, who was the son of a Jew of Tournay; of the painters Van Eyck, Quentin Matsys, Rubens, Vandyke, Teniers, Jordaens, Snyders, and many others who have sustained the high reputation of the Flemish school.

Authorities.—The statements of the preceding article are made chiefly upon the authority of the following works, and partly on the writer's personal observation: *Heuschling, Statistique Générale de la B.*, 1838; *Documents Statistiques de la B.* (*official*), 1839; *Vander Maelen, Dict. Geog. des Provinces de la B.*; *Baron d'Huart, Statistique Territoriale de la B.*, 1839; *Arendt, Belgische Zustaende*, 1837; *Briaumiers, De l'Industrie en B.*, 1839; *Van Aelbrock, Agric. de la Flandre*, 1830; *Rham, Outlines of Flemish Husbandry*, 1839; *Ratcliff, Agricultural Survey of Flanders*; *Nicholls, Reports on B.*, 1839; *Journal of the Statistical Soc. of Lon.*; *Article B. in Penny Cyclopædia*; *Grattan's Hist. of the Netherlands*; *Des Roches, Hist. de la B.*; *Sophorien, Voyage Historique et Pittoresque dans les pays Bas*; *Guicciardini, Descriptio Belgii*; *Annuaire de l'Observatoire de Bruxelles*, 1839; *Ducpetiaux, Education en B.*, 1839; articles in the *Annual Register* for 1830; in the *British and Foreign Quarterly Rev.*, *Foreign Quarterly*, and *London and Westminster Rev.* for April, 1839; *Murray's Hand-book of the Netherlands*, 1839; *Coplan's Guide to B.*, 1837; *Boyce's Belgian Traveller*; *Traveller's Guide through B.*, &c.

BELGRADE (an. *Singidunum*), a fortified town of the principality of Servia, on the right bank of the Danube, at the point where it is joined by the Save; lat. 44° 47′ 46″ N., long. 20° 30′ E. Pop. 20,000. From its position, on the limits of the Austrian and Turkish empire, at the confluence of two great rivers, its great strength, and the numerous sieges it has sustained, much interest has long been attached to Belgrade. Its citadel, on a steep hill, 100 feet high, near the centre of the town, occupies a most formidable position. It has been very strongly fortified; and if it were properly repaired and garrisoned, with the fortifications on the low ground at the junction of the rivers, sweeping as they do every approach by land and water, it would be all but impregnable. Latterly, however, its works have been neglected, and they are now going fast to ruin. Within the citadel are the arsenal and magazines, the principal mosque, and the palace of the pacha; the latter constructed of wood and mud! The town lies principally to the W. and S.W. of the fortress, partly along the Save, and partly on higher ground, and is surrounded by walls and palisades, generally in a ruinous state. The situation of the town is no better than that of the citadel. Many of its houses are in ruins; most of them are of the meanest possible description, "worse even than the cabins of the Irish;" and the streets are disgustingly filthy, and infested with herds of half-starved dogs. The bazar consists of several rows of miserable wooden booths, entirely open towards the streets; their assortment of goods corresponds with their appearance. Prince Milosch has hitherto resided at Kragusewatz, but he has built here a handsome house in the upper part of the town, a Greek church, and barracks. The manufactures are inconsiderable, consisting principally of carpets, silk goods, some descriptions of hardware and cutlery, with saddlery, &c. It has a good port on the Danube, and it is admirably situated for trade, of which, in consequence, it still preserves some small share.

The Turks, under Solyman the Magnificent, took Belgrade in 1522, and held it till 1688, when it was taken by the Imperialists. Two years after, it again fell into the hands of the Turks, and, though it has since been repeatedly taken by the Imperialists, they have, in most instances, soon after restored it to its Ottoman masters, of whose miserable government its present abject and degraded condition is a striking, though, unhappily, not a rare example. It was taken, in 1807, by the Servian insurgents, who, on being obliged to abandon it in 1813, burned the suburbs, and partly destroyed the fortifications. The town was placed in 1815, along with Servia, under the sovereignty of Prince Milosch, but its citadel is still occupied by a Turkish garrison, which, in 1836, amounted to only 600 half-disciplined troops. (*Murray's Hand-book*; *Elliott's Travels*, i., 103, &c.)

BELGRADE, p. t., Kennebec co., Me., 11 m. N. Augusta, 606 W. Watered by large ponds on its N., W., and E. borders, which are connected together, and discharge their waters by an outlet which enters Kennebec river at Waterville. Incorporated in 1796. It contains four stores, three grist-mills, three saw-mills, one academy, 90 students, 19 shcools, 845 scholars. Pop. 1748.

BELIDA, an inl. town of the regency of Algiers, prov. Titteri, at the foot of the Lesser Atlas, near the plain of Metidjah; 25 m. S. Algiers, and 10 m. N.E. Medeah; lat. 36° 18 N., long. 2° 45 E. It is surrounded by a wall 12 to 16 feet high, which has 4 gates, one at each of the cardinal points. Its streets are wider, and more agreeable than those of Algiers: the town is well supplied with water, and contains many gardens. It suffered much from the violent earthquake of 1825, since which the houses have been with only a ground-floor. Belida has some trade in grocery, spices, and other natural produce: its vicinity is fertile and picturesque. In July, 1830, the inhab. invited the French to defend them against the Kabyles; but, after their arrival, the Bedouins compelled the citizens to take up arms against them. Next year, however, the French took and still hold Belida. (*Rozet. Voyage, &c.*, iii., 195-202.)

BELINZONA. A town of Switzerland, cant. Ticino, of which it is the cap., in a deep valley on the banks of the Ticino, 5 m. above where it falls into the Lago Maggiore, and 15 m. N. Lugano; lat. 46° 10′ 35″ N., long. 8° 58′ 30″ E.; pop. 1600. Being situated near the S. extremity of the great road from Italy to Switzerland, by the St. Gothard pass, it is a depôt for the merchandise passing between them. It has a handsome church, and a bridge over the Ticino, 714 ft. long, and 24 ft. wide.

BELITZ, a town of Prussia, prov. Brandenburg, 12 m. S. by W. Potsdam. Pop. 2000. It is surrounded by old walls and fosses; and is the seat of a board of ecclesiastical inspection. Flax is grown extensively in its vicinity, and it has manufactures of linen.

BELKNAP, county, N.H. Situated in the S.E. part of the state, and contains 268 sq. m. Winnipiseogee lake bounds it on the N.E.; Squam lake lies on its N. border; Pennigewasset river forms its W. boundary. It was taken from Strafford co. since the census of 1840.

BELLA, a town of Naples, prov. Basilicata, cap. cant., 15 m. S. by W. Melfi. Pop. 5000. It is situated on a hill; has a collegiate, and one other church, a hospital, and three charitable foundations.

BELLAC, a town of France, dep. Haute Vienne, cap. arrond., on the declivity of a steep hill, near the confluence of the Vincou and the Gartempe, 24 m. N.N.W. Limoges. Pop. 3037. It has a tribunal of original jurisdiction, an agricultural society, with various manufactures, and a considerable trade in cattle, oak timber, and chestnuts.

BELLARY (*Valakari*), a distr. or collectorate of Hindostan, presid. Madras, part of the Balaghaut, ceded distr. (See BALAGHAUT.)

BELLARY, the cap. of the above collectorate, and the head-quarters of a civil estab. and a military division, 280 m. N.E. Madras; lat. 15° N., long. 76° 59′ E. It consists of a square fortress on an isolated rock, with a pettah or small town below it, containing the best military bazar in India. This also is the name of a ruined town of Allahabad, formerly of great extent, and having some fine Hindoo temples in its vicinity.

BELLE-FONTAINE, a village of France, dep. Vosges, 7 m. W. Remiremont. Pop. 2650. Some cutlery is made here.

BELLEFONTAINE, p. v., Lake t., capital of Logan co., O. 18 m. N. Urbanna, 69 m. N.W. Columbus, 456 W. Incorporated in 1820. It contains a court-house, jail, two churches of brick, one Methodist, and one Presbyterian; five stores, three tanneries, one pottery, one printing-office, one weekly newspaper, and over fifty dwellings.

BELLEFONT, p. v., capital of Centre co., Pa., 85 m. N.W. Harrisburg, 117 W. It has considerable trade in iron, which abounds in the vicinity. It communicates with the West Branch canal by Bald Eagle and Spring creek canal, 25 miles long. It contains four churches, one Presbyterian, one Methodist, one Moravian, and one Roman Catholic; an academy, eight stores, one fulling-mill, one woollen factory, two tanneries, one printing-office, one weekly newspaper, one academy, 25 students, 4 schools, 120 scholars, and 130 dwellings. Pop., in 1830, 698; in 1840, 1032.

BELLEFONTE, p. v., cap. Jackson co., Ala., 166 m. N.E. Tuscaloosa, 667 W. Situated 2 miles N.W. of Tennessee river. It contains two churches, one Methodist, and one Presbyterian; two academies, twelve stores, fifty dwellings, and 400 inhabitants.

BELLEGARDE, a fortress of France, dep. Pyrénées Orientales, on the Spanish frontier, 18 m. S. Perpignan. This is a fortress of the first class, constructed in the reign of Louis XIV., to command the pass of Perthus. It was taken in 1793 by the Spaniards, and retaken the following year by the French. Bellegarde is also the name of several small towns in different parts of France.

BELLEISLE, an isl. at the N. entrance to the straits of the same name, between the country of the Esquimaux, or

New Britain, and the N. end of Newfoundland. It is 21 m. in circuit, and 16 m. from the coast of Labrador. On the N.W. side it has a harbour for fishing vessels, or small craft.

BELLE-ISLE-EN-MER, an island of France, in the Atlantic, 8 m. S. of Quiberon Point, being included in the dep. Morbihan. It is almost everywhere surrounded by high steep rocks. Its N.W. end is in lat. 47° 32′ N., and its S. part in lat. 47° 16′ N. It is about 11 m. in length, its greatest breadth being about 6 m. It is accessible only at three havens or ports, all of which are dry at low water. Of these, Palais, on the E. coast, is the principal, as well as the capital. The haven here is formed by a stone pier, 200 ft. in length, and is protected by a strong citadel: it has only 5 ft. at high water, but the road is generally safe. The two other accessible points, Sauzon and Loc Maria, are also both fortified. Pop. about 6000. It is fertile, producing excellent wheat and horses. The inhabitants, are extensively engaged in the sardine fishery, and make excellent pilots.

This island was purchased in 1658 by Fouquet, intendant of finance to Louis XIV., and was exchanged in 1718 by his descendant for the comté of Gisors. In 1761 it was taken by the English, but was restored to France in 1763. (*Hugo*, art. *Morbihan*; *Purdy's Sailing Directions for the Bay of Biscay*, p. 8.)

BELLESME, a town of France, dep. Orne, cap. cant., on a hill which commands the environs, near the forest of the same name, 22 m. E.S.E. Alençon. Pop. 3263. Houses well built; streets straight, neat, and well paved. The want of running water is supplied by wells. It has fabrics of coarse linens and cottons, and a considerable trade in wood and horses.

BELLEVILLE-SUR-SAONE, a town of France, dep. Rhone, cap. cant., on the Rhone, 8½ m. N. Villefranche. Pop. 2448. It has a manufacture of stuffs, called *coton brochée*, and muslins.

BELLEVILLE, p. v., Belleville t., Essex co., N. J., 3½ m. N.E. Newark, 69 m. N.E. Trenton, 234 W. It is finely situated on the W. side of Passaic river, along which it extends for 3 miles. It contains one Dutch Reformed, one Methodist, and one Episcopal church, a boarding-school, and 200 dwellings. It possesses extensive water-power. The town contains twelve stores, four fulling-mills, two woollen-factories, one cotton-factory, with 1000 spindles, one dyeing and printing works, one paper-mill, two flouring-mills, one grist-mill, 7 schools, 316 scholars. Pop. 2466.

BELLEVILLE, p. v., capital of St. Clair co., Ill., 13 m. E.S.E. St. Louis, Mo., 100 m. S. by W. Springfield, 809 W. It has an elevated and pleasant situation, and contains a handsome court-house and a jail, both of brick; a county clerk's office, the hall of a library company, three churches, one Presbyterian, one Methodist, and one Baptist; one select and one common school; two large steam flouring-mills, and numerous mechanic shops; one printing-office, one weekly newspaper, and about 700 inhabitants.

BELLEVUE, p. t., Eaton co., Mich., 16 m. N. by W. Marshall, 119 m. W.N.W. Detroit, 584 W. The village is situated at the rapids, at the head of boat navigation, on Battle creek. The town contains three stores, one lumber-yard, one grist-mill, two saw-mills. Pop. 529.

BELLEY, a town of France, dep. Ain., cap. arrond., between two hills, within 4 m. of the Rhone, 42 m. E. Lyons; lat. 45° 45′ 29″ N., long. 5° 41′ 19″ E. Pop. 3970. It is the seat of a bishopric; has a tribunal of first instance, a director of customs, a secondary ecclesiastical school, a public library, and a museum of antiquities. The episcopal palace, finished only a few years before the Revolution, is one of the most remarkable edifices in the department. It is very ancient. The bishopric was founded in 412. (*Hugo*, art. *Ain*.)

BELLINGHAM, a market t. of England, co. Northumberland, on the Tyne, 22 m. W. Morpeth, and 28 m. W.N.W. Newcastle. Pop., in 1821, 404; 1831, 464. It is supposed to occupy the site of a Roman station, and several circular intrenchments of the fortified villages of the Britons are in the neighbourhood. The entire parish belonged to the Earl of Derwentwater, and was given to Greenwich Hospital, with the other estates of that nobleman, on his attainder in 1715. The church, dedicated to St. Cuthbert, is small and old. There are places of worship for Seceders and Rom. Catholics; a free school, poorly endowed; and a book club, formed in 1809. It is a station for receiving votes at elections for members for the S. division of the co. Markets are held on Saturdays; fairs on the first Saturday after 15th Sept., and the Wednesday before Good Friday; also "hirings" for servants on the Saturdays before 12th May and 12th Nov.

BELLINGHAM, p. t., Norfolk co., Mass., 36 m. S.W. Boston, 419 W. Charles river affords water-power. It contains two churches, one Baptist and one Universalist; five stores, three cotton-factories with 2700 spindles, three grist-mills, seven saw-mills, 9 schools, 284 scholars. Pop. 1055.

BELLOWS' FALLS, p. v., Rockingham t., Windham co., V., 98 m. S. by E. Montpelier, 455 W. This is a pleasant village at the falls of the same name in Connecticut river. Above the falls the river is from 16 to 22 rods wide. At the falls it is divided into two channels by a large rock in the middle, each about 90 feet wide. When the water is low, the whole of it flows through the W. channel, where it is then contracted to the breadth of 16 feet, and rushes with astonishing rapidity, with several pitches, one below another, for the distance of half a mile. The whole descent of the water is 42 feet. A bridge crosses the river at the first and principal fall, supported in the middle by the great rock which divides the stream, and is 365 feet long. The bridge is elevated about 50 feet above the water, and from it the traveller has a fine view of the falls. These falls are passed on the Rockingham side by a canal half a mile long, with nine locks, through which boats and small steam-boats pass. Salmon formerly passed these falls, but shad have never been taken above them. The region contains various interesting minerals. The village contains two churches, a bank, several stores, an extensive paper-mill, and other mills and manufactories, and a number of handsome dwellings.

BELL-ROCK, a dangerous ledge of rocks, off the coast of Scotland, in the German ocean, opposite to the frith of Tay, 12 m. E. Buttonness Point. The ledge is about 850 yards in length by about 110 in breadth. At low water, some of its summits appear from 4 to 8 ft. above the level of the sea, but at high water they are always covered. Many vessels have been lost on this rock, over which the sea breaks with tremendous fury. To lessen the chance of such disasters, a magnificent lighthouse, constructed on the model of the Eddystone, was erected, on one of its points, in 1808–10. The total height of the building, including the light-room, is 115 ft., the lantern being elevated 90 ft. above the sea at high water mark. The light is revolving, the flashes succeeding each other every two minutes. Lat. of lighthouse 56° 26′ N., long. 2° 23′ W. During foggy weather, bells are tolled every half minute.

BELLUNO (an. *Bellunum*), a city of Austrian Italy, cap. prov. same name, in the valley, and on the S. bank, of the Piave, at the place where it is joined by the Ordo, on the great road connecting Vienna with Venice, 48 m. N. of the latter; lat. 46° 7′ 46″ N., long. 12° 13′ 51″ E. Pop. 9600. It is surrounded by an old wall; is well built; has a cathedral, designed by Palladio, and several churches and convents; a rich hospital, a gymnasium, with various other educational establishments; a valuable public library, &c. Water is conveyed into the town from a distance by a fine aqueduct. It is the seat of the provincial authorities, and has fabrics of silk, wax, leather, hats, and earthenware, with a considerable trade in timber, and large fairs in February and April. Napoleon conferred on Marshal Victor the title of Duke of Belluno.

BELMONT, a town of France, dep. Loire, cap. cant., 6 m. N.E. Roanne. Pop. 3390.

BELMONT, county, O., situated in the E. part of the state, and contains 536 sq. m. Bounded E. by Ohio river. Watered by Indian Wheeling, and Captina creeks. It contained, in 1840, 20,070 neat cattle, 45,692 sheep, 41,032 swine; and produced 479,692 bushels of wheat, 6950 of rye, 528,934 of Indian corn, 416,397 of oats, 76,045 of potatoes, 31,487 pounds of hops, 1,720,892 of tobacco, 38,186 of sugar, 188,600 bushels of bituminous coal. It had two commission houses in foreign trade, 196 retail stores, one fulling-mill, three woollen-factories, thirty-one flouring-mills, twenty-nine grist-mills, fifty saw-mills, one paper-mill, fifteen distilleries, nineteen tanneries, one printing-office, two weekly newspapers, three academies, 56 students, 56 schools, 1984 scholars. Pop. 30,961. Capital, St. Clairsville.

BELMONT, p. v., Waldo co., Me., 37 m. E. by N. Augusta, 631 W. It contains two stores, one grist-mill, six saw-mills, 11 schools, 632 scholars. Pop. 1378.

BELMONT, t., Franklin co., N.Y., 10 m. E. Malone, 222 m. N. by W. Albany. Watered by Chateaugay and Trout rivers. It contains two saw-mills, 5 schools, 121 scholars. Pop. 472.

BELMONTE, a town of Naples, prov. Calabria Citra, on a mountain not far from the Mediterranean, 14 m. W.S.W. Cosenza. Pop. 3400. It has a castle, four churches, and some trade in silk. This is also the name of a small Neapolitan town, prov. Sannio.

BELOOCHISTAN (an. *Gedrosia*, and the countries of the Ichthyophagi, Oritæ, Arabitæ, &c., *Arrian*), a country of S. Asia, lying between 24° 55′ and 30° 15′ N. lat., and 57° 50′ and 69° 15′ E. long.; having N. Afghanistan, Seistan, and the sandy desert of Caubul; E. Upper and Lower Sinde; W. Persia; and S. the Indian ocean; length E. to W., 700 miles; breadth, on either side, 350 m., and 190 in

the centre: area 200,000 sq. m. (Eng.) Pop. has been estimated at 3 millions, but this, no doubt, is far beyond the mark: we incline to think that 500,000 would be nearer the truth.

Mr. Pottinger describes this country under the following divisions:

	Ch. T.	No. of Inhab.
1. Prov. of Sarawan	Kelat	20,000
— Jhalawan	Zuhree	2,500
2. — Mukran	Kedje	
— Lus	Bela	2,000
3. — Cutch Gundava (and Hurrund Dajel.) .	Gundava (Hurrund.)	
4. Kohistan	Puhra, Surhud.	
5. The Desert.		
6. Sinde.		

We shall only notice the first four divisions; the 5th belongs properly to Caubul, and the 6th will be treated of separately.

By far the greater part of Beloochistan is mountainous, and especially its E. and W. divisions, which consist of two table-lands; those of Kelat and Kohistan (*the land of mountains*), whose ranges run mostly N. and S., and communicate with each other by several other extensive ranges running E. and W. across the central prov. of Mukran. Those in the E., which separate Beloochistan from Sinde, and bound Cutch Gundawa W., are a lateral branch from the Hindoo-Koosh, by which the country is so intersected in various directions "as to resemble a piece of network:" it varies greatly in width; in lat. 30° being 275 m., but at Cape Monze, which is formed by it, it is only 40 m. across: the height of the range has not been measured; but Kelat, the most elevated point, is thought by Pottinger to be 8000 ft., and by Bell (*Notes on Rollin's Anc. Hist.*) to be 10,000 ft. above the level of the sea. These "Brahoolck mountains" terminate S.W. in a remarkable range running N.W. to about 28° N. lat., where it divides; one arm passing N.E. toward the Afghan hills, the other, the Wushatee, or Much mountains, direct W. for two degrees, bounding the desert S., and then uniting with the W. table-land, or that of Kohistan. This latter communicates N., by a long chain, with the Paropamisan mountains W. of Herat, and after enclosing the deserts of Bunpoor and Bushkurd by another chain, W., with those of Kerman (Persia). A considerable range passes in a waving manner E., to meet the Brahooic mountains, varying in its distance from the sea from 25 to 100 m., and dividing Mukran into two parts, the coast and the interior. The height of the W. is somewhat inferior to that of the E. mountains.

Excepting those of Lus and Cutch Gundava, which provs. are entirely flat, and that of Wudd, in Jhalawan, there are but few plains of any fertility. The coast division of Mukran is covered by flat, barren sands, destitute of water, and, excepting date-trees, of all vegetation. The desert of Bunpoor, a sandy waste, 155 m. long by 80 m. broad, is a continuation of the deserts which prevail in the middle of Persia and the S.W. of Afghanistan.*

Cutch Gundava, intersected by some of the W. tributaries of the Indus, is the only well-watered province. The remainder of Beloochistan suffers from want of water, excepting, perhaps, a few rice grounds in the prov. of Lus. There is not a rivulet in the N., and only a few along the coast, which, although sometimes swollen in a few minutes to torrents, by profuse rains, are, for the most part of the year, nearly dry. The principal stream is the Dust or Mooloodanee (probably the Boodoor of the desert; and, if so, rising N. of the Wushatee mountains, and running a course of 1000 m. before reaching the sea, in 61° 45' E. long.); the Poorally (an. *Arabis*), the second in size, rises in Lus, N. of Bela, and falls into the bay of Soumeany: for 25 m. this stream is navigable for small boats. (*Pottinger*, p. 297.)

The geology of this region is nearly unknown: the rocks in the mountainous parts are gray or black; the soil is commonly stony, but consisting mostly of a black loam in the valleys; in Kohistan some of the lofty hill tracts are covered by a vegetable mould. Former volcanic action is evident in this province, which yields most of the minerals found in Beloochistan, viz., sal ammoniac, brimstone, alum, nitre, rock salt, lead, iron, copper, tin, naptha, &c. (*Pottinger*, p. 292, &c.) Gold and silver are found only in Jhalawan, 150 m. S.S.W. of Kelat; antimony in vast quantity S. of Kelat, sulphur, alum, and a red, aperient salt in the hills between Kelat and Cutch Gundava; white and gray marble near Noosahky on the borders of the desert; salt in efflorescence on the plains of Lus, &c.

The climate is healthy except in Mukran. In the mountainous provinces there are four different seasons in the year, as in Europe; the spring from the middle of February to the middle of April; the summer thenceforward to the beginning of August, the heats of which are intense only towards the latter end: the autumn lasts till the October snows; and the winter, which is very severe, for the rest of the year. In the spring there are snow, hail, and violent winds, and the weather is quite as fluctuating, generally, as in England. In Mukran and Lus there are four seasons; two wet, and a cold, and a hot; the cold one is much milder on the coast; the hot one lasts from March to October. (*Pottinger*, p. 319–321.) In February and March there are rains with N.W. winds for a fortnight or three weeks; but in June, July, and part of August, they prevail with all the fury of the S.W. monsoon. In Kohistan, the June rains are often very partial, and a famine not unfrequently ensues from drought. Cutch Gundava enjoys a much milder climate than any other province, and is resorted to in the winter by many neighbouring chieftains.

The best timber is that of the *Zizyphus jujuba*, which is similar to teak; the palm-tree grows in the W.; the tamarind, neem, peepul (*Ficus religiosa*), sissoo, chinar (*Platanus orientalis*), mango, walnut, and sycamore, grow in this and other parts of the country. Fruits of almost all kinds known in Europe, as apples, pears, apricots, peaches, pistachio nuts, mulberries, pomegranates, &c., with the plantain, guava, &c., are common in many districts. Mukran is famous for its dates, which are exported in large quantities. N. of Kelat the almonds are so fine that they may be blanched with a dry cloth; and melons often grow so large that a man is scarcely able to lift them. (*Pottinger*, p. 327, 328.)

Lions and tigers are rare, but both are found on the E. border; hyenas, wolves, and jackals, prevail over the whole country, and wild dogs, which hunt in packs of twenty or thirty. Leopards, wild cats, foxes, &c., infest the jungles; and wild asses, antelopes, elks, red and moose deer, hares, mongooses, and mountain goats, are common; eagles, kites, magpies, are found round Kelat; water-fowl, herons, flamingoes, bustards, partridges, lapwings, snipes, &c., are natives: fish abound on the coasts; where they form the chief food of both man and beast, but not in the rivers: *Chelonia* and *Testacea* are also abundant; vermin and venomous animals are by no means so common as in Hindostan. (*Pottinger*, p. 328, 329.)

Pasture being considerably more abundant than arable land, and the population consisting chiefly of wandering shepherd tribes, the number of cattle is considerable. The sheep are of the fat-tailed kind; the goats have rough and black hair: the large cattle are mostly of the black breed, or buffaloes. The horses of Cutch Gundava, and the country S. of Kelat, which are those chiefly sent to India, are large, strong, and bony, but vicious; those of Mukran and Lus are small and spiritless: there are mules and asses; but camels and dromedaries are preferred as beasts of burden. Camel-grass and straw are the chief food of the cattle: in the S. of Mukran and Lus there are two crops of the former yearly, owing to the two wet seasons. Greyhounds and shepherds' dogs, of a ferocious kind, are both much valued: fowls and pigeons are the only domesticated birds. (*Ibid.*, p. 327, 328.)

Excepting in Cutch Gundava, which is fertile, well cultivated, and said to be capable of producing enough of grain for all the inhab. of Beloochistan; not a hundredth part of the country is cultivated: the table-lands yield only the coarser produce of Afghanistan. All the kinds of grain known in India are, however, grown; viz., rice, in the marshes on the coast (but it will not thrive in Cutch Gundava, though it be abundantly moist), wheat, barley, *Holcus spicatus* and *sorghum*, maize, sesamum, &c. The wheat and barley do not ripen so soon as in Britain: in the upper parts of Sarawan and Jhalawan the former is sown in August and September, and reaped in June; barley sown a month later comes to maturity in about eight months; maize, in warm and sheltered places, in three or four months. In Cutch Gundava, Lus, and a part of Mukran, wheat ripens in six months, barley in five months, and oriental grain in from two to five months. Cotton, indigo, and madder, are grown, but the indigo does not thrive: all the pulse and vegetables common with us are grown near Kelat. (*Pottinger*, p. 394–396; *Elphinstone, Caubul*, p. 495.)

Manufactures are very few and rude; most of the articles, beyond what are absolutely necessary to the support of life, being imported from neighbouring countries, in exchange for the few natural products. Sugar is prepared near Bela, the canes being pressed in a mill, the juice boiled in flat, copper pans, and the article afterwards packed in bags of palmyra leaf, and exported: the sediment is used for manure. Gum assafœtida is extracted from the

* It was through the plains of Mukran and the succeeding desert of Bunpoor that Alexander the Great led his army into Persia, during which march so much was suffered from thirst and famine. It is not now believed that his loss of men was so great as has been represented, but the troops kept too near the hills: had they been close to the shore they would have found *fresh* water on digging a foot or two below the surface.

stalk of the *Ferula assaf.*, by incisions near the root, which permit the escape of the juice: about one pound is obtained from each plant. The gold and silver ores are never worked, but pass into the hands of the Hindoo traders in their rough state. At Kelat there is an armoury belonging to the khan, for swords, spears, and matchlocks; but their workmanship is very clumsy and inferior. (*Pottinger*, p. 96–109.)

The principal exports are horses and other cattle, skins, dates, grain, some rice, cotton, silk, oil, indigo, salt, borax, nitre, &c.; from Lus, grain, felt, and coarse carpets, are sent into Mukran and Arabia. From the latter country almonds and Caffre slaves are imported, the Caffres being deemed very valuable; from India, iron, tin, lead, steel, copper, indigo, betel-nut, cochineal, sugar, spices, silks, goldcloths, chintzes, and coarse woollens, fruit, &c.; from Caubul and Khorassan, steel and copper; from Seistan, white cloths, loongees, turbans, &c.; from Sinde, Shikarpoor, &c., porcelain, tobacco, coffee, opium, &c. Broadcloth, Scotch plaids, and other European manufactures, are highly prized. (*Pottinger*, p. 295.)

The Hindoos pay for exports in silver rupees: at Kelat the currency is in Kureem Khanee rupees, one of which is equivalent to 48 copper pice; a gold sequin to 6, and 4 Zeman shahees to 5 K. K. rupees. (*Ibid.*, 295, 317.

The people are nearly equally divided between two distinct nations, the Beloochee, occupying the W., and the Brahooee inhabiting the E. division of the country. The former are desirous to be thought descendants of the Arabs, but are not physically like them, and are considered by Pottinger to have been originally Seljukes. They are tall, long-faced, but with not unpleasant features, and have generally strong, active, and athletic frames. They are subdivided into three tribes: the Nharooee, who live W. of the Great Desert, and Rinds and Mugheees, in Cutch Gundava, and near the desert of Kelat. They are brave, impetuous, inured to fatigue, freebooters, abhorring petty thefts, but applauding wholesale plunder; often wasting and destroying whole districts, yet curiously blending an "ingenuous hospitality with this predatory ferocity." Like all pastoral nations, they have no permanent residence, but live in *kheils*, or societies of four or five tents, moving about as pasture is found suitable for their flocks and herds. Their food consists of wheaten and barley cakes, rice, dates, cheese, sweet and sour milk, legume soup, onions, garlic, assafœtida, red pepper, and occasionally flesh. All the Beloochee are Mussulmans of the sect of Omar, and their customs are those of other Mohammedans, mixed with some plainly derived from the ancient Jews. Polygamy is allowed, but they treat their women with respect and attention; they have often numerous slaves, and in many respects behave to them with great kindness. They are armed with a matchlock, sword, spear, dagger, and shield, which they commonly derive from foreign traders. They are good marksmen, invariably hitting a target six inches square, while on horseback, at full gallop; a popular sport with them is to remove and carry away on the top of a spear, while at full gallop, a stake driven deep into the ground: an operation which requires much dexterity. Cudgel-playing, wrestling, warlike exercises, and field sports, form the rest of their amusements. The dress of the men is a white or blue calico shirt, buttoned round the neck, and reaching below the knees; trowsers of the same, puckered round the ankles; slippers; a close-quilted, cotton cap or turban, and scarf. The women wear long garments of red or brown cotton, reaching to the ankles, but open in front from the bosom downwards; very wide trowsers of silk; and the hair either parted in separate locks in front, and then tied up together in a knot on the crown of the head, or covered by a handkerchief. The language of the Beloochee is a dialect of the Persian, corruptly pronounced, but from which tongue half the words are borrowed. (*Pottinger*, p. 55–67, 270; *Elphinstone*, p. 495.)

The Brahooee are inferior in height to the Beloochee, have short thigh-bones, a round face, flat features, and often brown hair and beards. Their habits are still more unsettled than those of the Beloochee, but they are not so predatory, rapacious, avaricious, revengeful, or cruel. Pottinger prefers their general character very much to that of the former, and represents them as active, industrious, laborious, quiet, hospitable, faithful, and more under the control of their chiefs. They live chiefly on animal food, of which they are very voracious, and are admitted by the Beloochee to be better marksmen than themselves. They live either in tents, about 12 yards long by as many feet wide, built of sticks, and covered with coarse blankets, or in houses, which in the towns, as well as the open country, are built of tamarisk, or other wooden framework, flanked with mud or bricks of unburned clay, and ill thatched with grass. The men are occupied in the outdoor and the women in the indoor employments, but the latter are not kept secluded, and all mix and eat together. Their religion is Mohammedan; their dress very similar to that of the Beloochee, except that felt for caps, and garments of felt are often worn by the men. Their language is like the Hindoo of the Punjaba. (*Pottinger*, p. 12–54, 70–76.)

A race called Dewahrs inhabit different parts of the country, who are probably descendants of the Guebees, driven from Persia by the Arabs in the 38th year of the Hegira; they are below the middle height, with blunt features and high cheek-bones; are civil and obliging, though not hospitable; being faithful and trustworthy, the guard of the palace of the khan of Kelat is entirely composed of them. Their language is pure Persian; their treatment of females better than that of any other Moslem people. (*Ibid.*, p., 80–274.)

Hindoos are tolerated, and monopolize most of the trade in Kelat and the neighbouring provinces, but they are not allowed to settle in Beloochistan with their wives and families. There is a considerable infusion of Hindoo blood and manners among the inhabitants of Cutch Gundava and Lus, where the people are indolent in their habits, and incessantly smoking. In Mukran the people are larger built and darker in colour, from intermarriages with Caffre slaves; the women in this prov. are ill-favoured, and none of them long lived. (*Ibid.*, p. 11–30, 78–311.)

The government is nominally under the khan of Kheiat, but chiefly in the hands of the sirdars of each individual tribe. The khan, however, can oblige each sirdar or chief to furnish him with a contingent of troops in case of need. The public revenues are perhaps about 350,000 rupees a year (£35,000), a large part of which is paid in produce, which the khan afterward disposes of to the Hindoo merchants. The taxes are moderate; 1–20th of the produce is paid for lands requiring irrigation and much labour; from 1–16th to 1–10th for other lands: the respective sirdars stop a part of this, in payment of collection. Five rupees is paid for a camel-load of goods entering Kelat, and 1½ per cent. on goods sold, excepting cattle. The khan generally sits in judgment in cases of murder. This crime may sometimes be compromised with the friends of the deceased, but in the event of the murder of a foreigner, immediate execution waits upon the criminal. Adultery may be punished by the death of both by the hand of the offended party. Burglary and night robbery are capital crimes. Petty differences are adjusted or disposed of by the sirdars, and minor offences are punished by flogging and imprisonment. (*Ibid.*, 289–294.)

Almost all the inhabitants of Beloochistan are nearly barbarous and uncivilized: neither the Beloocheekee nor Brahooekee are written tongues, and he is greatly honoured, and called "moollee," who can read the Koran. They are quite ignorant of all the countries in their neighbourhood, and fancy the British E. I. Company (of which they have heard from the Hindoos) to be "an old woman with plenty of money." Medicine they are totally unacquainted with; and to cure a fever they will shampoo or thump the body all over. (*Ibid.*, p. 96–140, &c.)

This country was quite unknown to Europeans until the time of Alexander the Great: the hills were then inhabited by a race of savages, the shore by people who subsisted, as at present, on fish, thence called by the Greeks *Ichthyophagi*. For nearly ten centuries afterward there are no records of Beloochistan. A caliph of Bagdad, in the year 92 of the Hegira led an army through it to Sinde; it was afterwards taken possession of by Mumood, son of the emperor Mahmood, and remained governed by his dynasty till 1739, when Nadir Shah, having conquered it, bestowed it, with the title of beglerbeg, on an ancestor of the present khan of Kelat. Until 1758, it was tributary to the khan of Caubul, but is now quite independent. (*Ibid.*, p. 263–276.)

BELP, a village of Switzerland, cant. Berne, on the Gurben, at the foot of the Belperg, near the S. bank of the Aar, 5 m. S.E. Berne. Pop. 2600.

BELPECH, a town of France, dep. Aude, cap. cant., at the confluence of the Lers and the Viriege, 15 m. S.W. Castelnaudary. Pop. 2429.

BELPER, a market town and chapelry of England, co. Derby, par. Duffield, and hund. Appletree, 8 m. N. Derby, 54 m. S.E. Manchester, and 134 m. N.W. London. Pop. (1831) 7890. It is situated in a valley, through which the Derwent flows. This river is crossed, at the N. end of the town, by a stone bridge of three arches, near which is a fine weir, for working the mills of the Messrs. Strutt. The town, though irregular, is well built. The market-place, in an elevated situation, is surrounded by handsome shops. A new church has recently been erected. Courts leet are held here at Easter and Michaelmas, when the officers of the town, comprising a constable, and other public officers, are elected and sworn. Belper is one of the places for taking votes at the election of M.P. for the S. division of the co. The living is a curacy, in the archdeaconry of Derby, diocese of Lichfield and Coventry: patron, vicar of Duf-

field. There are places of worship for dissenters, and also Sunday and infant schools, and almshouses. From an inconsiderable village, this place has risen, in a comparatively brief period to be one of the most populous towns in the co. Its present (1839) pop. is estimated at about 9000. It is much indebted to the public spirit and enlightened benevolence of the Messrs. Strutt, whose cotton-works give employment to 2900 people. The manufacture of silk and cotton hosiery in the town and neighbourhood is also very extensive: and nails, earthenware, and other articles, are produced upon a large scale, and give employment to a great number of hands. There are also in the neighbourhood, potteries, bleaching-grounds, and coal-works. The Cromford canal passes within 2 m. of the town; but its most important channel of communication will doubtless be the North Midland railway, now in progress. This railway, which is intended to join Derby and Leeds, passes through Belper; and being made to connect at Derby with other railways communicating with London and the W. of England, will open an easy access to the principal markets of the empire to Belper, and the other places on its line. The surrounding scenery is very beautiful and picturesque, particularly that near the bridge. Market-day, Saturday. Fairs, 12 May and 31 Oct., for sheep, cattle, &c., &c.

BELPRE, p. t., Washington co., O., 12 m. S. Marietta, 116 m. S.E. Columbus, 304 W. Situated on the N.W. side of the Ohio river, and much of it is a beautiful meadow, as its French name denotes. Opposite the centre of the town is Blennerhasset's island, made famous by Burr's conspiracy, in which its proprietor was implicated. It was formerly ornamented with fine buildings and beautiful gardens, which are now in ruins. Opposite the island are several interesting ancient mounds. It was settled in 1789 by disbanded officers of the Revolutionary army, among whom were the descendants of Gen. Israel Putnam. It contains many fine orchards of excellent fruit, and has extensive dairies, producing excellent cheese.

BELT (Great and Little), two of the entrances into the Baltic, which see.

BELTURBET, a town of Ireland, co. Cavan, on the Erne, 61 m. N.W. by W. Dublin, 6¼ m. N. by W. Cavan. Pop. 2996. It is a corporate town, has a good market-house, and a spacious church; but it has no staple manufacture or trade, and is not increasing. There is a considerable distillery within the modern limits of the bor. It returned two mem. to the Irish H. of C., but was disfranchised at the Union. Its trade is injured from there being a rapid or fall in the river on its one side, and a shallow on the other. (*Municipal Boundary Reports, &c.*)

BELVEDERE, a town of Naples, prov. Calabria Citra, on a hill washed by the Mediterranean, 26 m. N.N.W. Cosenza. Pop. 5600. It has a fort, several churches and convents, and three *monts-de-piété*, the revenues of which are appropriated to the portioning of poor girls on their marriage. Its wine and raisins are in considerable repute.

BELVEZ, a town of France, dep. Dordonne, cap. cant., 14 m. S.W. Sarlat. Pop. 2513. It has mills for extracting oil from nuts; and its fairs and markets are well frequented.

BELVIDERE, p. t., Lamoille co., Vt., 47 m. N. by W. Montpelier, 557 W. Watered by branches of Lamoille river. It contains one saw-mill, two schools, 62 scholars. Pop. 207.

Belvidere, p. v., Oxford t., capital of Warren co., N.J., 57 m. N.N.W. Trenton, 212 W. Situated on Pequest creek, at its entrance into Delaware river, which first affords good water-power. It contains a court-house, jail, the county offices, a bank, an academy, and two churches, one Methodist and one Presbyterian. An elegant bridge here crosses the Delaware river.

Belvidere, v., Boone co., Ill. It has two stores, one grist-mill, three saw-mills, three schools, 136 scholars. Pop. 698. A college has been chartered at this place, under the direction of the Baptists.

BELVOIR, an extra-parochial district of England, partly in co. Leicester, partly in that of Lincoln, in hund. Framland of the former, and soke of Grantham of the latter; 98 m. N. by W. London. Pop. (1831) 105; area, 170 acres. The inhabitants are connected with the establishment at Belvoir castle, the splendid seat of the Duke of Rutland, which crowns the summit of an eminence overlooking the beautiful vale whence its name is derived. The site was first occupied by Robert de Todeni, standard-bearer of William the Conqueror, and remained with his lineal descendants till the reign of Hen. III., when it passed, by marriage, to the Manners family, in whose possession it has since remained. The structure, which had been destroyed in the wars of the Roses, was rebuilt by the first earl of Rutland, whose title dates 12 Hen. VIII. In the last civil war it was alternately garrisoned by the royal and parliamentary forces, and was much injured: after the Restoration it was again repaired by the first duke of Rutland. Great improvements and additions have been made to this magnificent pile, by the present duke, under the direction of Wyatt. While they were in progress, a fire nearly destroyed the whole: the irreparable injury was the destruction of the fine picture gallery, in which were several of Sir J. Reynolds's paintings; and among others that of the Nativity. The castle is now restored to more than its former magnificence, still preserving the style of an ancient baronial residence.

BEMUS HEIGHTS, p. v., Stillwater t., Saratoga co., N.Y., 26 m. N. Albany, 396 W. In the vicinity is the battle-ground, 2 m. W. of Hudson river, where Gen. Burgoyne was defeated by the American army under Gen. Gates, in 1777. His surrender, Oct. 17th, was 8 m. N., at Schuylerville.

BENARES, a prov. of Hindostan, formerly included in that of Allahabad, presid. of Bengal: containing the districts of Benares, Mirzapore, Ghazepore, and Juanpore; chiefly between lat. 24° and 26° N., and long. 82° and 84° 30′ E.; having N. Goruckpore; E. Bahar; S. the Bedar ceded distr.; and W. the territ. of the rajah of Rewah, and the districts of Allahabad and Juanpore. Area, 8670 sq. m. Pop. estimated at about 3,000,000. It consists, for the most part, of a cultivated flat, on both sides of the Ganges, and is, besides, well watered by the Goompty, Sone, Caramnasa, &c. It chiefly produces the drier grains, as wheat and barley, legumes, flax, &c., indigo, sugar, and large quantities of opium. The latter is a government monopoly, and Bahar and Benares are the only provinces in the Bengal presid. in which it is permitted to be grown. This prov. is among the most flourishing in India, and increasing greatly in trade and prosperity; the total land revenues in 1829–30 amounted to £410,270 sterling. Muslins, gauzes, brocades, and some salt of an inferior kind, are among the manufactures. One tenth of the pop. in the cities, and 1-20th in the rest of the prov., are Mohammedans; the judicial and other regulations of Bengal extend to this province. Before 1775 Benares belonged to the nabob of Oude, who, in that year, ceded it to the British.

Benares (*Varanashi*, Sanscr., or *Kasi*, the splendid), a large and celebrated city of Hindostan, presid. Bengal, cap. prov. and distr. of same name, seat of a court of circuit and appeal, and one of the six chief provincial cities in the presid., at the head of a judicial division. Lat. 25° 30′ N., long. 83° 1′ E.; on the N.W. bank of the Ganges, about 300 ft. above the level of the sea; 65 m. E. Allahabad, and 400 m. N.W. Calcutta. Pop. 630,000. (*Hamilton*, 1828.) It is the "most holy" city of the Hindoos; the ecclesiastical metropolis, in fact, of India, and is resorted to by pilgrims from all quarters, especially from the Maharatta countries, and from even Tibet and Birmah. According to Bishop Heber, it "is certainly the richest, as well as probably the most populous, city in the peninsula." Its first view is extremely fine; it extends about 4 m. along the bank of the river, which is considerably elevated, and adorned with large ghauts, or landing-places, with long and handsome flights of steps. "Its buildings, which are crowded, built of stone or brick, and uniquely lofty; here and there the sculptured pyramidal tops of small pagodas; and the great mosque of Aurungzebe, with its gilded dome glittering in the sunbeam, and two minarets towering one above the other, form a grand and imposing *coup-d'œil*." The streets are extremely narrow, and the opposite sides approach in some parts so near each other as to be united by galleries; the only open space is the market-place, constructed by the present gov., but the city is well drained and healthy. In 1801 there were upwards of 12,000 houses, from one to six stories high, built of brick or stone, and 16,000 more of mud, with tiled roofs. The former lodge, at an average, about 15 persons on a floor; those of six stories often containing from 150 to 200 individuals each; they are built round a court-yard, and have small windows, many verandahs, galleries, &c.; much painting, carving, and elaborate stone-work; and are "often not unlike those represented in Canaletti's 'Views of Venice.'" The causeways are much lower than the lower floors of the houses, which have mostly arched rows in front, with little shops behind them: each street, or bazar, is devoted to a separate trade. The principal public building is the mosque, built by Aurungzebe, on the highest point, and in the centre of the city, which it completely overlooks. A Hindoo temple was destroyed to make room for it. Many other mosques, which remain, are built on equally holy spots, much to the annoyance of the Hindoo population. There are numerous Hindoo temples; and fakirs' houses, as they are called, adorned with idols, occur at every turn. Benares is crowded with mendicant priests; there are said to be 8000 houses occupied by Brahmins, who live upon the alms and offerings of the pilgrims; only 1-10th of the pop. are Mohammedans; and Europeans, who are few in number, reside not in the city, but at Seroll, a little way off. Turks, Persians, Armenians, Tartars, &c. are settled in Benares. Its trade is considerable in shawls, diamonds of Bundlecund,

Dacca and other muslins; in silks, cottons, and fine woollens of its own manufacture, and in European articles. The Hindoo Sanscrit college of this city is the chief seat of native learning in India. In 1830 it was attended by 287 pupils: an English college, established in 1832, has from 140 to 150 pupils. Numerous Christian missions have been established here, and there are private teachers of both the Mohammedan and Hindoo law. One of the greatest curiosities at Benares is an ancient observatory, built before the Mussulman conquest, by the celebrated Rajah Jehsingh. It is of stone, and contains a large square tower, in which are preserved many instruments, chiefly of stone, some of them having been evidently used for judicial astrology: a few miles to the E. there is a solid stone ruin, similar in appearance to the Buddhist temples in the W. of India, called the Saranath. The country around Benares is fertile and well-cultivated, but bare of wood: fuel is, therefore, very dear, and *suttees*, in consequence of this scarcity, are said to have been less common than in many parts of India. This city is believed by the Hindoos to form no part of the terrestrial globe, but to rest upon the point of Siva's trident: hence, they say, no earthquake ever affects it. In 1017 it was taken by Sultan Mahmoud, and from 1190 followed the fortunes of the Delhi sovereigns: since 1775 it has enjoyed tranquillity under the British, interrupted only on one occasion by a religious conflict between the Hindoos and Mussulmans, on the latter breaking down a pillar, called "Siva's walking-stick." The rajah of Benares is a pensioner on English bounty to the extent of £13,498 annually, and without any political power. (*Hamilton's E. I. Gaz.; Ibid., Hindostan; Med. Trav.*, ix., 243-268; *Reports, &c. and Appendizes.*)

BENCOOLEN, a marit. town of Sumatra (E. archipelago), and the principal settlement of the Dutch, as formerly of the British on that island. It stands on the S.W. coast, in lat. 3° 49' N., long. 102° 16' E. The town, which is small and well built, is said to be unhealthy; but fort Marlborough, originally constructed by the British in 1685, stands a little farther inland, in a healthier situation. The pop. is composed of Dutch and other Europeans, or their descendants, Ooloos, Chinese, Balinese, Malays, &c. The trade of Bencoolen had greatly declined previously to our parting with it in 1825. The imports consist chiefly of cloths, rice, and salt, tobacco, sugar, handkerchiefs, &c. from Batavia; opium and various fabrics from Bengal and the Coromandel coast; printed cottons, cutlery, and metallic articles, from Europe; and salted fish, roes, eggs, poultry, oil, and timber, from other parts of the island. The English endeavoured to cultivate the clove and nutmeg here, but the produce was very inferior to that of Amboyna and the Banda islands. Bencoolen was always an unprofitable settlement to the British, the expenses of its government having uniformly exceeded its revenue. During the five years preceding its cession to the Dutch, the excess of expenditure over revenue amounted to about £85,000 a year. It was ceded in 1825 to the Dutch, in part exchange for the town and fortress of Malacca and other settlements. (*Hamilton's E. I. Gaz.*, i., 172; *Reports on the Affairs of the E. India Company.*)

BENDER, a town of European Russia, prov. Bessarabia, on the Dniester, about 58 m. from the Black sea. Pop. 1700. (*Schnitzler.*) It is fortified by a wall and ditch, and has a citadel on an eminence. In 1770, the Russians took this town by storm, and reduced it to ashes. They again took it in 1809, and it was finally ceded to them, with the prov. of Bessarabia, by the treaty of Bucharest in 1812. It was formerly a place of much greater consequence than at present; and is said, previously to its capture in 1770, to have had 20,000 inhabitants. In its vicinity is Varnitza, the retreat of Charles XII. after the battle of Poltava.

BENE, a town of the Sardinian States, prov. Mondovi, on a hill between the Stura and Tanaro, 16 m. N.E. Coni. Pop. 5000. It is defended by an old castle; has a collegiate church and a hospital.

BENEVENTO (an. *Beneventum*), a city of Italy, cap. of a small surrounding territory or deleg., within the Principato Ultra, in the kingdom of Naples, but belonging to the States of the Church, on the declivity of a hill between and near the confluence of the Calore and Sabato, 32 m. N.E. Naples; lat. 41° 7' N., long. 14° 43' E. Pop. of deleg. 23,000; of town, perhaps 16,000. It is surrounded by walls, and defended by a castle. The modern town occupies the site of the ancient one, and is almost entirely constructed out of the ruins of the latter. In fact, with the exception of Rome, hardly any Italian town can boast of so many remains of antiquity as Benevento. Of these the most perfect, and by far the most worthy of notice, is the arch of Trajan, now the *Porta Aurea*, erected in honour of the great emperor whose name it bears, about A.C. 114. This singularly beautiful structure is of white marble, of the composite order, and consists of a single arch. Its total height is 52 ft., the intercolumniations and friezes being covered with basso relievos representing the battles and triumphs of the Dacian war. These, which are of the most exquisite workmanship, are a good deal mutilated; but otherwise this noble fabric is nearly entire. The cathedral is a clumsy edifice, in the walls of which the finest remains of antiquity are huddled together without any regard to order. The cupola of the church of St. Sophia rests on a circular colonnade of antique marble; and scarcely a wall is to be seen that is not filled with fragments of altars, tombs, columns, and other relics of the old city. Benevento is the seat of an archbishopric, and has a fine *palazzo publico*, or town-hall, a seminary with a good library, a college, an orphan hospital, three other hospitals, and two *monti di pietà*. Considerable fairs are held at different periods of the year. It suffered severely from the plague in 1656, and from an earthquake in 1688.

Benevento is very ancient, its origin being ascribed to Diomed. It was first called Maleventum; but on being taken and colonized by the Romans, it was called Beneventum. In its vicinity, in 1266, was fought the great battle between Charles of Anjou and his rival Manfred, in which the latter was killed, and his army totally defeated. During the ascendency of Napoleon, Benevento was formed into a principality, conferred on M. de Talleyrand; but, on the downfall of Napoleon, it again reverted to the pope. (*Swinburne's Two Sicilies*, i., 410, 4to ed.; *Serristori, Statistica di Stati Pontifici, &c.*)

BENGAL (PRESIDENCY OF), a very extensive territory of Asia, being by far the most important and extensive of the three presidencies into which the British dominions in the East are divided. It consists principally of territories in India, on this side the Ganges, or in Hindostan, in which it extends over the whole of the large and fertile provinces of Bengal and Behar, with very considerable portions of those of Delhi, Allahabad, Oude, Gundwanah, Berar, Orissa, and Rajpootana. Beyond the Ganges, it comprises Assam, Arracan, Ye, Tavoy, and Mergui, with Malacca, Singapore, and Prince of Wales's island; but these latter districts, or those beyond the Ganges, should rather be considered as dependencies on, than as parts of the presidency. Its territories in and adjacent to Hindostan lie between lat. 16° 0' and 31° 15' N., and long. 74° to 96° E., having N. part of Rajpootana, the Himalaya mountains, Nepal, Sikkim, and Bootan; E. Jynteah, Cassay, and the Birman empire; S. the bay of Bengal, the Madras presid., and the dom. of the rajah of Berar and the Nizam; W. those of Scindiah, the rajah of Bhopal, indep. of Bundlecund, and Rajpootana. The distr. of Ajmeer and another detached and smaller distr. are enclosed in the last-named country. The ceded Birmese prova., Ye, Tavoy, and Mergui, are bounded W. by the Birman empire and the ocean, and elsewhere by Siam and the Lao territories. The dom. of this presid. entirely surround those of the rajah of Rewah, and nearly so those of the Oude; at one point they approach Runjeet Sing's dom., and at another come within 70 m. of the Bombay presid.; at Himalaya, they meet Tibet, and the farthest E. boundary of their Assamese territories is not 100 m. from the frontier of China. Their total area has been estimated at 348,400 sq. m., and the total population at 70,000,000.

It is divided into the Upper or Western, the Central, and the Lower provinces; the former including Delhi and others W. of 80° long.; the Central, Allahabad, Behar, and others as far E. as 87° long.; and the Lower prov., Bengal, and the rest still farther E. These provs. are divided into numerous districts, which have mostly the same limits as they had under the Mohammedan government: on the opposite page will be found the official report of their extent, population, and land revenue. (See *Rep. on the Affairs of the E. I. Comp.*, 1831, p. 762, 763; and *Appendix—Revenue*, par. ii., p. 2-4.)

The principal cities are Calcutta, the British cap. of India; Delhi, the Mohammedan capital; with Benares, Moorshedabad, Dacca, Behar, Patna, Allahabad, and Agra.

The surface of this vast territory has, in different parts, every variety of elevation and aspect. But by far the larger portion consists, notwithstanding, of immense plains, including those of the Ganges and Brahmaputra. Exclusive of the Himmalaya and Garrows mountains, which bound it N. and E., it has no mountains of any importance, with the exception of the Vindhyan range, S. of the Ganges.

Rivers.—No part of India is so well watered, or has so many great rivers. The Ganges flows in a S.E. direction through the whole extent of the presidency, being joined in its progress by numerous tributaries, some of them, as the Jumna, Chumbul, Gogra, Gunduck, Sone, &c., of great magnitude and importance. It is also traversed in its E. parts by the Brahmaputra, which, as well as the Ganges, falls into the N. part of the bay of Bengal, near each other. Both of them, but especially the Ganges, divide into numerous arms before reaching the sea; and their united deltas form a tract of alluvial soil of above 30,000 sq. m. in extent,

BENGAL, PRESIDENCY OF.

Official Report of the Extent, Population, and Land Revenue of the Presidency of Bengal.

Division and District.	Extent of each dist. in Eng. sq. m.	Population in 1822.	Land revenue, 1829–30.
			In Sicca rupees.
Calcutta.			
Burdwan	2,000	1,187,580	2,847,468
Jungle Mehals	6,990	1,304,740	449,422
Midnapore	8,260	1,914,060	1,307,614
Cuttack	9,040	1,984,620	789,701
Jessore	5,180	1,183,590	1,209,355
Nuddea	3,105	1,187,160	1,166,951
Hooghly	2,260	1,230,150	1,102,874
24 Pergunnahs	3,610	599,595	1,139,868
Suburbs of Calcutta	1,105	360,360	65,569
Calcutta city	7	265,000 (1837.)	
		229,714	
Patna.			
Ramghur	22,430	2,252,985	161,293
Behar	5,235	1,340,610	1,679,690
Tirhoot	7,732	1,697,700	352,868
Sarun	5,760	1,464,075	1,560,563
Shahabad	4,650	908,850	1,480,483
Patna	667	255,705	352,868
Moorshedabad.			
Bhaugulpore	7,270	797,790	413,733
Purneah	7,460	1,362,165	1,035,411
Dinagepore	5,990	2,341,490	1,756,538
Rungpore	7,856	1,340,350	1,063,178
Rajeshaye	3,950	4,087,155	1,464,290
Beerbhoom	3,870	1,267,065	691,876
Moorshedabad	1,870	762,690	1,195,562
Dacca.			
Dacca	1,870	512,365	408,362
Dacca Jelalpore	2,585	598,375	
Tipperah	6,830	1,372,260	810,417
Chittagong	2,980	700,800	533,797
Backergunge	2,780	666,640	781,809
Sylhet	3,532	1,083,720	303,516
Mymensing	6,998	1,454,670	728,615
Separate collectorates of Durrhumpore, Cooch-Behar, Rajmahal, Bhuiwha, Boggree, Sherapore, and Balasore, included in the district above	. .	. .	1,337,878
Carried forward	153,802	37,503,265	
Brought forward	153,802	37,503,265	
Upper or W. Provinces.			
Benares.			
Allahabad	2,650		1,870,843
Futtehpore	1,780		1,330,906
Bundlecund, N. and S.	4,680		
Benares	3,350		
Ghazeepore	2,850		
Goruckpore	9,520		1,696,898
Juanpore	1,920		1,323,499
Azimghur	2,240		790,061
Mirzapore	3,650		1,082,301
Bareilly.			
Agra	3,500	32,206,806	1,683,187
Allyghur	3,400		1,479,366
Furruckabad	1,850		1,736,854
Bareilly	6,900		1,329,274
Shahjehanpore	1,490		1,194,136
Seharunpore	3,800		1,158,051
Meerut	2,250		1,404,216
Cawnpore	2,650		3,175,746
Etawah	3,450		1,825,284
Moradabad	5,800		965,110
Boolundshahur	1,950		839,313
Collectorates of Pillibheet, Suheswan, Nugeenah, Saidabad, Bandah, Kalpee, Moozuffernugger, and Delhi, included in the above district.	. .	. .	11,614,154
Ceded Districts.			
1. On the Nerbudda	29,800		
2. By the rajah of Berar in 1826	55,900		
3. *Birmese Prov.*			
Assam	15,900	No returns.	
Aracan	11,500		
Cachar	6,507		After certain deduc. see Rep.,— 7,171,470*l.*
Jynteah	3,850		
Ye, Tavoy, Mergui, &c.	15,000		
Total	358,760	69,710,071	

and great natural fertility, but mostly overrun with jungle. There are no lakes similar to those in Tibet, or other parts of Asia; but many extensive lagunes, or *jeels*, especially in the lower prov., and, above all, in the districts of Dacca and Rajeshaye. (*See* BENGAL, PROV. OF.)

Scenery, &c.—Every kind of scenery is met with in this presidency. Kumaon, the most N. part, is a "vast and tumultuous ocean of mountains," elevated in successive ridges to 7000 ft. in height, backed by the snowy ridge of the Himalaya, and covered in great part with an uninterrupted forest of both Asiatic and European vegetation. The W. parts of Delhi trench on the Indian desert, and have an arid look and thirsty soil; other portions of this prov. are also flat, but fertile and highly cultivated. The Doab is flat, and abounds in long grass, but is singularly deficient in timber. Allahabad is among the most productive provs. in Hindostan; its surface is unequal, the S. part rising progressively into a hill tract, which extends through Bandah and part of Kalpee districts. Bundlecund and the ceded distr. on the Nerbudda, form part of the high central table land of India; they abound in deep ravines, fertile valleys, and extensive forests; but are in many parts sterile, as are also some of the districts even in the neighbourhood of the Ganges. The central prov. are undulating, often well cultivated, intersected by rivers, and adorned in many parts by groves and forests. Bahar, N. the Ganges, is flat and waste, but is very fertile on the S. side of that river; its height also increases as it advances more to the S., so that in Ramghur we find a mountainous and rocky country two thirds waste, participating in the natural features of the Gundwanah districts, joining those on the Nerbudda. Orissa, near the sea coast, is low and swampy; but its interior contains cultivated plains and dense jungles, backed W. by a mountainous forest region, which descends gradually through the Jungle Mehals and Beerbhoom, into the lowlands of Bengal. The latter are enclosed, both towards the sea and the N. border, by immense belts of jungle, and have E. the noble valley of the Brahmaputra, which constitutes the prov. of Assam. From Sylhet to Aracan the interior is extremely hilly, the coast swampy, but the surface often very fertile and well cultivated: the other ceded Birmese provinces have dense forests and jungles, rice-plains, and a rocky coast, preceded by low islands.

Geology and Minerals.—The Himalaya, in Kumaon, is composed of granite, gneiss, porphyry, quartz, mica, hornblende, &c.; and its lower ranges contain sandstone brecciated limestone, copper, and iron ores. The Vindhyan mountains betray a volcanic character throughout, and the Garrows mountains, on the opposite side of the Delta of the Ganges, exhibit a similar structure. Tertiary beds are met with in Sylhet, and where the Brahmaputra issues from the Assam valley, containing organic remains of crocodiles, *Testacea*, &c. The Bhaugulpore distr. is peculiarly rich in iron, and considerable mines have formerly been worked; the ore is nodular, and yields 20 to 25 per cent. metal. In the Sylhet hills there is a fine granular iron; and in Ramghur, on the banks of the Jumna, and in the Himalaya, ore is found yielding 30 to 60 per cent. Coal, in conjunction with iron, is found in considerable quantity both in Burdwan and Sylhet; that of the former distr. is preferred, and is largely consumed at Calcutta: some has recently been discovered in the Saugor distr., on the Nerbudda, which showed near the surface. The upper soil is dry, light, and sandy, in the N.W.; clayey in the Doab and its neighbourhood; sandy again in Allahabad, and a shallow alluvium in the delta of Bengal. In Behar and elsewhere, it affords efflorescences of nitre and muriate of soda, in immense quantities; the former in greater abundance than in any other part of the world. The annual export of nitre from Calcutta has, of late years, been 170,000 bags, chiefly to Great Britain, China, America, and France. The manufacture of salt is a gov. monopoly, within the provs. of Bengal and Bahar, and the district of Cuttack: its annual produce may be about £1,600,000; in 1837, 4,682,723 maunds were sold, realizing 15,404,803 rupees. The upper provs. are supplied with salt, partly from the lower ones, and partly from salt mines in the W. of India. Diamonds are found in Bundlecund, the matrix being a conglomerate

bed, with quartzose pebbles; silver and gold dust in many rivers.

The Climate, in so wide an extent of country, is, of course, varied; at Calcutta, the annual mean temp. was found, by three years' observations, to be 78° 39′ F.; at Benares, for two years, 77° 81′; and at Sahunpore (Delhi), 73° 5′: the barometer, at each of these places, for like periods, averaged respectively 29·764, 29·464, and 28·765 inches. June is the dampest, January the driest month; drought is often experienced in the upper prov., where the depression of the moistened thermometer sometimes exceeds 35°; but at Calcutta the average fall of rain for three recent years was 89·83 inches. Bengal prov. is subject to fogs; from these Tirhoot (Behar) is free, and is temperate, producing almost every European fruit and vegetable; the upper provinces are also temperate, excepting in the hottest season, when burning winds prevail, occasionally obliging the inhab. to resort to underground habitations. In Kumaon the surface is wholly covered with snow from September to April, although, during the rest of the year, the thermom. in the sun often rises to 110° Fah.

Vegetable Products.—Teak, saul, sissoo, banyan, ebony, rattans, bamboos, and a large number of trees yielding material for cordage; oaks and pines in the hill forests; and along the coasts of the bay of Bengal, cocoa, areca, and other palms, are met with in profusion. (*See* HINDOSTAN.) The lower provinces are highly favourable to the production of rice, the staple article of food, and, consequently, of production; the central and upper provinces to that of the drier grains: European products, and those peculiar to the tropics, being raised in alternate seasons. Grain forms a valuable export from Bengal. Indigo is cultivated from Dacca to Delhi, and occupies more than 1,000,000 statute acres; its annual produce being worth from two to three mill. ster., half of which is expended in its production. There are 900 indigo factories in the presid., and the exports to Europe of the article amount, in some years, to 9,000,000 lbs. The culture of opium is monopolized by the government, and is carried on only in parts of Bahar and Benares. The opium grown in these provs. is considered by the Chinese, by whom it is mostly all made use of, to be much superior in flavour to the opium of Malwah. The opium sold at the public sales, in 1836–37, was 16,916 chests, worth £3,539,510. The nett revenue from it is about £1,000,000. Cotton, in every variety, is largely grown; but the imports into England do not amount to one per cent. of the imports of American cotton. The soil of Benares is especially adapted to the sugar-cane, and sugar might, perhaps, be produced, were sufficient care taken in its manufacture, of as good quality as that of the W. Indies, though hitherto it has been inferior. (See next article.) Coffee, pepper, and tobacco, the latter chiefly in Bhaugulpore and Bundlecund, are staple exports; the rare spices of the E. archipelago have been naturalized at Calcutta, and a multitude of trees, fruits, and other vegetables of China, Caubul, Europe, and America, are grown in different parts of the presidency.

Animals.—Alligators abound in the Ganges and Brahmaputra; tigers infest the jungles; and we meet with wild elephants, rhinoceroses, leopards, wolves, bears, jackals, a great variety of birds, a profusion of fish, and different species of serpents, both innocent and noxious. (*See* MANDOSTAN.) Silk is procured from both the native and the Chinese or annular worm; the mulberry and castor-oil plants being cultivated for the purpose. The produce is, perhaps, inferior to that of Italy, though the best Indian silk fetches a very high price: the silk distr. lie chiefly between 22° and 26° lat., and 88° and 90° long.

Races of Men.—A number of widely-differing tribes inhabit the territ. under this presid.: Hindoos, differing in physical and mental qualities in almost every prov., the hill-people in Bhaugulpore, and Gonds in Gundwanah, of which tracts they are believed to be the aborigines, Mahrattas, Moguls, Seiks, Rajpoots, especially in Delhi, Bundlecund, and Oude; Coosbes, Khyens, Garrows, Coosyahs, Mughs, &c., ultra Gangetic nations, all apparently of a different family from the Hindoos, with quite different usages and religion.

The *Government* is vested in the gov.-general of India, at Calcutta, and five councillors, three of whom are appointed by the comp.; the fourth also by the comp., but not of their body, and subject to the approbation of the sovereign; the fifth, the commander-in-chief, with precedence after the gov.-general. Though in case of vacancy he never succeeds to the government, the senior civil member always doing so. There is a lieutenant-governor at Agra, with authority over the upper prov., subject to the control of the central gov. of India (*see* AGRA); and Prince of Wales's Island has a separate governor.

Public Revenues.—149,782 sq. m. of territory, under the Bengal presid., embracing the whole provinces of Bengal, Bahar, Benares, and Bengalese Orissa (excepting Cuttack), are assessed under what is called the *perpetual* settlement, at a permanent revenue of £3,947,085. (*See* BENGAL PROV.) The upper or W. prov., and the ceded distr. on the Nerbudda, with an area of 96,310 sq. m., are assessed on the village system (*see* BOMBAY PRESID.); and the ryotwarry system (*see* MADRAS PRESID.) prevails in some of the central provs. and in Cuttack. The taxation, on account of land, averaged, in 1837, 1s. 10d. per head; a portion of the public revenue is besides derived from taxes on houses, professions, salt, sales, and licenses, opium and tobacco; tributes from protected and other states; customs, excise, post-office, stamps, judicial fees and fines; sayer and abkaree duties, pilotage fees, &c. The following table shows the revenue and expenditure of the presidency, in the years therein specified—

Revenues.	1832–33.	1833–34.
	Sicca Rupees.	*Sicca Rupees.*
Mint Duties	225,087	454,949
Post-office Collections	775,831	747,906
Stamp Duties	2,571,948	2,765,817
House Tax in Calcutta	229,918	233,545
Excise Duties in Ditto	196,218	171,149
Judicial Fees and Fines	511,782	432,754
Miscellaneous Civil Receipts	292,954	159,876
Land Revenue	65,403,323	60,395,208
Syer and Abkaree ditto	4,003,401	3,471,683
Miscellaneous Revenue Receipts	1,158,988	1,505,027
Ceded Territory on the Nerbudda and Bhopaul Land and Syer Revenue	2,636,400	2,589,468
Receipts from Territory ceded by the Birmese	1,018,587	1,020,435
Customs, including Town and Transit Duties	7,078,727	5,922,559
Sale of Salt	17,282,960	17,018,043
Sale of Opium	11,511,941	12,918,145
Marine and Pilotage Receipts	873,118	898,282
Revenues of Prince of Wales's Island, Singapore, and Malacca	542,818	439,444
Subsidies from the Nagpoor Gov., the Nizam, Birmese, and Bhurtpore Gov.	3,182,806	2,490,344
Interest on Arrears of Revenue	216,596	387,276
Total Gross Revenue	112,851,019	113,990,528
Deduct—		
Allowances and Assignments payable to Native Princes, &c.	5,900,895	5,250,421
	112,430,[illegible]	108,109,[illegible]
Charges of collecting Revenue	2[illegible],019,605	19,967,455
	91,411,949	88,442,407
Amount relative to Malwa Opium Transactions	3,466,727	
	94,877,776	88,442,407
Total nett Revenue	= 9,487,778	= 8,844,241

Charges.	1832–33.	1833–34.
	Sicca Rupees.	*Sicca Rupees.*
Civil and Political	8,715,451	8,771,510
Judicial and Police	10,897,294	10,726,129
Charges in the ceded Territory on the Nerbudda	1,147,833	745,886
Ditto in the Birmese ceded Territory	1,148,223	966,624
Marine and Pilotage	1,678,495	1,070,012
Buildings, Roads, &c.	1,215,79	923,085
Charges on Prince of Wales's Island, Singapore, and Malacca	1,084,195	881,468
Military Charges	26,597,876	23,468,911
	52,354,[illegible]96	56,967,640
Deduct—		
Amount of unclaimed Deposits of Seven Year's standing, &c.	647,487	2,504,509
Total Charges, exclusive of Int. on Debt	51,647,209	54,463,131
Interest on Debt	15,214,969	15,701,897
	76,872,273	70,1[illegible],[illegible]28
Total Charges of the Bengal Presid.	= 7,687,[illegible]	= 7,018,4[illegible]

In 1834, the Bengal Presidency, as above, was subdivided into the two presidencies of Bengal and Agra. The nett Revenues and Charges of both, in the year 1834–35, were as follows:

	Nett Revenues.		Charges.
Bengal	58,220,726 *s. r.*		68,948,351 *s. r.*
Agra	40 382,158		6,989,698
	98,557,888		75,938,039
Total	78,923,039		
	20,2[illegible],[illegible]49		
Surplus	= 2,032,9[illegible]		

The Bengal debt bearing interest is about £32,000,000, 18,000,000 of which are at 5 per cent.; the civil debt not bearing interest amounts to £8,000,000. The Bank of Bengal was established 1809, and has a capital of 7½ mill. rup.; the Union Bank has a capital of eight mill. rup.; and there is a bank at Agra with a capital of two mill. rup., chiefly supported by European officers. A new bank, called the Bank of India, is being formed at Calcutta, and savings'

banks are about to be established. There is little gold in circulation, and the highest silver coins are rupées. These formerly varied a little, but the company's rupee, worth about 2s., is now the only one that is coined. The gold mohur is equal to sixteen rupees. Cowries are fast disappearing.

Weights, Measures, &c.—The chief weights in use are the seer (2 lbs.), the factory maund (74 lbs. 10 oz.), and the bazar maund (82 lbs. 2 oz.); the measure of length, coss (1¼ mile square), the bega varying from about 2 to 3½ to the English acre.

Justice.—The supreme court of justice is the sudder dewanny, and nizamut adawlut, in Calcutta. Its functionaries—administering, under its first title, justice in civil, and under the second, in criminal cases—are a chief justice and three puisne judges, who have lately been personally vested with all the powers of the court; the concurrence of one colleague only being necessary in sentences of death. The only appeal from the judges is to the queen in council. The courts next in rank are the six prov. courts of appeal, viz., Calcutta, Moorshedabad, Dacca, Patna, Benares, and Bareilly, for suits above the value of 5000 rup., the decisions of which are final, except in cases of special appeal. There are forty-nine zillah courts, with power to try suits to the amount of 20,000 rup., and decide appeals from decisions of registrars, sudder ameems, moonsiffs, and other native judges. Native judges have been, during the last year, established in zillah and city courts, and native assessors now sit on the bench with European judges.

Police.—There are about 15 or 20 police stations in each distr., with 20 or 30 well-armed men at each, at whose head is an officer, who holds inquests, &c.; in addition to these, each village has its watchman, and all together form a body of 164,000 men; besides which, there are a mounted and river police, both conducted by natives. The police force is now much more efficient than formerly.

Crime.—Crimes are more numerous and aggravated in the W. and ceded districts than in the lower provs.: in the central provinces they exist to a middle extent, between the two extremes. Crime is now greatly on the decrease; in one year the total decrease of offences in the lower and western provinces was 14,211, and under a mild and equitable system, murders decreased 576 in two years. Dacoity, an atrocious system of gang robbery (*see* BENGAL PROV.), did not, in 1830, exceed one seventh part of its amount thirty years previously.

Military Force.—The total military force in this presid. consists of 96,897 men, 13,254 of whom are Europeans, including two regiments of British cavalry and eight of infantry. The Bengal, of all our native Indian armies, contains the greatest number of men of high caste. The yearly costs of the army is £3,430,000.

Pilot Service.—There is a pilot service at the mouths of the Ganges, consisting of twelve schooners of 200 tons each, which put a European pilot and leadsman on board each ship as it appears in sight. The cost of this service, including buoy vessels, light-houses, &c., is £153,856 a year.

Religions, &c.—The Hindoo and Mohammedan are the prevailing religions. In the prov. Bengal, the Mohammedans constitute about one seventh of the pop., but their distribution is remarkable, as in the W. of that prov. (and in Behar) they are to the former but as 1 to 4, while they equal their numbers in the E., although more distant from the original seat of Mohammedan power. The Mussulmans live mostly in the cities and towns, where they sometimes even outnumber the Hindoos. The Gonds have a rude idolatry peculiar to themselves; Buddhism is confined to Aracan and the Birmese provs. In 1830 there were upward of 10,000 native Christians attending the different Protestant churches stationed in the presid. The church establishment consists of the Lord Bishop of Calcutta (to whom the other bishops in India are subordinate), an archdeacon, and 27 chaplains: the total annual expenditure on this account, in 1835, was £92,300. There is also a small public establishment of the Scotch kirk. The Roman Catholic estab. receives the countenance and support of gov.; its members are subordinate to a vicar apostolic at Agra, with direct authority from the pope, and a legate at Calcutta, under the authority of the R. C. bishop of Madras. Christianity is said to be increasing; and it is affirmed that, in 1832, 50,000 children attended the Protestant schools in Bengal only.

Education, &c.—Education and the study of the English language are also rapidly spreading. Seminaries and private schools, receiving the aid of government, have been established in many places, and superior colleges planted or revived in the principal cities. In 1830 the Bengal government spent £44,830 in forwarding these objects.

Charitable Institutions.—Public dispensaries have been established in Agra, Delhi, and Cawnpore; and those in Moorshedabad, Dacca, Patna, and Chittagong districts have been revived or remodelled.

History.—In 1707, Calcutta, which had previously been subordinate to Madras, was made a separate presid.; and, in 1726, a charter was granted to the comp. enabling them to establish a penal court there, as well as at the other presid. In 1760, by a treaty with Meer Cosim, the soubahdar of Bengal, the revenues of Burdwan, Midnapore, and Chittagong, were assigned to the E. I. Comp., and, in 1765, an imperial grant from Shah Allum to the English to receive the revenues of the dewanny of Bengal, Bahar, and Orissa, gave them the virtual sovereignty of those provinces, which they actually assumed in 1772. In 1773 a governor-general was appointed to reside in Bengal, to which presid. the two others were made subordinate, and a supreme court of judicature established, with judges appointed by the crown; in 1775 the comp. became possessed of Benares and its territory. In 1793, under the administration of Lord Cornwallis, the Perpetual Settlement was introduced into Bengal, Bahar, &c.; prov. courts of appeal were at the same time established in Calcutta, Patna, Moorshedabad, and Dacca, with the courts of sudder dewanny, and nizamut adawlut: in 1798 the English took possession of Allahabad; in 1801 the soubahdar of Oude relinquished Rohilcund, Goruckpoor, and the Doab, to the British; and, in 1802, the nabob of Furruckabad ceded his territory on receipt of a pension. In 1805, the empire of Delhi finally fell before the British arms. Kumaon was obtained from Nepaul in 1815; Saugor, and the territories on the Nerbudda were ceded in 1818; in 1824, Singapore and Malacca, the latter ceded by the Dutch, were acquired; and, in 1826, large districts in Gundwanah were ceded by the rajah of Berar; Aracan, Martaban, Ye, Tavoy, and Mergui, were ceded also in 1826, by the Birmese, as well as all dominion over Assam; and, finally, within the last few months, British officers have been sent from Calcutta to take upon themselves the government of the most easterly parts of the last named prov. The governors-general of India, since 1758, have been as follows:

1758 Col. R. Clive.	1793 Sir J. Shore (Lord Teignmouth).
1760 J. L. Holwell, Esq.	1798 Marq. Wellesley.
1760 H. Vansittart, Esq.	1805 Marq. Cornwallis.
1764 J. Spencer, Esq.	1805 Sir G. Barlow.
1765 Lord Clive.	1807 Earl of Minto.
1767 Harry Verelst, Esq.	1813 Marquis of Hastings.
1769 J. Carter, Esq.	1823 Lord Amherst.
1772 War. Hastings, Esq.	1828 Lord W. Bentinck.
1785 Sir J. Macpherson.	1835 Lord Auckland.
1786 Marq. Cornwallis.	

(*Hamilton's Hindostan, and Gazetteer; Reports on the Affairs of the E. I. Company*, 1830–1832; *Bengal Almanac*, 1838.)

BENGAL, one of the largest and most important provinces of Hindostan, the principal seat of the British power in India, between 21° and 27° N. lat., and, for the most part, between 80° and 93° E. long.; it has N. Nepaul, Sikkim, and Bootan; E. Assam, Jynteah, Cachar, and the Khyen districts of Birmah; S. the bay of Bengal, and parts of Orissa and Aracan; and W. Bahar; area 82,700 sq. m.; pop. (1822) 24,887,000. Bengal is protected on the N. by a thick jungle of *sugeah* grass, sometimes 30 feet high, and by tall forest-trees, covering a belt of lowland country from 10 to 20 m. broad, backed by the Himalaya ranges; E. by the Garrows mountains, and their prolongations; the sea coast on the S. is fenced by shallows, and is difficult of access; and on the W. frontier, which is most exposed, the country is not favourable to an invading force, being in parts mountainous, sterile, and thinly inhabited; and were an invading army to penetrate from the W. as far as the Ganges, that river would be a formidable obstacle to its progress eastward. Excepting towards its E. and W. frontiers, Bengal presents only a dead level, broken by occasional undulations of ground, and is everywhere exceedingly fertile. The two greatest rivers of India, the Ganges and Brahmaputra, flow through the prov.; and it is so intersected by their numerous arms and tributaries, that in its central and western parts, even in the dry season, few places are more than 20 miles distant from a navigable river; while, during the period of the inundation, most part of it is laid under water, the towns appearing like so many islands in the surrounding sea. Many extensive lagunes or marshes, called jeels, are produced by rivers altering their channels during the dry season, in consequence of obstructions formed during the inundations.

Climate.—It is less subject than any other part of India to fluctuations of the seasons; which may be divided into the cold, hot, and rainy: the natives, however, divide the year into six seasons, each occupying two months; viz., 1-2, the spring and dry season, towards the end of which the heat becomes oppressive, though reduced in the eastern by occasional showers, and in the middle districts by frequent thunderstorms: the sudden and violent squalls incident to this season render navigation dangerous on the rivers. 3-4. Early in June the rains commence almost simultaneously

over the whole prov.; for the first two months they are incessant and heavy, sometimes from three to five inches falling in a day; during the succeeding two months there are intermissions of fine weather, and the increase of heat is again rapid: should the rains cease early in September, the heat becomes intense and injurious to natives as well as Europeans; but they commonly last till about the middle of October. The annual average of rain is from 70 to 80 inches. The inundations usually begin, conjointly with the wet season, in the third month of which, the Ganges reaches its highest level. Its delta is then entirely overflowed, and the whole region exhibits a similar scene; the ears of rice floating on the surface, and the habitations of the peasantry insulated amid the waste of waters, while they are seen passing from place to place in boats, with their families and moveable property, lest a sudden rise of the river should sweep the latter away in their absence. About the middle of autumn the rivers begin to subside, and the land is completely drained previously to the setting in of winter, when heavy fogs and dews prevail in the lower, and frosts in the upper, districts. Although within the range of the tropical winds, the mountain chains and the rivers materially influence their currents and effects. In the central distr. the winds blow mostly N. and S., following the course of the Ganges.

Geology and Minerals.—Granite, whinstone, and other primary rocks are met with in the bed of the Dummodah and the Jungle Mehals distr.; whinstone and hornblende in the Rajemahal hills (Bhaugulpore); nummulite limestone and some tertiary deposites in Silhet and below the Garrows hills: coal and iron are found both in Silhet and Burdwan. Soil, generally clay, with a considerable proportion of siliceous material, and fertilized by various salts and by decayed animal and vegetable substances. Bengal is not generally rich in minerals or mineral springs. Fresh water is not obtained at Calcutta at a depth of 140 feet; but nitre there and elsewhere effloresces on the surface in large quantities.

Vegetable Products.—The bamboo, date-palm, areca, in the central parts, cocoa in the S., and bassia on poor soils and in the hilly tracts, grow wild in profusion, as well as the plantain, mango, orange, lemon, and many other fruits. The peasants have generally orchards, and entertain a superstitious veneration for the trees planted by their ancestors. Different kinds of grain, indigo, cotton, sugar-cane, and tobacco, are objects of culture; the hills in the N.E. yield red jarool wood and betel, and thick jungles spread themselves over great part of the country.

Animals.—Tigers infest the jungles; and these, with elephants, buffaloes, gyals, wild deer, and boars, jackals, apes of many kinds, &c., are natives of Bengal; pariah dogs and adjutants swarm in the towns, where they perform the function of scavengers; the *Vultur bengalensis*, and other kinds of vultures, kites, crows, &c., and various birds, abound. Crocodiles and gavials in the larger rivers; the cobra-de-capello, and other formidable serpents, turtles, frogs, lizards, &c.; plenty of fish, and swarms of moschetoes, are everywhere met with.

Bengal is distributed into three divisions; viz., those of its three principal cities, Calcutta, Moorshedabad, and Dacca, which have subordinate to them the following districts or collectorates:

1. Burdwan,	2. Purneah,	3. Dacca Jelalpore,
Jungle Mehals,	Dinajepore,	Tipperah,
Jessore,	Rungpore,	Chittagong,
Nuddea,	Rajeshahye,	Backergunge,
Hoogly,	Beerbhoom,	Sylhet,
24 Pergunnahs,	Moorsheadabad.	Mymensing,
Calcutta City and Suburbs.		Dacca.

The chief cities, besides those already mentioned, are Burdwan, Hoogly, Chandernagore, Purneah, Rajemahal, and Dinajepore.

Agriculture, &c.—Mill (*Report on E. I. Affairs*, 1831) supposes that one third part of this province is under tillage, one third jungle, and the remaining third in an intermediate state. The best and most productive lands are in Burdwan, Nuddea, 24 Pergunnahs, and Calcutta districts; the worst and least productive in Silhet, Tipperah, and Cooch-Bahar. Rice, the principal grain in all the S. districts, yields two crops a year, one in August and one in December; and each crop may, when good, be taken at five quarters an acre, or 15 for 1. Farther up the Ganges, wheat and barley predominate; they are sown at the beginning of winter, and reaped in the spring. In general the supply of rice and grain is so abundant as to render Bengal the granary of India; but when a season of drought, and consequently of deficient produce, intervenes, the inhabitants, too poor and too improvident to keep a reserve stock of grain, suffer the greatest privations. Pulse of various kinds is grown, some for cattle, but not in any great quantity, as the latter are generally fed upon chaff and straw. Millet, &c., are sown sometimes for second crops; linseed, mustard, palma Christi, and sesamum largely for their oil, and maize is less grown than in most countries adapted to its culture, and chiefly on poor soils towards the W. Indigo succeeds best on newly-cleared lands, and the great increase of its culture has caused large tracts of waste land to be brought into tillage. It is principally raised in the Dacca Jelalpore, Jessore, Mymensing, and Burdwan districts; and though it be true that a good deal of tyranny has often been exercised by the planters over those under them (see *Evid. of Rammohun Roy, in Report for* 1832, p. 364–366, and *Rep. for* 1831, p. 232, 233), and that disputes respecting boundaries, limits of culture, &c., have often led to disturbance and bloodshed; still the people are uniformly best clothed and fed where indigo is grown. Its culture and preparation is mostly in the hands of European capitalists: the natives, even when they have the intelligence, being generally without the means of carrying it on upon anything like an extensive scale. The sugar-cane grows luxuriantly in many parts of the province, and especially in the Rungpore, Beerbhoom, and Burdwan districts; its growth and manufacture, as well as that of tobacco, being mostly carried on by the natives, are both, consequently, in a very rude state; but there is little doubt that were European capital and skill applied to this department, sugar might be rendered one of the staples of India. The mulberry (*Morus Indicus*) ceases suddenly where it meets the poppy, the culture of which is restricted to the border of Behar. Silk, an important product, is obtained from five different varieties of worms, including the Italian: about 1,000,000 lbs. are annually exported, mostly for Europe, at an average price of about 13*s.* per pound. Both silk and sugar have evidently been known in Bengal from the earliest times: the Sancrit has names for every object and occupation connected with the former, and the original name of this province, *Gour*, appears to be directly derived from *gur*, which signifies sugar in both ancient and modern Indian tongues. The cotton of Bengal is not generally much sought after; a great deal of a coarse kind is produced, which is used for home consumption; a better sort is produced in the E., but that which is made into the finest manufactures is brought from the Doab. The Dacca muslins are made from a fine cotton cultivated on the banks of the Magna, that is, of the river formed by the junction of the Ganges and Brahmaputra. Sun-hemp and coffee have both been tried, but with little success; potatoes are well suited to the soil; but most other esculent vegetables introduced from Europe have become tasteless and insipid. Husbandry is in a very low state. Farms are generally small, varying from 2 to 40 begas or bigahs (the bigah = ⅓ to ⅓ acres), and are burdened, as will be afterward seen, with an oppressively high rent. It is almost unnecessary to add, that the *ryots* or cultivators are immersed in poverty: and are usually without the means, even if they had the inclination, of attempting any improvement. The common plough, drawn by a pair of oxen, costs less than a rupee (2*s.*): it is a very rude instrument; and, as it merely scratches the ground, several ploughs follow in succession, to make the furrows of sufficient depth: the plough is succeeded by a kind of harrow, a heavier implement, and similar to the worse sort in use in the S. of Europe. Manures are applied only to the sugar-cane, tobacco, mulberry, and poppy. Dung (especially that of the cow) is, from superstitious motives, almost exclusively used for fuel. The rotation of crops and the use of fallows are unknown, and the land is generally in an impoverished and exhausted state. Much grain is lost by birds, and the irruptions of wild animals or cattle, in consequence of bad enclosures, as well as from suffering the crop to get over-ripe before it be cut down. Grain is trodden out by oxen; stacking corn, or preserving it under ground, is unusual, and it is often left exposed, like rice (which, however, is not equally injured), to the weather.

Of all departments connected with agriculture, that of irrigation is best understood and practised. In the hilly districts the preservation and regular distribution of water is, in fact, essential; and there it is collected in wells and dams, the construction of which has at all times been deemed an act of singular piety and merit, whence it is distributed as occasion requires. Animal food being but little used, sufficient attention is not paid to the breeds of cattle and sheep; the profits of the former consisting chiefly in their milk and labour, and of the latter in their wool. The Bengal horse is ill shaped, vicious, and is not used in field labour, in which oxen or buffaloes are exclusively employed: the sheep are small, lank, and thin, but, if well fed, yield tolerable mutton. The property and profit of the small farmers and cultivators is mostly in their cattle, which are grazed at a very trifling expense. Cows are usually fed near home, on reserved pastures, or on the waste lands of the village: buffaloes, needing more nutriment, and on thriving rank vegetation, do not find sufficient pas-

turage in populous districts. Herds of this sort of cattle are most numerous in the northern and western provinces, where, in the rainy season, they find pasturage on downs which are never submerged; and in the dry season on forest lands, which are mostly inundated during the rains; but many herds of buffaloes travel in the dry season into the vast forests which border on Bengal.

The wants of the natives being few, and necessaries cheap, wages are extremely low. Ploughmen receive only one rupee per month; reapers, 1 sheaf in 16; or, if they carry also, which is usual, 1 in 8; weeding labourers are also paid in grain instead of money; rice is cleared by a wooden pestle and mortar, $\frac{4}{5}$ths of the original quantity of clean rice being delivered in, the surplus, with the chaff, paying for the labour.

Perpetual Land Settlement.—Landed property in Bengal is held under what has been called the *perpetual* or *Mohurrurer settlement*. When the E. I. Company came into possession of Bengal, Behar, and Orissa, they found the land revenue collected in the most summary method by officers who had charge of districts of unequal extent, with various titles, as zemindars, taloukdars, &c., and who received for their trouble a per centage on their collections. The question whether these superior officers or zemindars were originally the proprietors of the soil, and, as such, made accountable to government for the land-tax laid on it, or whether they had been at first merely collectors of the tax, which office having become hereditary in their families, gave them the appearance of being proprietors, was keenly discussed after the British acquired the sovereignty of Bengal. Specious reasonings were adduced in favour of both opinions; but it is now pretty universally allowed by those best acquainted with the subject, that the zemindars had originally been only tax-collectors; that the government, by the gradual usurpation of nearly all subordinate rights, had become the real proprietor of the soil; but that the ryots or cultivators were a sort of *quasi* proprietors, and could not be, or at all events, were not, dispossessed, provided they paid the tax imposed by government. Lord Cornwallis, however, decided otherwise, and, in 1793, the zemindars, whether cultivators or officers in actual charge of districts, were recognised as the hereditary possessors of the soil; but with a reservation of power on the part of the government to step in between the zemindar and the ryots in behalf of the rights of the latter, should they ever be infringed. The sum which the zemindar had been in the habit of paying was ascertained from the returns of a few prior years; the assessment or tax was *fixed forever* at that amount, and an engagement was made that it should not be levied on him individually. Upon this basis, a system in some respects similar to that of the *metayer system*, prevailed in the S. of Europe (*see* FRANCE, PAPAL STATES, TUSCANY, &c.), was adopted: the cultivator pays to the zemindar a money rent (unless otherwise specified), estimated at *half* the produce of his land; 9-10ths of which rent or land-tax goes to the government, the other 1-10th remaining in the hands of the zemindar for his remuneration; he being, as formerly, head collector of, and responsible for, the tax. We shall not stop to inquire into the principles of this plan; but it is quite clear that, how advantageous soever in other respects, the exorbitant amount of the land-tax could hardly fail to render it a source of poverty and ruin. The practice of letting lands on the metayer system is one of the worst that can be adopted (*M'Culloch's Principles of Political Economy*, p. 463); but in European countries the tenant is never called upon to pay half the produce, unless the landlord supply him not merely with the land, but also with the stock and implements of husbandry. A claim of half the produce on account of the land only is nowhere enforced unless in India; and it is unnecessary to go farther for an explanation of the abject condition of the cultivators. Within a few years after the introduction of the perpetual settlement, the greater number of the original zemindars having fallen into arrears of rent, their estates were sold, and the purchasers having contrived, under one pretence or another, to dispossess the cultivators of the rights reserved to them by Lord Cornwallis, the latter are now become, in effect, mere *tenants at will* under irresponsible landlords.

The fixing of the assessment has, however, had the good effect of causing the cultivation of a considerable extent of waste land, and many of the zemindars are now opulent. But the ryots or cultivators, that is, the vast majority of the people, have gained little or nothing by this extension, and poverty is universal.

"The condition of the cultivators," says Rammohun Roy, "is very miserable; in short, such is the melancholy condition of the agricultural labourers, that it always gives me the greatest pain to allude to it. They have no means of accumulating capital: very often when grain is abundant, and therefore cheap, they are obliged to sell their whole produce to satisfy the demands of their landlords, and to subsist themselves by their own labour. In scarce and dear years they may be able to retain some portion of the crop to form a part of their subsistence, but by no means enough for the whole." (*Appendix*, p. 719–721.) The total amount of the land revenue for 1829–30 was £1,958,800.

Manufactures.—The want of capital, which has so injurious an influence over agriculture, is still more hostile to manufactures: it prevents the division of labour, and renders the acquisition and employment of improved tools and machines all but impossible. Manufactures have, however, been long prosecuted, and have made considerable progress here and in most parts of India. Muslins of the finest texture were formerly made at Dacca, but the manufacture is now lost, owing to the want of demand, there being no wealthy native nobility, and no native court. They were always, in fact, a mere object of curious luxury. It is commonly supposed that the manufacture was destroyed by the importation of cheaper fabrics from England; but this is an entire mistake: it was extinct before a yard of Manchester calico had been imported. The principal existing manufactures are, cotton piece-goods and diaper, at Dacca; packthread and sail cloth, on the *N.* frontier; chintzes in Calcutta; woven silks and taffetas at Moorshedabad; union fabrics in Burdwan; and calicoes and blanketing universally. The production of salt is monopolized by the government; its average price has been about 5 rupees (11*s.* 6*d.*) per maund (80 lbs.), and the E. I. Company have realized from it an average annual rev. of 22,694,900 rupees (£2,269,450). The increase of the revenue of Bengal is principally due, in fact, to the monopolies of salt and opium, and not to the permanent settlement. The exchange of grain for salt, cotton, and sugar; and the exchange of tobacco for betel-nut, &c., constitute the chief branches of the internal trade. The foreign exports to Europe and America are indigo, silk, sugar, saltpetre, rice, lac, cotton, &c., with the produce of China, Persia, and the E. Archipelago; to China and the East, opium, grain, saltpetre, gunpowder, iron, fire-arms, cotton, and silk goods; the same articles, with naval and military stores, and a variety of other European goods, to the Birman empire; grain, sugar, silk, and cotton piece-goods, to the gulfs of Persia and Arabia; and home produce to the Bombay and Madras presidencies; but the trade with the latter has greatly decreased since the conquest of Mysore. The imports from Europe are metals of all sorts, wrought and unwrought, especially copper, cotton goods and yarn, woollens, silk goods, wines, and ales; haberdashery, and a host of smaller articles. Bullion used formerly to be a leading article of export from Europe; but latterly large quantities have been brought from Bengal. The imports from Madras and the Coromandel coast are salt, red wood, long cloths, chintzes, &c. China supplies spices, tea, porcelain, lacquered ware, bullion, &c. (For a detailed account of the foreign trade of Bengal, *see* CALCUTTA.)

The Bengalese, when young, are handsome, of middling height, varying in colour from light olive to dark brown, according to rank, with an oval face, frequently aquiline noses, and universally black eyes and hair. Their constitution is weak and ill fitted to support changes of climate. Though generally healthy, they rarely attain to any great age: they marry young; and it is by no means uncommon to see women of 12 and 14 years of age with children in their arms. They are lively, inquisitive, and polite; but deficient in energy, and, speaking generally, are remarkable for duplicity, extreme bad faith, and proneness to litigation. They are, however, less corrupt at a distance from Calcutta than in the vicinity of that capital. Domestic slavery exists very partially; the slaves are treated kindly, and more as members of the family than otherwise, not being employed in the labours of husbandry.

The Bengalese are mostly very abstemious; rice, seasoned with salt, and sometimes spice, being their chief food. The slaughter of kine and the eating of cows' flesh are considered by the Hindoos as sinful. They do not, however, scruple to eat different kinds of animal food, as fish, ducks, and geese; but all castes hold it an abomination to eat the common fowl. They rarely indulge in spirituous liquors; but they drink the juice of the palm, which rapidly ferments, and the intoxicating extracts of poppy and hemp; chew betel and tobacco, and smoke. In the upper parts of the prov. they live in mud hovels; in the lower distr., in huts of bamboo sticks, mats, and straw, sometimes neatly thatched. None but the opulent classes inhabit houses of brick and lime. (*Evid. of Ramm. Roy, Rep.* 1831, p. 740, 741.) The male dress of the classes above poverty is a piece of cotton cloth around the chest, and another reaching from the loins to the ankle; the labourers have only a piece of cloth round the loins. The Mohammedans wear a turban; but the Hindoos, except men of rank, who dress like Mohammedans, are both bareheaded and barefooted. The female dress is generally composed of one long piece of cloth rolled round the waist, one end

flowing in folds to the ankle, and the other drawn round the head and chest, and then serving for a veil: they paint their foreheads, fingers, and feet, red, and wear a profusion of rings and other ornaments. The upper classes, and especially the zemindars living in Calcutta are gradually adopting European tastes and luxuries; and a knowledge of European arts and sciences has been diffused by means of schools in various parts, and of colleges in Calcutta and other chief cities. The Bengalese are apt and quick scholars, and the English language and literature have become familiar to many, though native learning has long been retrograde, owing, most likely, to the want of encouragement for men of literary distinction since the breaking up of the native governments. Justice is administered as in the contiguous prov. by moonsiffs, sudder ameens, and judges of the zillah courts, the prov. courts of Calcutta, Moorshedabad, and Dacca; the supreme court discharging the functions of the *Sudder Dewanny Adawlut*, or supreme civil court, and *Sudder Nizamut Adawlut*, or supreme criminal court: the proceedings of the latter are governed by the Koran and the laws of Menu. The peculiar crime of this prov. is *dacoity*, a kind of brigandage, by gangs of robbers, attended by every species of cruelty upon their victims. The Mohammedan exactions probably first gave rise to it; at all events, it was very prevalent during their ascendency, but it is now much less frequent. Mohammedans and Hindoos are subject to their respective codes of justice: Europeans, indeed, and every one else, natives and foreigners, within the liberty of Calcutta, are exclusively amenable to the English law; but, beyond those limits, there is no separate provision for foreigners. In no prov. of India has the creed of Mohammed made so much progress, though at such a distance from the former seat of Moslem empire. In the E. distr. Mohammedans are nearly as numerous as the Hindoos; in the central parts they constitute scarcely 1–4th of the pop., and in the W. still less. There are about 40 Jewish families in Calcutta.

In 1203 the greater part of Bengal was conquered by the Mohammedans, and governed by viceroys from Delhi till 1340, when it was erected into a separate kingdom. From 1538 to 1740 Bengal was again an appendage to the throne of Delhi: in 1765 the British acquired, from the emperor Shah Allum, possession of Bengal, Behar, and Orissa, which has ever since been the nucleus and principal seat of our possessions in the East. The present nabob of Bengal, the descendant of the last sovereigns, deprived of all political power, receives a pension from the British gov. of £224,035 a year. (*Hamilton's E. I. Gaz.*, p. 173–216; *Ibid., Descr. of Hindostan*, 1–123; *Reports on E. I. Affairs and Append.*, 1830–1832; *Colebrooke's Remarks on the Husbandry and Internal Commerce of Bengal*, 1806, an excellent work; *Mod. Trav.*, vol. viii., &c.)

BENGAZY (an. *Hesperis* and *Berenice*), a marit. town of N. Africa, district Barca, reg. Tripoli, on the E. coast of the gulf of Sidra (an. *Syrtis Major*); lat. 32° 7′ 30″ N., long. 20° 2′ E. Pop. 2500? It is finely situated on the margin of an extensive and very fertile plain, but is miserably built, filthy in the extreme, and infested to an almost intolerable extent with flies. The harbour, which seems to have formerly had deep water, is filled up, so that it cannot now be entered by vessels drawing more than 7 or 8 ft. water, and that only in moderate weather. At the entrance to the port is a castle, the residence of the bey, but worthless as a means of defence. Notwithstanding its poverty, and the indolence of its Arab inhabitants, Bengazy has some trade, principally carried on by Jews. According to a statement furnished by the French consul, the value of the exports in 1836, consisting principally of wool, oxen, and sheep, salted butter, and corn, amounted to about £12,000. The trade is mostly carried on with the other Barbary states and Malta.

Such is the present abject condition of a city that occupies the site of the ancient Berenice,* which had the gardens of the Hesperides in its vicinity. It is singular, that though its walls were completely repaired under Justinian, hardly a trace of them is now to be met with. In fact, scarce a vestige of the old city is to be found above the surface of the plain; but very extensive remains are found on digging a foot or two below the surface. Captain Beechey has given a very full account of Bengazy and the surrounding country in his voyage to N. Africa; and to it the reader is referred for farther particulars.

BENGORE HEAD, a promontory of Ireland, N. coast, co. Antrim, adjoining the Giant's Causeway; lat. 55° 16′ 10″ N., long. 6° 23′ 20″ W. This remarkable promontory is made up of a number of capes. Of these the most perfect and striking is Pleaskin. "Its summit," to use the words of the Rev. Mr. Hamilton, "is covered with a thin, grassy sod, under which lies the natural rock, having generally a uniform hard surface, somewhat cracked and shivered. At the depth of 10 or 12 ft. from the summit, this rock begins to assume a columnar tendency, and forms a range of massy pillars of basalt, which stand perpendicular to the horizon, presenting, in the sharp face of the promontory, the appearance of a magnificent gallery or colonnade, of upwards of 60 ft. in height. This colonnade is supported on a solid base of coarse, black, irregular rock, nearly 60 ft. thick, abounding in blebs or air holes; but, though comparatively irregular, it may be evidently observed to affect a peculiar figure, tending, in many places, to run into regular forms, resembling the shooting of salt and many other substances, during a hasty crystallization.

"Under this great bed of stone stands a second range of pillars, between 40 and 50 ft. in height, less gross and more sharply defined than those of the upper story; many of them, on a close view, emulating even the neatness of the columns in the Giant's Causeway. This lower range is borne on a layer of red ochre-stone, which serves as a relief to show it to great advantage.

"These two admirable natural galleries, together with the interjacent mass of irregular rock, form a perpendicular height of 170 ft.; from the base of which, the promontory, covered with rock and grass, slopes down to the sea for the space of 200 ft. more, making, in all, a mass of near 400 ft. in height, which, in beauty and variety of colouring, in elegance and novelty of arrangement, and in the extraordinary magnitude of its objects, cannot readily be rivalled by anything of the kind at present known." (*Letters on the Coast of Antrim*, 12mo. ed., p. 91.)

BENGUELA, a country of W. Africa, the limits of which are usually considered to be the Coawra river on the N., the Cumene river on the E., the mountains behind Cape Negro on the S., and the shore from that cape to the mouth of the Coawra on the W. According to this outline, it extends from 9° to 16° N. lat., and from 12° to 17° E. long., having a mean length of 460 m., a breadth of 270 m., and an area of considerably more than 1,000,000 sq. m. (*Labat, Relat. Hist. de l'Ethiop., Or.*, i., 67; *Barbot, Voyage to Congo River*, p. 501; *Bowditch's Map of the Coast and Interior of Congo, Angola, and Benguela*, corrected from *Captain Owen's Observations.**)

Face of the Country.—Benguela appears to be mountainous throughout its whole extent; the land rising sometimes so high that, if it do not actually reach the snow-line, a very great degree of cold is experienced. (*Battel, Purchas' Pilgrims*, ii., 275, *Bowditch's Portuguese Discoveries*, p. 62.) These mountains come down to the sea, are in general very difficult of passage, but, like other African elevations, rise in masses rather than peaks, and abound in terraces, table lands, and valleys, to their very summits. The rivers are numerous and important, and, as the direction of the mountains is from N.E. to S.W., the chief of them run a N.W. course to the Atlantic. This is the case with the large river, without a name, which falls into the ocean at Cape Negro, and with the Cobal, Coporao, Catumbela, and Cuvo. Besides these, which are very large, there are an immense number of small streams running short and almost straight courses from the W. flanks of the mountains, and the various affluents of the principal rivers are almost innumerable; in addition to which, springs of sweet water are so abundant, that in almost every part of the country they may be found by digging to the depth of two feet. The natural consequence of this abundant moisture in tropical countries is observed in Benguela, and nowhere is vegetation more abundant or more varied. Dense forests of cedars, palms, boobesh, date trees, tamarinds, with every other tropical tree, and some that belong to more temperate climates, clothe the sides and tops of the mountains, intermixed with vines, bananas, ananas, and all the finest species of tropical fruit. Grain is not very abundant; but this arises from the want of skill or industry in the natives, since there is no species of corn that might not be successfully cultivated upon some part of the high or low lands. Lions, tigers, elephants, rhinoceroses, hippopotami, and other large animals, are extremely numerous; in addition to which, the zebra is very commonly met with, and, in short, every wild animal for which Africa is noted is found within the limits of Benguela. The elk (which is also a native here) is particularly prized, from its being supposed that one of its hoofs has power to cure the epilepsy; deer and antelopes, of course, are abundant. Cattle, sheep, and goats, are very numerous, but it does not seem that horses are at all plentiful. Of birds, Battel reports that peacocks are found wild in the interior as numerously as any other kind; that they are accounted sacred and kept

* This name was given to it under the Ptolemies, being that of the queen of Ptolemy Philadelphus.

* Bowditch's map was constructed from the Portuguese survey of the coast and interior, in 1790, and is by far the best existing of this part of Africa. Captain Owen's survey of the coast was performed in 1825. According to the first, Cape Negro, the most S. and W. point of Benguela, lies in 16° S. lat., 13° 20′ E. long.; according to the last, in 15° 49′ 7″ S., 11° 53′ 2″ E.

tame about the graves of the great chiefs. The ostrich is also found here, with all the reptiles, dangerous and harmless, for which this part of Africa is so much reputed, crocodiles being especially numerous and powerful. The mountains are known to yield copper, sulphur, petroleum, and crystals; and are supposed to possess gold and silver. Some of the rivers unquestionably bring down the former, but probably in small quantities, which the natives work into the handles of their hatchets.

The rainy season is accounted, in Benguela, to last through May and June; but it is extremely irregular, and sometimes no rain falls for the space of three years. (*Bowditch*, vol. ii.) The coast is, by all accounts, excessively unhealthy; but the interior is salubrious, and apparently well fitted for cultivation of all kinds; every degree of temperature seems to be experienced at different elevations, and it probably is not exposed to the uncertainty of rain, which exists on the coast. Battel, who resided in different parts of the interior for a considerable time, never, among all his miseries, complains of the climate.

It is not to be supposed that Benguela, through all its great extent, comprises but one kingdom; the much larger portion is inhabited by petty tribes of independent and very savage barbarians, whose habits and manners do not differ from those of other negroes, with the exception of one—the Gagas, or Gigas, a wandering herd of robbers, which appear to approximate nearer to perfect barbarism than any other, even of the African races. They are of no tribe nor nation, destroy all their own children, and keep up their strength and numbers by stealing those of 12 or 13 years of age from the countries which they overrun. They are bold and skilful soldiers, but ruthless cannibals, without the slightest idea of art or industry, so that wherever they encamp, they destroy all around, and then depart, to inflict the same desolation on some other district. They appear frequently to cause a famine, where such a calamity would otherwise seem to be impossible, verifying the animated description of the locust: "Before them is a garden, behind them a barren desert." Battel, who was their prisoner for more than two years, has left a full and curious account of these savages, which carries the impress of truth on every line. Benguela was formerly subject to Angola, at least nominally, and was accounted one of the 17 provinces of that kingdom. The Portuguese have long had settlements on the coast and the interior, but their power does not seem to extend far beyond their forts. *See* ANGOLA. (*Battel's Purchas*, ii., 974–977; *Barbot*, p. 501; *Merolla*, p. 60–68; *Labat*, i., 66–70; *Bowditch*, p. 26–64; *Capt. Owen's Nar. of Voy.*, ii., 271–275.

BENGUELA VELHA (*Old Benguela*), the native capital of the country above described, lat. 10° 45′ S., long. 15° 5′ E. It is well situated on the coast, between the rivers Cuve and Lonja, in a very fruitful champaign country, and about 3 m. to the S. is a convenient harbour, called by the sailors Hen's bay, from the number of domestic fowl which are collected about it. There are no accounts preserved of the pop. or other statistics of Old Benguela; its trade, if it ever had any, having long since been transferred to

BENGUELA (ST. FILIPPE DE), the Portuguese capital of the same country, lat. 12° 12′ S., long. 15° E., about 100 m. S. of the old town. Pop. about 3000, the greater portion being free blacks or slaves; it is a wretched place, built of half-baked bricks, and so slightly, that no tenements are ever repaired, but as soon as they begin to decay, others are built by their sides. It stands on an open bay, and is watered by a tolerable stream, formed by the junction of two small rivers. Its site is a marsh, full of stagnant pools, and so extremely unhealthy, that the Portuguese affirm none of their countrywomen could endure it three months. It was lately nearly destroyed by an invasion of *elephants*, a number of them having entered it in search of water during the dry season; and danger always threatens the inhabitants from the alligators and hippopotami in the river. To compensate these evils, it was, if it be not still, a good *slaving* station, the exports formerly averaging 20,000 a year! This traffic is said to have diminished of late years; but such does not really appear to be the case. (See *Buxton on the Slave Trade*, p. 30.)

BENICARLO, a marit. town of Spain, in Valencia, on the Mediterranean, 25 m. S. Tortosa. Pop. 5500. It is defended by walls, a ditch, and an old castle. Streets narrow and dirty, and the houses mean. The surrounding territory is very fruitful, particularly in wine. Large quantities of which, of a dark red colour, considerable strength and flavour, are shipped from this town, whence it has its name, principally for Cette. It is thence conveyed, by the canal of Languedoc, to Bordeaux, where it is employed to give body and colour to the clarets, especially to those exported to the English markets. (*Miñano; Henderson on Wines*, p. 194, &c.)

BENIN, a country of Africa, near the E. extremity of the gulf of Guinea, between 4° and 9° N. lat., and 4° and 8½° E. long. It has S. the gulf, W. Dahomey, N.W. Yarriba, and N.E. and E. the lower Niger, which separates it from the states of Nyffe, Jacoba, Funda, and Calabar. It has something of a triangular form, is about 340 m. in length by 300 m. in extreme width, and contains probably not less than 50,000 sq. m. (*Adams's Remarks on Coast from E. Palmas to N. Congo*, p. 109–128; *Clapperton's Second Exped.*, p. 1–37; *Lander's Travels*, p. 632–694.) On the coast, the country is level, but it rises gradually, till, in the central parts, the continuation of the Korg mountains attains an elevation of 2500 feet. It is well-watered, for the delta of the Niger comprises more than 140 m., that is, more than 7-10ths of the whole sea board. The W. branch of this delta is the stream which has always been called the river of Benin; the farthest E. is the main limb, formerly called the Nun; but demonstrated by Lander to be the Niger. (*See* NIGER.) Besides these, there are several other streams upon the coast, nor can there be any doubt but that the mountains give forth many affluents to the great river in the interior. (*Smith's Voyage to Guinea*, p. 227; *Lander*, p. 467, *et seq.*; *Adams*, p. 109, 119, &c.) Under the influence of abundant irrigation and a tropical sun, the productions of the earth are very numerous. They do not, however, differ from those of other parts of the same coast, except that wood is rather more abundant. (*Adams*, p. 111.) The hippopotamus is more common than in other countries of Guinea (*Lander*, p. 639), in proportion to the more magnificent scale of the hydrography; but, in other respects, the animals of Benin are also described in those of Guinea generally; and the same remark will apply to the habits and customs of the natives: the same arts, with the exception of gold working, for gold is not found in Benin (*Adams*, p. 170); the same government; the same religion (Fetichism); the same festivals, marked by the same disgusting cruelties, are observed here as in Ashantee (*see* ASHANTEE), with one additional aggravation, namely, the annual sacrifice of human victims to the power of the sea. (*Adams*, p. 115.) Benin is well peopled; the capital contains 15,000 inhab., and the town of Warre 5000. (*Adams*, iii., 123.) Clapperton also found the N. frontier, on the Akinga river, very populous, as did Lander that of the E., upon the banks of the Niger. Previously to the nominal abolition of the slave-trade, this country was the great theatre of that traffic; and it is now (1839) carried on to a greater extent than ever. An annual fair is held at Bonny, on the coast, at which not fewer than 20,000 slaves are sold, of whom it is alleged 16,000 are brought from the single district of Heebe or Eboe, a port of Benin, on the right bank of the Niger. Some few of these are sold to native masters, as the kings of New and Old Calabar, but the vast majority are disposed of to foreign traders, and are shipped principally for Brazil and Cuba. (*Adams*, p. 129; *Buxton, passim*, &c.) A more harmless trade, and to a considerable extent, is carried on in salt, palm oil, and blue coral.

BENIN, a large town of Africa, cap. of the above kingdom; lat. 16° 15′ N., long. 5° 53′ E. Pop. 15,000? It stands on the right bank of a large stream, hitherto called the river of Benin, but now known to be one of the numerous mouths of the Niger; it is built without any order, the houses being detached from each other, and, consequently, occupying a great deal of ground. They are large, constructed of clay, and neatly thatched with reeds, straw, or leaves. There is an almost continual market for cattle, sheep, goats, pigs, poultry, yams, cotton, ivory, and European wares; it was also formerly the great emporium for slaves; but the river not being navigable for large ships higher than 40 m. below Benin, this traffic is now carried on nearer the coast, and chiefly at Brass, the outlet of the main branch of the Niger. For a negro town, Benin is extremely clean, and it has a system of municipal government resembling in many respects that of more civilized communities: every district is under the control of a *street king*, whose office is not much unlike that of our aldermen, and who are sometimes powerful enough to hold the monarch at defiance. Gatto, or Agatton, is the port of Benin; it lies about 40 m. down the river, or, rather, on a large creek which the former gives out from its bank, and is accessible to craft of the burden of sixty tons. It is said to be larger and more populous than Benin itself. The surrounding country is well wooded, fertile; but low, flat, swampy, and very unhealthy. It was here that Belzoni died of dysentery in 1823, on his road to Houssa and Timbuctoo. (*Smith's Voyage to Guinea*, p. 234, &c.; *Adams's Remarks on the Country from Cape Palmas*, p. 111, &c.; *Nouvelles Annales des Voyages*, xxii., 142; *Gent.'s Mag.*, p. 94, 462.)

BENIN (BIGHT OF). The coast of Benin is so called. It is a considerable indentation of the gulf of Guinea, extending from the Akinga to the Niger. It is an iron-bound coast, offering no entrance to vessels, except at the mouths of rivers, and scarcely there, if the vessels be of much burden. (*Adams*, p. 227.)

BENIN (RIVER OF), called also the FORMOSA, falls into the gulf of Guinea, about 180 m. below Benin, in lat. 5° 40′ N., long. 5° E. It is a deltoid branch of the Niger, commencing at Kirree, about 100 m. above Benin, and its whole course, inclusive of windings, may be about 210 m. (*See* NIGER.)

BENISUEFF, a town of Egypt, cap. prov. same name, on the W. bank of the Nile, 64 m. S. Cairo. Pop. 5000. This is a pretty well built, important town, being the entrepôt for all the produce of the fertile valley of Fayoum, which is brought here for shipment to Cairo. It had, in 1835, a large cotton-mill at work, which gave employment to several hundreds of poor people; with large barracks for cavalry, &c. It is well supplied with provisions of all sorts; and quarries of alabaster have recently been discovered in its vicinity. (*Scott's Egypt and Candia*, p. 265.)

BENNECKENSTEIN, a town of Prussia, prov. Saxony, reg. Erfurth, on the Rapbode, at the foot of the Harz, in an *enclave* situated in the duchy of Brunswick, 13 m. N.N.W. Nordhausen. Pop. 2700. It has an iron foundry, a nail-work, a brewery, and a manufactory of baskets.

BENNETSVILLE, p. v., capital of Marlboro dist., S.C., 107 m. N.E. Columbia, 409 W. Situated on the S.E. side of Crooked creek, a branch of Great Pedee river. It contains a court-house, jail, two churches, one Methodist and one Baptist, and about 350 inhabitants.

BEN NEVIS, a mountain of Scotland, in Dumbartonshire, the highest of the British mountains. It lies immediately to the E. of fort William, being separated from the Grampians by the desolate tract called the Moor of Rannoch. It rises 4370 ft. above the level of the sea; being 43 ft. higher than Ben Macdhu, the next highest mountain in Scotland, and 799 ft. higher than Snowdon, the most elevated of the Welsh mountains. Its circumference at the base is supposed to exceed 24 m. Its outline all round is well defined. Its N. front consists of two grand ascents or terraces: the level top of the lowest of which, at an elevation of about 1700 ft., contains a wild *tarn* or mountain lake. "The outer acclivities of this, the lower part of the mountain, are very steep, though covered with a short grassy sward, intermixed with heath; but at the lake, this general vegetable clothing ceases. The surface of the upper and higher part of the mountain, where not absolutely precipitous, is strewed with angular fragments of stone, of various sizes, wedged together, and forming a singularly rugged covering, among which we look in vain for any symptom of vegetable life. On the N.E. side, a broad, terrific, and tremendous precipice, commencing at the summit, reaches down to a depth of not less than 1500 ft. The furrows and chasms in the black beetling rocks of this precipice are constantly filled with snow, and the brow of the mountain is also encircled with an icy diadem. From the summit, the view is remarkably grand and sublime: it commands most of the W. islands, from the pass of Jura to Cuchullin, in Skye; and on the E., the view extends to Schiehallion Cairngorm and Ben Macdhu." (*Anderson's Highlands*, p. 266, &c.)

Ben being a term used in the Gaelic to signify a high summit, is applied to several of the Scotch mountains, as Ben Lomond, on the E. side of Loch Lomond, 3195 ft. above the level of the sea, and the best known of all the Highland mountains; Ben Macdhu, on the confines of Banff, Inverness, and Aberdeen, 4327 ft. above the sea, being, as already stated, only 43 feet lower than Ben Nevis; Ben Sawers, Ben Gloe, Ben Wyvis, &c. (*See* SCOTLAND.)

BENNINGTON, county, Vt., situated in the S.W. corner of the state, and contains 610 sq. m. The eastern part extends into the Green mountain range. The western part, though uneven, is favourable to tillage. A range of limestone extends through the co. from N. to S., and furnishes some good marble quarries. Iron ore is also found. It contained, in 1840, 18,897 neat cattle, 104,721 sheep, 9906 swine; and produced 12,959 bushels of wheat, 25,671 of rye, 70,246 of Indian corn, 16,071 of buckwheat, 137,837 of oats, 564,279 of potatoes, 180,986 pounds of sugar. It had thirty-eight stores, five furnaces, eleven fulling-mills, eight woollen factories, three cotton factories with 1608 spindles, twelve tanneries, one pottery, one paper-mill, seventeen grist-mills, seventy-three saw-mills, one oil-mill, one printing-office, one weekly newspaper; four academies, 275 students, 102 schools, 3894 scholars. Pop. 16,872. Capitals, Bennington and Manchester.

BENNINGTON, p. v., capital, with Manchester, of Bennington co., Vt., 117 S. by W. Montpelier, 37 m. N.E. Albany, 68 m. S.W. Windsor, 132 m. W.N.W. Boston, 407 W. It was chartered in 1749 by Benning Wentworth, the royal governor of N.H., from whom it was named, but it was first settled in 1761. Walloomscoik river, a branch of Hoosic river, affords water-power. Three fourths of the soil is very fertile. The village at the centre is situated on elevated ground, and contains a court-house, jail, a Congregational church, two academies, a bank, five stores, a printing-office, issuing a weekly newspaper, seventy-five dwellings, and about 400 inhabitants. A mile and a half E. of this is the east village, which has considerable manufactures. It contains four churches, one Baptist, one Methodist, one Episcopal, and one Congregational; an academy, eight stores, one woollen-factory, two cupola furnaces, three tanneries, one pottery and stone-ware factory, 149 dwellings, and 700 inhabitants. There are several other villages in the town. The Americans, under Gen. Stark, defeated a superior British force, August 16th, 1777, on the W. border of the town. It contains fourteen stores, three fulling-mills, two cotton factories with 1608 spindles, three furnaces, four tanneries, one pottery, one paper-mill, three grist-mills, two saw-mills, one oil-mill, one printing-office, one weekly newspaper, two academies, 150 students, twelve schools, 419 scholars. Pop. 3429.

BENNINGTON, p. t., Wyoming co., N.Y., 246 m. W. Albany, 370 W. Drained by Cayuga and Tonawanda creeks. It contains five stores, one woollen-factory, two grist-mills, nine saw-mills, thirty-four schools, 915 scholars. Pop. 2283.

BENNINGTON, t., Shiawassee co., Mich. Drained by Looking-glass river. It contains a saw-mill, three schools, sixty-five scholars. Pop. 403.

BENNINGTON, p. t., Delaware co., O., 40 m. N. Columbus, 409 W. Pop. 1051.

BENOIT (ST.), a town of the Isle de Bourbon, on the E. coast of the island, at the mouth of the Marsouins. The products of the district are shipped in small vessels at the creek, or bay, for St. Denis, the cap. of the island.

BENSALIM, t., Bucks co., Pa. Bounded S.E. by Delaware river. Neshamony creek runs on its E., and Poquessing creek on its W. border, both of which furnish good water-power. It contains five stores, three grist-mills, one saw-mill, four schools, 154 scholars. Pop. 1731.

BENSHEIM, a town of the grand-duchy of Hesse Darmstadt, 15 m. S. Darmstadt. Pop. 4000. It has a church, a college, and a hospital.

BENSON, p. t., Rutland co., Vt., 85 m. S.W. Montpelier, 62 m. S. Burlington, 457 W. Bounded W. by lake Champlain, which is here about a mile wide. Chartered in 1780, first settled in 1783. It contains three churches, one Congregational, one Methodist, and one Baptist; three stores, one grist-mill, six saw-mills, one fulling-mill, eleven schools, 510 scholars. Pop. 1403.

BENTON, county, Ala., situated in the N.E. part of the state, and contains 1060 sq. m. Watered by Tallapoosa river, and a branch of Coosa river. It contained, in 1840, 16,898 neat cattle, 4886 sheep, 48,340 swine; and produced 77,976 bushels of wheat, 667,832 of Indian corn, 22,191 of oats, 23,677 of potatoes, 30,538 pounds of tobacco, 1,756,522 of cotton; gold produced to the amount of $11,080. It had twenty-nine stores, one cotton factory with 158 spindles, fourteen flouring-mills, twenty-nine grist-mills, twenty-four saw-mills, eight tanneries, eighteen distilleries, one printing-office, one weekly newspaper, four academies, 180 students, thirty-eight schools, 1498 scholars. Pop.: whites, 11,380; slaves, 2894; free coloured, 6; total, 14,280. Capital, Jacksonville.

BENTON, county, Tenn., situated in the W. part of the state, and contains 375 sq. m. Bounded E. by Tennessee river, and W. by Big Sandy river. It contained, in 1840, 5263 neat cattle, 3645 sheep, 23,330 swine; and produced 13,722 bushels of wheat, 41,533 of Indian corn, 22,421 of oats, 5229 of potatoes, 29,563 pounds of tobacco, 22,499 of cotton. It had four stores, three grist-mills, two saw-mills, three distilleries, four schools, 214 scholars. Pop.: whites, 4517; slaves, 247; free coloured, 8; total, 4772. Capital, Camden.

BENTON, county, Mo., situated in the S.W. of the centre of the state, and contains 1050 sq. m. Watered by Osage river. The surface is uneven: soil fertile. It contained, in 1840, 4177 neat cattle, 2617 sheep, 12,541 swine; and produced 3283 bushels of wheat, 110,335 of Indian corn, 8195 of oats, 5523 of potatoes, 4731 pounds of tobacco, 2821 of cotton. It had eight stores, one tannery, two distilleries, one school, 30 scholars. Pop.: whites, 3933; slaves, 261; free coloured, 11; total 4205. Capital, Warsaw.

BENTON, county, Ark., situated in the N.W. corner of the state, and contains 1050 sq. m. Drained by White river, and branches of Neosho river. It contained, in 1840, 3044 neat cattle, 1934 sheep, 8221 swine; and produced 5128 bushels of wheat, 130,595 of Indian corn, 5965 of oats, 5744 of potatoes, 1,114,622 of cotton. It had six stores, two tanneries, four distilleries, five grist-mills, three saw-mills, six schools, 121 scholars. Pop.; whites, 2050; slaves, 168; free coloured, 10; total, 2228. Capital, Bentonville.

BENTON, p. t., Yates co., N.Y., 184 m. W. Albany, 337 W. The outlet of Crooked lake and Cashong creek afford water-power. The village at the centre contains two churches, two stores, and about thirty-five dwellings. The town contains seven stores, two fulling-mills, one woollen-facto-

ty, two flouring-mills, one grist-mill, five saw-mills, one distillery, eighteen schools, 1085 scholars. Pop. 3911.

Benton, t., Hocking co., O. Pop. 448.

Benton, p. v., capital of Saline co., Ark., 24 m. S.W. Little Rock, 1089 W.

Benton, p. v., capital of Scott co., Mo., 229 m. S.E. Jefferson city, 870 W. It has a court-house, jail, and several stores.

Benton, p. v., capital of Yazoo co., Miss., 50 m. N.W. Jackson, 1019 W. Situated midway between Big Black and Yazoo rivers, and contains a court-house, jail, one church, free to all denominations except Roman Catholics, one academy, a masonic hall, and four stores. The country around produces an abundance of cotton.

BENTONVILLE, p. v., capital of Polk co., Tenn., 174 m. S.E. Nashville, 574 W. It has a court-house, jail, and an academy, all of brick, two churches, one Baptist and one Cumberland Presbyterian, three stores, and about 200 inhabitants.

Bentonville, v., capital of Benton co., Ark. It contains a court, jail, an academy, and 134 inhabitants.

BERAR (Dom. of Rajah of), a territ. of India, in the Deccan, under British protection, comprising Nagpoor, part of Berar prov., and a considerable portion of Gundwanah; between lat. 17° 48′ and 22° 43′ N., long. 78° 20′ to 80° 48′ E.: having N. the ceded distr. on the Nerbudda; E. parts of the Bengal and Madras presid., and S. and W. the nizam's dom: greatest length, N. to S., 330 m.; breadth, 300 m.; area, 56,723 sq. m. (*Capt. Sutherland.*) Pop., early in the present century, about 2,500,000, exclusive of some of the wilder districts. In the N. its boundary is a high tableland; its S.W. limit is, for the most part, identical with the course of the Wurda, the other chief rivers are, the Pain-Gunga, its tributary the Khahan, and the Mahanuddy. The land is fertile in dry grains; peas, vetches, flax, sugar, betel, and tobacco are also raised. The Nagpoor wheat is reckoned the most nutritious in India; it comes to perfection in three months, and with maize, which is sown after it as a second crop, forms the chief subsistence of the inhab. A large proportion of the land has been brought into cultivation since the British have had the superintendence of this country; the capital of the cultivators generally has increased, and irrigation and the state of the wells are better attended to. Additional bullocks are now used in agriculture, but no improvement has taken place in the implements of husbandry: the plough is a crooked instrument, of the coarsest wood, with a little bit of iron at the end of it, costing but three or four rupees, and sufficient only for scratching the ground. Sugar, betel, and tobacco are largely manured, but not with cow dung, which is used by the Hindoos for the floors of houses and for fuel, though plenty of wood suitable for the latter purpose is scattered over the country. Indigo grows wild, but is not cultivated to any extent, and opium very little. A great portion of the country belongs to zemindars, who pay nothing but a quit-rent to government, and are, in other respects, independent of any superior authority: but these are less numerous in the central districts, which, a few years since, were placed under the immediate superintendence of the rajah. In the more civilized parts the revenue is collected under the village settlement; the chief farmer of the village being the *potail*, responsible for the payment of the ryots under him; receiving their rents; advancing them money when necessary, and receiving for his own remuneration 1-6th part of the whole sum collected. Cowls, or agreements between the government and the potail, or between the potail and the ryot, that only so much shall be collected from the land in a certain term (generally five or seven years) are very common, and were introduced by the Mahrattas when they conquered this territory, in order to promote cultivation, which at that time had been greatly neglected: the system is said to be advantageous, and if the assessant were moderate, and the term of agreement extended, and the conditions abided by, it perhaps would be as good a system as the principle on which it is bottomed will admit of.

The office of potail is usually considered hereditary, but is dependent on the pleasure of the government. The revenue is about 46 or 47 lacs, and the civil expenditure 7 or 8 lacs rupees a year. The ascending ranks of judicial authorities are the potail, the native pergunnah collector, the soubahdar of the district, and the rajah himself, who holds all the soubahdar jurisdiction round the capital. The *punchayet*, a body of five judges, two of whom are chosen by each of the contending parties, and the fifth by the potail, decides most civil suits, and its decision is final. This system is said to work well, except near Nagpoor, where corruption is common; it is always, however, resorted to; for when the rajah decides, he exacts ¼ of the sum in dispute as a fine from the loser, and another ¼ as a compensation for the decision, from the winner. There are no statute laws: succession to property is commonly determined by the Hindoo code, and there are a few men of learning in the cap. versed in this; but where one of these is not called in, most matters are determined by the *punchayet*. Education is not much countenanced either by the government or the people at large; it is mostly confined to the children of the Brahmins and mercantile classes, and among these extends little beyond reading, writing, and accounts. All other classes are very illiterate, and it is rare that a cultivator can write his own name. There are no schools for Mohammedans only, they forming but a very small part of the population. Domestic slavery is not very prevalent, and is more common in the cap. than elsewhere: it chiefly occurs from persons pressed by poverty disposing of their children, who are treated more as members of the families of their owners than otherwise: none are exclusively employed as agricultural slaves, nor are any attached to the soil. The public roads are few; there are no canals; communication is very trifling generally, and in bad weather there is none at all. The trade of Berar with other provs. is very insignificant, and from all these causes the knowledge of the state of the country is, of necessity, very imperfect. Commerce is said to be promoted in a most singular manner, that is, by a belief among the lower tribes, that suicide is acceptable to their divinities, and they accordingly immolate themselves at fairs, &c., to which merchants and other classes resort to witness the spectacle! In 1830, 816 European, and 4000 native troops, formed the military establishment.

After the fall of the Mogul empire, the Mahrattas overran this country, and under the second Mahratta rajah, Jenjee, who lived about the middle of last century, it is said to have been in a more flourishing condition than at any other period. The rajah of Nagpoor, however, at the beginning of the present century, having become hostile to the British, was deprived of the prov. of Cuttack, which had previously belonged to him, and some territories adjoining Hyderabad, which were given to the nizam. In 1817 the rajah was again in arms against the English, who then took upon themselves the administration of his territory. This continued for 8½ years, during which time much improvement, to the general satisfaction of the people, was effected. The annual revenue had risen from 37 to 47 lacs of rupees, when the central parts were delivered up to the young rajah Bajee Rao Boosiah, on his majority in 1826, at which time he ceded to us a territory on both banks of the Nerbuddah, and those parts of Gundwanah now belonging to the Bengal presid., together with an annual tribute of eight lacs; the whole of our acquisition by this treaty being estimated at 30 lacs rup. a year. In 1829 the rajah was put in possession of the rest of his prov., with an agreement that, instead of a force of 2000 horse and 3000 foot, he should, for the future, maintain a standing army of 1000 horse only. (*Hamilton's E. I. Gaz.*, i., 217-221; *Reports on the Affairs of the E. I. Comp.*, *Evid. of Mr. Jenkins*, p. 140-150; *Append.*, vi., 163.)

BERAT, a town of Turkey, in Europe, in the N. part of Albania, on the Tuberathi (an. *Apsus*), 28 m. N.E. Aulona; lat. 40° 48′ N., long. 19° 52′ E. Pop. 8000?* It consists of an acropolis or citadel, on the summit of a pretty high hill, and of a lower town. The former, which was repaired and strengthened by Ali Pacha, is very extensive, and contains within it the palace of the vizier, several Greek churches, and about 250 houses. Being commanded by the neighbouring heights, and without either springs or cisterns (*Pouqueville*), it could oppose no effectual resistance to an invading army properly supplied with artillery, or strong enough effectually to blockade it. The lower town, at the foot of the acropolis, is intersected by the river, over which there is a good bridge of eight arches. It has numerous mosques, and a large and handsome bazar. Merchants import British and other foreign goods through the port of Aulona. Scandebeg failed in an attempt to take this town, which has always been regarded as an important post, and the key, in fact, of this part of the country. (*Pouqueville, Voyage de la Grèce*, i., 301, ed. 1820; *Hughes' Albania*, ii., 385.)

BERAUN, a walled town of Bohemia, cap. circ. same name, on the Beraun, 14 m. W.S.W. Prague. Pop. 2900. It has fabrics of earthenware and fire-arms, and in its vicinity are quarries of marble and coal mines. In the vicinity of this town, the Austrians, in 1746, gained a signal victory over the Prussians.

BERBERA, a sea-port town of Africa, in the country of the Somaulis, on the sea of Bab-el-Mandeb, at the bottom of a narrow and deep bay; lat. 10° 24′ N., long. 45° 8′ E. It is rather an encampment than a town, the inhab. dwelling mostly in tents or huts constructed of a few sticks, and covered with skins. It has few permanent residents; but from September to April, during which period a great annual fair is held, there is a large concourse of visitors,

* Pouqueville says that the lower town has 6000 inhab., and the upper 200 houses.

sometimes to the amount of 7000 or 10,000. The Somaulis bring with them, from the interior, ghee or butter, coffee, sheep, various descriptions of gums, myrrh, ostrich feathers, gold dust, hides, slaves of both sexes, &c., which they exchange for iron, lead, cotton, cloth, rice, dhourrah, &c., brought from the Arabian ports of Mocha, Hodeida, Makullah, &c. The trade is almost wholly in the hands of Banian merchants, who are said to realize large profits. (*Wellsted's Arabia*, ii., 360, &c.)

BERBICE. *See* GUIANA.

BERDITCHEF, a town of Russia, in Europe, gov. Volhynia, on its S.E. confines, 25 m. S.E. Jitomir. Pop. 9000? It is dirty and ill built, and is principally inhabited by Jews. It is, however, the centre of a considerable trade. Its fair, called *Onoufrief friefskaia*, is much frequented. In 1832, there were brought to it Russian merchandise of the value of 3,108,755 roubles; foreign and colonial do., 1,518,195 r.; Asiatic do., 347,900 r.; with horses of the value of 710,000 r., and cattle, 150,000 r. (*Schnitzler, La Russie, &c.*, p. 398.)

BEREZINA, a river of Russia in Europe: it rises in the district of Disna, gov. Minsk, which it traverses from N. to S.: after receiving various affluents, and being joined by a canal with Dun, it falls into the Dnieper a little below Ritchitza. This river has become celebrated from the difficulties and disasters attending the passage over it of the army under Napoleon, when retreating from Moscow in 1812. The above river must not be confounded with another and smaller river of the same name, which also rises in the gov. Minsk, and which, having divided, during a part of its course, the govts. of Grodno and Wilna, falls into the Niemen, at Nikolaef.

BERGAMO, a town of Austrian Italy, cap. prov. and distr. same name, on some low hills between the Serio and the Brembo, 29 m. N.E. Milan; lat. 45° 41′ 51″ N., long. 9° 40′ 26″ E. Pop. 30,500. It is surrounded by walls, and has an old castle; but these are now useless as means of defence. It is well built; has a massive cathedral, fourteen churches, twelve monasteries, ten nunneries, a large hospital, a *monte-de-piété*, an orphan asylum, and other charitable institutions, a lyceum, and a *seminario*; the Carrarese school, founded by Count Carrara, where gratuitous instruction is given in music, painting, and architecture; a public library, with 60,000 vols., two theatres, &c. There are here extensive establishments for the spinning and weaving of silk, great quantities of which are produced in the vicinity, with woollen and cotton fabrics, iron foundries, &c. A great fair is annually held on the 22d of August, and 14 following days, in a large quadrangular building, called the *fiera*, containing 540 booths or shops. All the products of Lombardy are exposed to sale at this fair; but silk is the staple article, and next to it are iron, wine, &c. It has also a considerable trade in grindstones, quarried in the neighbourhood. The value of the goods disposed of at the fair is said sometimes to amount to £1,200,000. It has also other, but less considerable, fairs, and cattle-markets. It is the seat of a bishopric, of the provincial assembly, and of a judicial tribunal.

Bergamo is very ancient, having existed under the Romans. In 1428, the inhabitants placed themselves under the protection of the republic of Venice, of which it continued to form an integral part till the subversion of the latter in 1796, with the exception of about seven years after the battle of Agnadello, in 1509, when it was taken by Louis XII. During the French ascendency, it was the cap. of the dep. of Serio.

Bergamo has given birth to some very eminent men. Among others, to Bernardo Tasso, the father of Torquato (a colossal statue has been erected in the *Piazza Grande*, in honour of the latter); Tiraboschi, the author of the learned, elaborate, and invaluable work on the history of Italian literature (*Storia della Letteratura Italiana*); the Abbé Serassi, author of the Life of Tasso, &c. The Bergamesque dialect is peculiar, and one of the most corrupted forms of the language spoken in Italy. (*Osterreishen Encyc.; Rampoldi, Corografia Italiana, &c.*)

BERGEDORF, a town of the distr. or ter. of Hamburg, at the confluence of the Bille with a canal that joins the Elbe, 9 m. S.E. Hamburg. Pop. 2000.

BERGEN, a town and sea-port of Norway, cap. of the diocess of S. Bergenshuus, at the bottom of a deep bay, 365 m. W.N.W. Christiania; lat. 60° 24′ N., long. 5° 20′ E. Pop., in 1835, 22,339. It is built on a promontory, and surrounded on every side by water, except N.E., where it is enclosed by mountains considerably above 2000 feet in height; and is protected, besides, by lofty walls, and several forts, mounting in all about 100 guns. The harbour is safe and commodious, and the water deep; but the bay all round is so beset with rocks as to render its navigation dangerous without a pilot. Bergen is generally well built, though some of its streets be narrow and crooked; viewed from the sea, it appears remarkably picturesque, being built amphitheatrewise round the harbour. It contains a cathedral and four other churches, three hospitals, a prison, a house of correction, six establishments for the poor, a national museum, five public libraries, a naval academy, a superior college, established by Bishop Pontoppidan in 1750, and various schools. It is the seat of a tribunal of secondary jurisdiction, the residence of the high sheriff and bishop of the diocess: one of the three public treasuries of the kingdom, and a division of the National Bank, are established at Bergen. It has a governor, and a garrison of 300 men; and a squadron of the navy is stationed here. There are manufactories of tobacco and porcelain, many distilleries, and some rope-yards.

The fishery is the principal business carried on here; but both the internal and foreign trade are considerable. The imports from the N. provinces consist of cod-fish, roes, fish-oil, tallow, skins, feathers, &c., which are brought by fleets of 50 to 80 small vessels, twice a year during the summer; and which take back in return the other necessaries and some of the luxuries of life. The articles brought from the other parts of Norway are less important: they consist chiefly of iron manufactures, glass, tiles, mill-stones, &c., and fir timber; but the planks and deals of Bergen are not equal in quality to those of Christiania. The foreign trade is chiefly with the Baltic, Denmark, Sweden, Holland, Hamburg, England, France, and the Mediterranean. The imports from Hamburg far exceed the exports thence from Bergen, and consist of fabrics and colonial goods of every description. England supplies her manufactures and colonial products; but the trade with this country has much decreased. France sends thither salt, wine, and brandy; and receives most of the salted fish roes. The dried cod, or stockfish, a staple commodity of the place, is sent to most Catholic countries. We subjoin a statement of the quantities of the principal articles imported into, and exported from, Bergen, in 1834.

Imports.		Exports.	
Brandy . .	15,192 gals.	Bones . .	296,969 lbs.
Corn . .	97,310 qrs.	Stockfish . .	19,421,506
Flour . .	274,679 lbs.	Salted do . .	6,262,967
Barley meal .	102,481	Herrings . .	174,798 brs.
Cotton manuf. .	51,556	Cod roes . .	17,943
Woollen do. .	38,751	Oil . . .	17,299
Coffee . .	267,454	Lobsters . .	266,697 no.
Flax . .	137,431	Horns . .	15,613 lbs.
Hemp . .	1,333,298	Iron . . .	11,546
Molasses . .	364,995	Rock moss .	65,968
Sugar . .	497,057	Skins, various .	94.600
Soap . .	100,266	Wood . .	22,476 c. ft.
Tobacco . .	304,967	Anchovies . .	3,254 kg.
Wine . .	97,442 gals.		

During the same year, 1039 vessels entered, and 985 cleared out of, the port: of those entering it, 539 were Norwegian, 184 Danish, and 71 British. The inhabitants are industrious, and several of the mercantile houses are believed to be wealthy. The modern town was founded by one of the kings of Norway in the 11th century. In the 13th, traders from the Hanse towns began to settle; and, in the succeeding centuries, acquired an almost sovereign supremacy in Bergen, until checked by an act of the Danish government in 1560. The principal part of the trade is now in the hands of natives. (*Board of Trade Papers*, part v.; *Dict of Commerce*; and *Penny Cycl.*)

BERGEN, a town of the Prussian States, cap. island of Rugen, 15 m. N.E. Stralsund. Pop. 3060. It stands almost in the centre of the island; has a court of justice, a castle, and a convent of noble ladies.

BERGEN, county, N. J., situated in the N.E. part of the state, and contains 350 sq. m. Drained by Hackensack, Ramapoo, and Saddle rivers, the latter a branch of the Passaic. It contained, in 1840, 6425 neat cattle, 7366 sheep, 8599 swine; and produced 7221 bushels of wheat, 80,743 of rye, 86,667 of Indian corn, 45,169 of buckwheat, 79,239 of oats, 127,043 of potatoes, products of the dairy $65,262, of the orchard $57,803, of the garden $32,494. It had thirty-four stores, one fulling-mill, six cotton-factories with 4366 spindles, forty-seven grist-mills, fifty-seven saw-mills, five paper-mills, nine tanneries, eight distilleries, one academy, 25 students, forty schools, 1368 scholars. Pop. 13,223. Capital, Hackensack.

BERGEN, p. t., capital of Hudson co., N. J., 56 m. N.E. Trenton, 222 W. The village is situated on the summit of Bergen ridge, 3 m. W. of Jersey City, and has two churches, one Dutch Reformed and one Presbyterian; two stores and sixty dwellings. The court-house is about to be erected in the N. part of the town. Settled in 1616 by Danes. The town contains one furnace, two ropewalks, fourteen schools, 670 scholars. Pop. 3255.

BERGEN, p. t., Genesee co., N. Y., 14 m. N.W. Batavia, 237 m. W. Albany, 378 W. Watered by Black creek. The Tonawanda railroad passes through it. It contains three stores, one saw-mill, ten schools, 405 scholars. Pop. 1832.

BERGEN-OP-ZOOM, a strongly-fortified town of the

king. of Holland, prov. Brabant, 23 m. W.S.W. Breda, near the left bank of the E. Schelde, with which it communicates by a canal; lat. 51° 29′ 44″ N., long. 4° 17′ 23″ E. Pop. 6080. Besides its fortifications, which are exceedingly strong, it is surrounded by marshes that render the access to it very difficult. It has a grammar school, and a school of design and architecture, with numerous fabrics of earthenware. Its anchovies, taken in the river, are in considerable demand.

This was one of the first towns occupied by the States General. In 1622 it stood a memorable siege by the Spaniards, who were compelled to retire, after losing 10,000 men. In 1747 it was taken by the French by stratagem. In 1814 it was nearly taken by the British by a *coup de main*; but they were finally repulsed with considerable loss.

BERGERAC, a town of France, dep. Dordogne, cap. arrond., in an extensive and fertile plain, on the Dordogne, 27 m. S.S.W. Périgueux. Pop. 9285. It is neat, well laid out, generally well built, and thriving. It has a magnificent bridge of five arches over the Dordogne, a theatre, and some fine promenades. The fortifications by which it was once surrounded were demolished by order of Louis XIII., in 1621. It has a court of original jurisdiction, a college, and a secondary ecclesiastical school. Excellent paper is made here; and there are manufactures of different sorts of iron and copper goods, serges, hosiery, hats, and earthenware; with tanneries, distilleries, iron-foundries, &c. It maintains an intercourse with Bordeaux and Libourne, and is the principal entrepôt for the trade of the dep. Bergerac suffered much from the religious wars, and still more from the revocation of the edict of Nantes. (*Huge*, art. *Dordogne*, &c.)

BERGUES, a town of France, dep. du Nord, cap. cant., at the foot of a hill, on the Colme, 5 m. S.S.E. Dunkirk. Pop. 5968. It was strongly fortified by Vauban, and has the means of laying the adjoining plain under water. Though old, it is pretty well built. In one of its squares are two high towers, the remains of two ancient churches destroyed during the revolution. It has a communal college, a hospital, and a small public library. It has distilleries, refineries of salt and sugar, with potteries, and fabrics of soap and tobacco. Owing to its favourable situation on the canals of Bergues and Hondscoote, it is the entrepôt of the corn, cheese, and lace produced in the adjoining country. (*Huge*, art. *Nord*, *Diction. Géographique*.)

BERKELEY, a bor. and par. of England, co. Gloucester, hund. Berkeley. Area of par. 14,680 acres Pop. par., in 1821, 3635; in 1831, 3699; population of the town only, 901: houses, 196. The town is situated amid rich pasture lands, in the vale of Berkeley, on the Avon (which joins the Severn 1½ m. below), 101 m. W. by N. London. It consists mostly of four streets, diverging from the market-place; houses but indifferent. The church is a large handsome building, in the pointed style, with a modern tower at some distance from it. There is also a chapel of ease at Stone; four dissenting chapels in the town, and two in the tithing. There is a free grammar school, endowed with about £40 a year, in which 26 boys are educated. The town-hall (a handsome structure built in 1825) is now used as a chapel by the Independents; the market-house is beneath it. The market is held on Tuesday, and two annual fairs on May 14 and December 1: there are also cattle-markets on the first Tuesday in Sept. and in Nov. The Gloucester and Berkeley Canal (navigable for vessels of 600 tons) has its entrance 2½ m. from Berkeley, but the place can only be considered as a large agricultural village. The corporation exists by prescription only; there are no charters, nor has it now any duties to perform.

Berkeley Castle on an eminence S.E. of the town, is among the most perfect specimens of its kind remaining in the kingdom, being in complete repair and occupied: it is an irregular pile, with a keep and many castellated buildings, enclosing a spacious court. There is a fine baronial hall, a chapel, and a dungeon chamber 28 feet deep. The other apartments are numerous and gloomy: in one of these Edward II. is supposed to have been murdered, in 1327; this castle is nearly surrounded by a fine terrace. The date of its foundation is uncertain, but it was granted, in 1150, by Henry II. to Robert Fitzharding; and in the last civil war it was garrisoned for the king, and for a time awed the surrounding district; it was subsequently surrendered to the parliamentary army, after a nine days' siege. (*Losebrook's Hist. of Gloucestershire; Atkins's Ditto; Smythe's Hist. of the Berkeleys; Parl. Reports.*)

BERKHAMSTEAD (GREAT), a par. and town of England, co. Hertford, hund. Dacorum, 26 m. N.W. London. Area of par. 4250 acres. Pop. of par. 1821, 2310; 1831, 2369; houses at the latter date, 477. The town is in a deep vale, on the S.W. side of the Bulborn and the Grand Junction canal, which here run in a line together, parallel with the high road, which passes through the town. It forms the principal street, about ½ m. in length; a smaller street branches from the church in the middle of the town, towards the old castle. Houses irregular brick buildings, but many of them very respectable. The church is a Gothic cruciform structure, with a tower, and several small chantries, and curious monuments. There is a free school, established in the reign of Henry VIII.; ann. amount of its revenue, £634; but it has long been unavailable to the town: All Souls college has the patronage. Another school, founded in 1727, has an annual revenue of £279: in it 20 boys and 10 girls are clothed and educated. The castle, on an eminence E. of the town, enclosed a space of 11 acres, and was very strong: it originated in the Saxon period; was strengthened in the reign of William I., and rebuilt in that of Henry II., who, at one time held his court in it, and conferred many privileges on the town. Cowper the poet was born here, his father being rector of the parish.

BERKELEY, p. t., Bristol co., Mass., 37 m. S. Boston, 18 m. E. Providence, 434 W. Bounded W. by Taunton river. It contains a Congregational church, one store, one grist-mill, seven schools, 238 scholars. Pop. 886.

Berkeley, county, Va., situated in the N.E. part of the state, and contains 392 sq. m. Bounded N.E. by Potomac river. It contained, in 1840, 9157 neat cattle, 13,092 sheep, 25,035 swine; and produced 287,127 bushels of wheat, 38,005 of rye, 200,948 of Indian corn, 135,920 of oats. It had twenty-eight stores, seven fulling-mills, three woollen factories, one furnace, nineteen flouring-mills, thirty grist-mills, twenty-six saw-mills, one paper-mill, seven tanneries, eight distilleries, one printing-office, one weekly newspaper, four academies, 115 students, eighteen schools, 612 scholars. Pop.: whites, 8760; slaves, 1919; free coloured, 293: total, 10,972.

BERKS, or BERKSHIRE, an inland co. of England, having N. Oxford and Bucks, from which it is separated by the Thames, E. Surrey, S. Hampshire, and W. Wiltshire and a part of Gloucestershire. It is very irregularly shaped, and contains 481,280 acres, of which about 260,000 are tillage land, 72,000 meadow and dairy land, and 30,000 waste, consisting of part of Bagshot Heath, &c. It is a very beautiful co.; has every variety of soil and surface; and is well stocked with timber, particularly oak and beach. Exclusive of the Thames, it is watered by the Kennet, Loddon, Ock, and other rivers. It is about equally divided between tillage and stock and dairy husbandry. The Berkshire breed of pigs is much celebrated. Agriculture in a rather backward state; four or five horses are generally yoked to the plough; and from the want of proper covenants in leases, land is often left in a bad and exhausted state at their termination. Property much divided; a third part of the co. is supposed to be occupied by proprietors. Farms of all sizes, under 1200 or 1400 acres; but few above 500 acres, or under £50 a year. Average rent of land, 16s. 10d. an acre. Windsor Castle, the ancient and only magnificent residence of the English sovereigns, is in this county. This was formerly one of the principal seats of the woollen manufacture; but it has entirely disappeared, and the manufactures now carried on are but of trifling importance. Principal towns, Reading, Windsor, and Abingdon. Berkshire is divided into 20 hunds. and 151 pars. In 1831, it had 28,103 inhabited houses, 21,081 families, and 145,389 persons. It returns nine mem. to the H. of C.; viz., three for the county, two each for the boroughs of Reading and Windsor, and one each for Abingdon and Wallingford. County constituency in 1837–38, 5755. Sum expended on the poor in 1838, £64,644. Annual value of real property in 1815, £719,890. Profits of trades and professions in do., £299,704.

Berks, county, Pa., situated in the E. part of the state, and contains 1020 sq. m. Watered by Schuylkill river and its branches. It contained, in 1840, 32,803 neat cattle, 21,517 sheep, 34,095 swine; and produced 381,950 bushels of wheat, 449,247 of rye, 490,777 of Indian corn, 58,040 of buckwheat, 585,111 of oats, 294,591 of potatoes. It contained 118 stores, sixteen fulling-mills, seven woollen-factories, twenty-seven flouring-mills, 114 grist-mills, 108 saw-mills, fifteen oil-mills, five paper-mills, three powder-mills, three potteries, eleven furnaces, thirty-six forges, fifty-two tanneries, twenty-nine distilleries, one printing-office, five weekly newspapers, three academies, 138 students, twenty-five schools, 1750 scholars. Pop. 64,569. Capital, Reading.

BERKSHIRE, county, Mass., situated in the W. part of the state, and contains 860 sq. m. Drained by branches of Housatonic and Hoosic rivers, which afford good water-power. It contains marble and iron ore. The rail-road from Boston to Albany passes through it. It contained, in 1840, 34,410 neat cattle, 133,942 sheep, 13,873 swine; and produced 30,236 bushels of wheat, 54,547 of rye, 119,846 of Indian corn, 288,164 of oats, 670,876 of potatoes, and 234,334 pounds of sugar. It had 106 stores, seventeen fulling-mills, ten woollen-factories, twenty-five cotton-factories with 34,512 spindles, six furnaces, thirty-nine grist-mills, 188 saw-

mills, nineteen paper-mills, three oil-mills, two powder-mills, twenty-eight tanneries, three distilleries, one brewery, four printing-offices, three weekly newspapers, one college, 130 students, twelve academies, 522 students, 258 schools, 9104 scholars. Pop. 41,745. Capital, Lenox.

BERKSHIRE, p. t., Franklin co., Vt., 65 m. N. by W. Montpelier, 22 m. N.E. by E. St. Albans, 31 m. N.E. by N. Burlington, 502 W. Watered by Missisque river and its branches. Pike river, from Canada, affords good water-power. It contains five stores, one fulling-mill, one grist-mill, four saw-mills, three tanneries, thirteen schools, 267 scholars. Pop. 1818.

BERKSHIRE, p. t., Tioga co., N. Y., 148 m. W.S.W. Albany, 13 m. N. Owego, 291 W. The village, on East Owego creek, contains one Presbyterian and one Methodist church, two stores, an academy, one woollen-factory, one grist-mill, one saw-mill, forty-five dwellings, and about 308 inhabitants. The town has 352 scholars in schools. Pop. 956.

BERKSHIRE, p. t., Delaware co., O., 28 m. N. Columbus, 398 W. It contains an Episcopal church, in the village. The town has seven schools, 210 scholars. Pop. 1407.

BERLEBURG, a town of the Prussian States, province Westphalia, cap. circ. Wittgenstein, 27 m. S.S.E. Arnsberg. Pop. 2900. It is the residence of the prince of Wittgenstein. Berleberg has a castle, a haras or *dépôt de chevaux*, and some forges.

BERLICHINGEN, a village of Wirtemberg, on the Jaxt, 9 m. W.N.W. Kunzelsau. Pop. 1400. It has a castle, a Catholic church, and a synagogue.

BERLINCHEN, a town of the Prussian States, prov. Brandenburg, on a small lake, 52 m. N.N.E. Frankfort on the Oder. Pop. 2200. It has a hospital, distilleries, and fabrics of linen.

BERLIN, the capital of the Prussian States, and the ordinary residence of the monarch, on the Spree, 127 feet above the level of the sea, in the middle mark of Brandenburg; lat. 52° 31′ 45″ N., long. 13° 22′ 45″ E. Streets broad and straight, some of them being ornamented with rows of trees; squares regular and spacious; houses all of brick, and mostly stuccoed over; public buildings and monuments numerous and magnificent; so that, notwithstanding its sameness, and the want of bustle and liveliness, Berlin is one of the finest cities of Europe. It was founded about the middle of the 12th century. In 1688 the population was about 18,000; in 1775 it had increased to 135,500; in 1816 it was 182,387; and at the close of 1838 it amounted to 290,797; viz.:

	Males.	Females.	Total.
Civil . .	135,073	136,895	271,968
Military . .	15,081	3,748	18,829
Totals .	150,154	140,643	290,797

The births in 1838 were 10,045, the marriages 2929, and the deaths 8554. The number of families in Berlin at the present moment is not exactly known; but in 1831 they amounted to 50,243. In 1838 the city contained 7614 front and 6606 back houses, or 14,220 in all; giving an average pop. of 20·21 individuals to every house. In Edinburgh, where the pop. to a house is greater than in any other large town in Great Britain, each house has, at an average, about 16 inhab., so that, in this respect, it is inferior to Berlin. This density of population arises in both cities from the same cause; that is, from the appropriation of different stories (Edinburgh, *flats*) and parts of the house to the accommodation of particular families. Some of the houses in Berlin have 50, 70, 80, and 100 inhabitants. The back houses are built round court-yards, one of which is attached to almost all the principal houses, and do not front the streets. The city is surrounded by ramparts; but they serve only for purposes of police and revenue, and are quite useless as a means of defence.

Berlin owes much to the taste and munificence of its sovereigns. The quarter called the new town (Neustadt) was built by the great elector, Frederick William (1640–1688), who also planned the *Unter der Linden* street, and otherwise greatly enlarged and beautified the city. The succeeding monarchs, especially Frederick I., Frederick the Great, and the reigning monarch, have added many new streets, squares, and suburbs, and have embellished the city with many splendid buildings and monuments. Among the principal of these are the royal palace, imposing by its vast magnitude; the museum, a noble building, begun in 1823, and finished in 1829, containing a large collection of vases and a sculpture and picture gallery; the opera-house; the theatre royal; the royal library, a heavy building, but which contains one of the largest and finest collections of books and manuscripts in the world; the Joachimsthal, one of the royal gymnasiums; the royal academy; the arsenal, erected in 1695, and esteemed the finest building in Berlin; the university buildings; the old palace, formerly belonging to the Knights of St. John, now the residence of Prince Charles; the Brandenburg gate, one of the most colossal structures of the kind in Europe, and a principal ornament of the city, erected in 1790, after the Propylæum at Athens, but on a much larger scale—it is surmounted by a statue of Victory, in a chariot drawn by four horses, carried away by the French, in 1807, and brought back in triumph in 1814; the monument to brave men who fell in the campaigns of 1813, 1814, 1815, immediately outside the Halle gate; the royal guard-house, with statues of Scharnhorst and Bulow; the monument in honour of Marshal Blucher, and a host of others; but, strange to say, Berlin cannot as yet boast of a monument in honour of Frederick the Great. The churches, of which there are thirty-seven, are inferior; the principal are the cathedral; St. Mary's, with a steeple 292 feet in height; the church of St. Nicholas, consecrated in 1223; the church of the garrison; and the church of St. Hedewige. The Spree, which intersects the city, and insulates one of its quarters, is crossed by above 40 bridges, principally of stone, but partly also of iron. Some of them are handsome structures. The "Long Bridge," of stone, has a fine equestrian statue of the "Great Elector." The *Unter der Linden* street is the finest in Berlin, and one of the finest in Europe. "It is ¾ m. in length, from the Brandenburg gate to the royal palace; the five noble avenues in the centre being composed of chesnuts, linden, aspen, acacia, and plantain, whose varied foliage contrasts beautifully with the numerous elegant palaces and public buildings that line each side of the street. It is the corso of Berlin; for here the fashionable and the wealthy exhibit themselves and their equipages: here are the palaces of the Queen of Holland, Prince William of Prussia; the seminaries of the Artillery and engineers, the Academy of the Fine Arts, the opera-house, the arsenal, and the king's palace. In short, in whatever direction we turn our eyes, whether to the Brandenburg gate or the museum, majestic structures seem vying in magnificence with each other, intermingled with the statues of Prussian heroes, presenting altogether one of the finest architectural vistas of any city in Europe. (*Germany and the Germans*, i., 58.) Frederick Street is above 2 m. in length, and there are some other fine streets: the Schloss Platz, or square of the palace, the Gens-d'armes-market, Wilhelm Platz, the most fashionable square in the city, the square of *La Belle Alliance*, &c., are all well built, and most of them highly ornamented; but, unluckily, they are not planted inside, and, consequently, notwithstanding the fineness of the buildings, have not half the effect they would have were they properly laid out.

Besides its military and judicial establishments, Berlin has to boast of many celebrated literary institutions. The university established in 1810 enjoys a high degree of reputation, and is attended by nearly 1800 students. There are also six royal gymnasiums or high schools, with many inferior academies and schools; among others, one (*Gewerbe Institut*) in which young artisans of promise receive gratuitous instruction in drawing, modelling, &c. The military seminary has about 335 pupils. The hospitals and other charitable institutions are numerous and well conducted. The orphan asylum supports about 400 children in the house, exclusive of about 700 boarded out of doors. Manufactures important and valuable. They include woollens, silk stuffs, and ribands, cottons, porcelain, cast-iron goods, paper, coaches, and light carriages, jewelry, watches, and clocks; hats, snuff and tobacco, refined sugar, &c. The cast-iron goods, manufactured at the foundry outside the Oranienburg gate, comprise all sorts of articles, from colossal pillars and statues down to the minute furniture of a lady's toilet. In delicacy of impression they are unequalled by those made in any other country. The casts in relief of some of the finest pictures are particularly admired. The porcelain for which Berlin has long been famous is the produce of a royal manufactory, which, as was to be expected, annually costs the goverment a considerable sum. There were in Berlin, in 1838, twenty-nine steam-engines—of which *one* only was employed in the spinning of wool, and not one in the spinning of cotton. There are ten cotton spinning establishments in the city, but they are all moved by water-power. Printing is carried on to a great extent. Subjoined is a classified account of some of the principal trades carried on at Berlin, and of the number of individuals employed in each in 1838:

Trade.	Masters or parties working for their own account.	Labourers and apprentices.
Pastry-gingerbread bakers and confectioners .	105	
Butchers	269	623
Tanners, curriers, cordwain and parchment makers	79	206
Shoe-makers	2,056	2,416
Gloves	91	119
Harness-makers and saddlers	188	245
Tailors	2,119	2,731

(*Continued.*)

Lace-makers	207	
Hat-makers	67	129
Carpenters, shipwrights, pump-makers	61	1,266
Persons allowed to make carpenters' work	13	
Joiners and cabinet-makers	1,085	2,269
Wheelwrights and cartwrights	79	321
Coopers	141	248
Turners	254	
Masons	41	1,212
Persons allowed to act as masons	23	
Stone-cutters or workers	12	155
Potters and stove-manufacturers	59	322
Glaziers	149	
Room and sign-painters, house-painters, gilders, and decorators	435	
Paper, oil-cloth, and oiled-silk manufactures	12*	169†
Blacksmiths and armourers	102	476
Locksmiths, whitesmiths, nail-smiths, cutlers, gun-smiths, spurriers, file-cutters	459	1,208
Girdlers, sword-cutlers, brass button-makers	140	289
Coppersmiths	40	99
Braziers and bell-founders	42	95
Pewterers	25	81
Tinmen	146	345
Mechanics	107	154
Watch-makers, watch case and dial-makers	128	113
Gold and silver workers (jewellers)	217	310
Lapidaries and seal-engravers	30	
Letter (type) founders	8*	74†
Printing-houses for books and music	26*	139‡
Copper, steel, wood-cut, and printing institutions	11*	
Lithographical institutions	17*	
Book-binders	207	344
Chemical manufactures	8*	59†
Sugar refineries	15*	284†
Starch and fine flour manufactures	9*	
Porcelain and earthenware manufactures	6*	659†

* Number of the institutions. † Number of persons
‡ Number of the workmen employed in that branch.

Spinning Establishments.	Establishments.	Spindles.
For cotton	10	734
For sheeps' wool and trammels	2	260
For comb	1	240
Working looms—Professionally.		
In silk and half-silk		1,875
In cotton and half-cotton		2,207
In wool and half-wool		585
In linen		52
Weavers' looms		170
Riband looms		20
In secondary Occupations.		
For linen		12
For coarse woollen stuffs		6
For other loom wares		248

Cloth shearer and cloth dresser—masters 55, assistants 101.
Dyers of black—of cloth, and silk, do. 72, do. 125.

Cotton, Linen, and other Stuff Printings.
Number of institutions, 21; number of workmen employed, 1064.

Commercial Trades.	
Shops for money, paper, and money-changing business	97
Wholesale dealers, without shops	251
Merchants, with open Shops.	
For spices, groceries, and drugs	435
For silk, cotton, and woollen wares	564
Hard and metal wares	66
For articles of dress and ornament	72
For other wares, not mentioned here	243
Wine-merchants	73
Corn-dealers	57
Wood-merchants	78
Brokers in wholesale trade	36
Book, music, and print-sellers	33
Antiquaries	24
Circulating libraries	41
Shopkeepers with short wares	188
Victualling shops and hawkers	1,028
Pedlars	72
Number of vehicles and vessels for land and water carriage carrying 4000 lbs. load each	10,558
Carriers	221
Number of horses kept by them	1,186
Inns for the higher classes of people	31
Beer-houses and bathing-houses	72
Publicans and cook-shops	172
Tapsters or tavern-keepers	1,181
Musicians by profession, who play at festivals	108

Servants.	Males.	Females.
For personal attendance on masters	3,250	12,220
For agriculture and other trades, &c.	1,984	3,146

Owing to the flatness of the ground on which it is built, the drainage of Berlin is very imperfect, and, instead of running off, the water in the streets, in wet weather, stops and stagnates on the surface. The Spree, too, being more like a great canal than a river, conveys so slowly away the filth that is poured into it, that in hot weather the odours are alike unpleasant and unwholesome. But the greatest annoyance in summer arises from the heat of the sun, which, being reflected by the arid sandy soil, becomes very oppressive. The streets used to be badly provided with *trottoirs*, but this is no longer the case; the change in this respect has been a very advantageous one, for the streets being mostly paved with small sharp stones, were very unpleasant, and (to a stranger at least) even painful to walk upon. There are numerous hackney coaches and other street carriages, placed under judicious regulations, and as superior to those of London as can be well imagined. The principal streets are lighted with gas, and the houses are all heated by stoves. The rent of shops and houses varies so very greatly that no general average can be given.

A traveller visiting Berlin in search of amusement, and without introductions, will, perhaps, exhaust the *sights* in a fortnight, and may then find it dull; but a stranger, provided with good introductions, will meet in society with many of the ablest men of Germany, most of whom government has attracted to the capital by bestowing upon them official situations or chairs in the university. Berlin is, in fact, the centre of intelligence; the Athens, as it were, of the N. of Germany. There are but few people in Berlin who would be called rich in England, but large numbers have revenues of from 2000 to 3000 rixdollars a year. It is not the habit among the middle classes to ask strangers to dine at their houses, but to take them to clubs. All classes are extremely well informed. In 1825 there were in the town 416 authors; and their number has certainly not declined in the interval. The theatre, dedicated to the regular drama, is generally well attended. There is attached to it a subscription room for balls and concerts, which are frequently attended by the royal family. With the exception of Vienna, and probably Munich, there is no city where music is more universally patronised, or where the opera is better performed or more heartily appreciated, than in Berlin. "Here," says Mr. Strang, "it is not fashion, but a passion for the art, that prompts the crowd of admiring listeners to congregate in the opera-house—listeners whose judicious applause is at once illustrative of their taste for, and knowledge of, good music." The fashionable dinner-hour is three or four.

The *conditterie* are much frequented by the upper classes. They resemble our confectioners' shops; but are far more spacious, and fitted up with greater attention to comfort and elegance. Besides refreshments of all sorts, they are well supplied with domestic and foreign newspapers, literary and scientific journals, &c. Tea and coffee constitute the favourite beverage of the higher classes; and the latter, when they can afford it, is popular with all ranks. Chicory and roasted acorns are not unfrequently used as substitutes for coffee. The gin palaces of Berlin are nowise inferior, if they be not superior, to those of London, and are quite as much, or rather more frequented. Dram-drinking is, in fact, very prevalent, not only in Berlin, but throughout all the N. of Germany. The custom of smoking prevails among all classes; and the consumption of tobacco is immense. Prostitutes are licensed, and are but few in number.

Berlin is the seat of an extensive commerce, and the centre of the pecuniary transactions of the monarchy. The Royal Bank, the Association for Maritime Commerce, &c. have their principal offices in it. The Spree, which is navigable for flat-bottomed boats or barges, drawing 9 ft. water, is connected by canals and otherwise with the Elbe on the one hand, and the Oder on the other; and, exclusive of the facilities for commerce that are thus afforded, newly-constructed lines of road lead from the city to most quarters. The town revenues amount to from 600,000 to 700,000 rixdollars a year, of which about 100,000 rixd. (£14,500) are expended upon the relief of the poor. The country round Berlin is uninteresting, sandy, and miserably poor; so that most part of the provisions and fuel (timber) required for the use of the city have to be brought from a distance. The annual consumption, at an average of the population, is estimated for each individual, at 100 to 110 lbs. butchers' meat (*ex* game, poultry, and fish); 88 to 90 lbs. wheat; and about 180 lbs. of rye.

The police is strict, and sometimes carries interference to what would be reckoned in England an unwarrantable extent. But the public tranquillity is seldom interrupted; outrages of all sorts are rare; and the persons and property of natives and strangers are better protected than in most large towns.

Owing to circumstances already alluded to, Berlin is but indifferently healthy, particularly in summer. The deaths in 1838 were:

Of old age	564
Suicide	69
Fatal accidents of all kinds	102
Child-bed	32
Small-pox	14
Of "inner-burning" diseases	1,891
Of "inner-lingering" sicknesses	4,117
Sudden fits of sickness, hemorrhage, apoplexy, &c.	1,093
Wounds	131
Of diseases not determined	156
Dead born	809
Total	8,964

Berlin, p. t., Coos co., N.H., 111 m. N. Concord, 594 W. Called Maynesborough until 1829. Drained by Androscoggin river, and the S. branch o' Upper Ammonosuc river. It contains one grist-mill, one saw-mill, two schools, 42 scholars. Pop. 116.

Berlin, t., Oxford co., Me., 45 m. N.W. Augusta. It has five schools, 211 scholars. Pop. 116.

Berlin, p. t., Washington co., Vt., 4 m. S. Montpelier, 517 W. The branches of Onion or Winooski river, which bounds it on the N., afford good water-power. Chartered in 1780, first settled in 1785. It contains four churches, one Congregational, one common to Methodists and Universalists, and two others; one store, one fulling-mill, two flouring-mills, five grist-mills, eight saw-mills, thirteen schools, 534 scholars. Pop. 1508.

Berlin, p. t. Worcester co., Mass., 15 m. N.E. Worcester, 34 m. W. by N. Boston, 413 W. A branch of Assabet river affords good water-power. It contains three churches, two Congregational and one Friends'; one store, two grist-mills, three saw-mills, one academy, 10 students, five schools, 289 scholars. Pop. 763.

Berlin, p. t., Hartford co., Ct., 10 m. S. by W. Hartford, 397 W. Taken from Farmington in 1785. The principal village, called Worthington, in the E. part, contains three churches, one Methodist, one Congregational, and one Universalist; an academy, five stores, and about eighty dwellings. It is celebrated for the manufacture of tin ware, which commenced here before the Revolution, and has been greatly extended. The village of New Britain, in the N.W. part, contains three churches, one Methodist, one Congregational, and one Baptist, and about 1500 inhab. There are forty-five factories in the parish, chiefly of brass. Kennington, in the S. part, contains a Congregational church. The Hartford and New-Haven railroad passes through the town. It contains twelve stores, two cotton-factories with 1000 spindles, one fulling-mill, four grist-mills, three saw-mills, one academy, 49 students, sixteen schools, 794 scholars. Pop. 3411.

Berlin, p. t., Rensselaer co., N. Y., 26 m. E. Albany, 387 W. It contains four stores, three grist-mills, five saw-mills, eight schools, 522 scholars. Pop. 1794. The village, situated on Little Hoosick creek, contains one church, four stores, two mills, and about 300 inhabitants. The village at the centre contains one church, one store, and twenty dwellings.

Berlin, t., Wayne co., Pa. Drained by branches of Lackawaxen river. It contains three stores, six schools, 128 scholars. Pop. 488.

Berlin, p. b., Brothers' Valley t., Somerset co., Pa., 143 m. W.S.W. Harrisburg, 160 W. Situated on a branch of Stony creek, and contains two churches, one Lutheran and one German Reformed: four stores, four tanneries, two potteries, two schools, 60 scholars. Pop. 524.

Berlin, t., Milwaukie co., Wis. ter. Pop. 199.

Berlin, t., St. Clair co., Mich. Pop. 225.

Berlin, p. t., Holmes co., O., 95 m. N.E. Columbus, 337 W. It contains four grist-mills, two saw-mills, one pottery, one printing-office, one weekly newspaper, one school, 52 scholars Pop. 1149.

Berlin, t., Erie co., O. It has twelve schools, 575 scholars. Pop. 1628.

Berlin, t., Knox co., O. Pop. 1091.

Berlin, p. t., Trumbull co., O., 18 m. S.W. Warren, 156 N.E. Columbus, 303 W. Watered by Mahoning creek. It has nine schools, 528 scholars. Pop. 1283.

BERMEO, a sea-port town of Spain, on its N. coast, prov. Biscay, on a rather shallow bay, 16 m. N.E. Bilboa. Pop. 4250. The inhab. are principally dependant on the fishery, which they carry on to a considerable extent. This town gave birth to the only distinguished epic poet whom Spain has to boast, Don Alonzo d'Ercilla, the author of the *Araucana*, born here in 1528.

BERMUDAS (THE), or SOMER'S ISLANDS, a group of islands in the N. Atlantic ocean, belonging to Great Britain, said to be above 350 in number; in about lat. 32° 20' N., and long. 64° 30' W.; 600 m. E. from S. Carolina: they are estimated to contain about 20 sq. m., or from 12,000 to 13,000 acres. White pop. in 1837, 4033; coloured and free blacks, 4422. When viewed from the sea, their elevation is trifling, the highest land scarce attaining to a height of 500 ft. Their general aspect is similar to the West Indian islands, except that they remind the voyager (from their proximity, and the sea flowing between them) of the lake scenery of European climates.

St. George's island, and St. David's, with others of minor importance, form several bays; and the harbour of St. George's is large enough to contain the whole British navy, but is difficult of ingress and egress, in consequence of the smallness of its entrance. The principal island (or main land, as it is called) is about 20 m. in length, but it rarely exceeds 1½ m. in width. In the centre of this island, and on the N. side of a beautiful bay, is the town of Hamilton, now the seat of government. The only places that are fortified are Ireland island and St. George's, where forts have lately been built, which render the islands almost impregnable. At the former of these is the naval dock-yard, off which there is good anchorage and moorings laid down for fifteen or twenty ships of war, though the breakwater is extensive enough to contain a large fleet of the line. There are two other mooring-places for king's ships, viz., Murray's anchorage, near the ferry, and Five Fathoms' hole, off the mouth of St. George's harbour. With the exception of two or three small detachments, the chief military force is stationed at St. George's, and consists of one regt. of the line, and companies of artillery and engineers. The legislature is composed of eight members of council and thirty-six of the assembly, each parish returning four of the latter, who are elected every seven years, or whenever a new sovereign ascends the throne.

There are ten established churches, and seven chapels, erected since the emancipation of the slaves in 1834. Many schools have been established by the archdeacon, for the education of coloured children, as well as poor whites; and there are many who receive instruction from the young ladies of each parish, at Sunday schools, held at the parish churches, which are supplied with books by the Society for Promoting Christian Knowledge. In the most populous parts of the islands friendly societies have been formed by the coloured people, to provide for those of their sable brethren who have been prevented by illness, or who, at the time of emancipation, were too old to maintain themselves. The police has hitherto been very deficient, but lately a colonial law has passed to provide for police magistrates and constables, whose exertions have already wrought a beneficial change in the lower orders.

The principal articles exported from the Bermudas (the produce and manufacture of the islands) are—arrow-root, potatoes, onions, and palmetto and straw-hat manufactures. They possess about 100 sail of vessels, of from 100 to 150 tons burden, generally employed in conveying salt-fish and dry provisions from Halifax and Newfoundland to the West Indies for the consumption of the negroes; and carrying away rum and sugar, which they find a market for in some of the N. American provinces. An inconsiderable whale-fishery, carried on in Bermuda employs about twelve whale-boats and their crews three months in the year: the number of whales seldom exceeds twenty in the season, yielding about 1000 barrels of oil. This fishery, being carried on very near the land, is capable of considerable extension by the employment of additional capital. The reefs that surround the islands abound in fish of great variety; none is, however, cured for exportation. The islands abound in poultry of the best kind. Beef and mutton may generally be procured, but the only meat that is plentiful is veal. The ordinary fruits and roots of intertropical climates are generally to be had in Bermuda; but peaches, oranges, grapes, melons, and figs are abundant. The mails from England are received monthly, *viâ* Halifax, whence they are conveyed by hired mail-boats. The winter generally commences about November, and lasts till April, during which time the islands are subject to strong N.W. gales, which often dismast ships crossing this lat.; and scarcely a winter passes without eighteen or twenty vessels being driven in by stress of weather, or forced on the rocks that run out many miles to the N. and N.W. The total value of the imports in 1837 amounted to £97,811; exports, £25,271; ships inwards 122, tons 11,651; outwards 125, tons 11,001. The revenue in 1837 was £17,273, and the expenditure £19,374. The legislatures of these islands and Antigua were the only colonial legislative bodies that abolished slavery without the intervention of apprenticeship. The proportion of the £20,000,000 voted by parliament for compensation was £50,584, for 4203 slaves, valued at £27 4*s.* 11*d.* each.

BERN (Canton of), the largest and the second in rank in the Swiss confederation, in the W. part of Switzerland, between lat. 46° 19' and 47° 30' N., long. 6° 50' and 8° 28' E., having N.W. France; N. and N.E. the cant. of Basle, Soleure, and Aargau; E. Lucerne, Unterwalden, and Uri; S. the Valais; S.W. Vaud; and W. Fribourg and Neufchatel: length, N.W. to S.E., 82 m.; greatest breadth at its S. part 62 m.: area, 2562 sq. m. Pop. (1837) 400,000, three fourths of whom are Protestants, the rest Catholics. Most part of this cant. is mountainous, especially the S., which is intersected by the Bernese Alps, to which belong the Finsteraarhorn, Monch, Jungfrau, Schreckhorn, &c., some of the highest summits in Switzerland: in the N. the ranges belong to the Jura, and are considerably lower. The region between these two mountain systems contains the valley of the Aar, the Emmenthal, and other fertile valleys, but in no part presents anything like an extensive plain: S. of the lakes of Thun and Brienz begins what is called the Bernese Oberland, a mountainous region, including the four celebrated valleys of the Simmen, Lauterbrunnen, Grindel-

wald, and Hasli. The chief rivers are the Aar and its tributaries, Birse, and Doubs: the lakes, those of Thun, Brienz, and Bienne; between the two former of these is the small but highly cultivated plain of Interlachen. The climate varies with the elevation, and is, besides, remarkably subject to sudden changes of temperature: even in the Interlachen, where it is the mildest, after a warm day, very severe frosts often occur at night. Rains and fogs are frequent; but the canton, as a whole, is generally healthy. It is divided into twenty-eight prefectures, under four principal divisions; viz., the Oberland, country of Bern, Emmenthal, and the old bishopric of Basle, united to Bern by the allies in 1815. Iron ore is found in great abundance in the Jura mountains; gold dust is met with in the sands of the Aar and the Emmen, and crystals in the Grimsel rocks; and there are many mineral springs, some used as baths, and much frequented. The soil is in great part stony and barren, and the arable land occupies but a small proportion of the whole surface, and, though well cultivated, the produce of corn is insufficient for the supply of the inhab., and large quantities are imported. There are in parts plantations of fruit-trees: white mulberry, chestnut, peach, fig, &c., and a few vines are raised on the shores of lakes Thun and Bienne, but not to any considerable extent: in the Lauterbrunnen, wheat is treated as an exotic, cultivated in small beds, and trained on sticks. Cattle of a superior breed form the chief wealth of the canton, and breeding, grazing, and dairying are the principal branches of industry. In 1839, the live stock was 158,390 head of black cattle, 107,389 do. sheep, 55,870 goats, 26,880 horses, and 55,210 swine. The pastures in the Oberland and Emmenthal are excellent, and produce the finest cattle; the latter valley has also a strong and active breed of horses, exported to France for draught and heavy-armed cavalry. The cheese made in this cant. is, next to that of Fribourg, the best in Switzerland: the average produce is estimated at 50,000 cwt. a year: a great deal is sent from the Emmenthal into Germany and Italy. The houses in the Oberland are generally of wood, but in the Jura, and round Bern, of stone: the Bernese are, for the most part, well lodged. The estate of a father is everywhere divided into equal shares among his children, without respect to sex or seniority, except in the Emmenthal, where, by a peculiar law, landed property descends to the youngest son. Hence, in the greater part of the cant., land is very much subdivided, and the holders in very depressed circumstances; there are but very few estates that reach to 150 acres, unless they belong to village or town communities; but the possessions of the latter are frequently sufficiently large not only to defray the annual expenses of the community, including the relief of the poor, but sometimes to yield a surplus revenue, after all outgoings are deducted, which is divided among the citizens. Each commune is obliged to support its own poor, who do not become chargeable upon other communes or upon the state; they generally receive out-door relief, but if subsequently prosperous, are bound to return what they have received. Manufactures and trade are of little importance; linen and woollen cloths are made in the Emmenthal; paper around Bern; watches, jewelry, and fire arms are made in Bern, Porentrui, &c.; thread and printed calico, near Bienne: silk, especially for umbrellas, and leather, in the bishopric of Basle. There is also an extensive manufactory of agricultural implements at Hofwyl. The exports consist chiefly of cattle, cheese, &c.; iron from the Jura, and a few manufactured goods: the imports are corn, salt, colonial produce, and articles of luxury. The revenue, in 1836, amounted to 2,608,268 Swiss francs, and the expenditure to 2,183,862 do., leaving a surplus of 424,902 do.

The government is entrusted to a grand and an executive council; the former consists of 240 members, 200 of whom are chosen by the people in the primitive assemblies of the twenty-seven prefectures, and 40 by the Grand Council itself; and is presided over by the landamann, who is the first magistrate of the cant.: it meets once a month, if necessary, but determines on nothing without the co-operation of the Executive Council, which consists of 16 members, chosen from among the former. From the latter the Council of State is selected, whenever Bern has the directorial power of the Confederacy. Members of the Grand Council must be twenty-nine years old, and have landed property to the value, at least, of 5000 Swiss fr., excepting professors of the university, advocates, and physicians, of whom such qualification is not required. The salary of the landamann is 4000 Swiss fr.; that of a mem. of the Executive Council 2000 fr. a year; mem. of the Grand Council are allowed 2½ fr. a day during the time they are assembled. Every male from sixteen to fifty years of age is liable to serve in the army. The contingent of troops furnished to the Confederacy is 5158 men, and of money, 164,080 Swiss fr. a year. There is a judicial tribunal in each distr., and a court of appeal in Bern; the latter consisting of 10 mem., with a president; and besides these, a *matrimonial tribunal* in every parish. Savings' banks are general, and education well attended to. In 1831 there were no fewer than 700 country schools, in which 65,000 children were instructed; and since then education has made a considerable progress. In 1834, a university, a gymnasium or preparatory school for the university, and a normal school for the instruction of schoolmasters, were established. The university has faculties of theology, jurisprudence, medicine, and philosophy, each having three ordinary and from two to five extraordinary professors; the salary of the former is from 2400 to 3000 Swiss fr., and of the latter from 1200 to 1400 ditto. There is also a veterinary school, and some distinguished private educational establishments, especially that of M. Von Fellenberg, at Hofwyl. Dr. Bowring reports (1836) that when he visited the prison in Bern, which contained 320 convicts, 315 could read; and those unable to write, most of whom were strangers, did not amount to 50. Except about 50,000 individuals of French extraction, in the ancient bishopric of Basle, the inhab. are of German stock; and German is the prevalent language. The German part of the pop. are generally much superior in their physical appearance to the French portion, especially those in the Oberland. The Bernese are brave, hospitable, public-spirited, and really good-tempered, notwithstanding they are subject to violent fits of passion, which sometimes occasion the effusion of blood. Catholics are less industrious than the Protestants. This cant. entered the Swiss Confederation in 1353: at first its territory was very limited, but afterward, by conquest and purchase, it acquired nearly the whole of the now existing cant. of Vaud and Aargau, which, in addition to its present extent, it held till 1798, when it was taken by the French. In 1815, in indemnification of Vaud and Aargau, the congress of Vienna added to its dom. the town of Bienne with its territory, and the greater part of the ancient bishopric of Basle, otherwise entitled the bailliages of the Jura. (See *Helvetic Almanac*, *Lutz's Switzerland*; *Dr. Bowring's Report*, *&c.*)

Bern, a town of Switzerland, cap. of the above canton, and, alternately with Zurich and Lucerne, of the Swiss Confederation, on the Aar, 52 m. S. Basle, and 60 m. S.W. Zurich; lat. 46° 57′ 15″ N., long. 7° 25′ E. Pop. 20,500. It stands 1708 ft. above the level of the sea, on a hill, which, except on the W., is surrounded on all sides by the Aar. A stone bridge, 260 ft. long, is erected over the river, and three gates lead to the interior of the town. The fortifications by which it was formerly surrounded were demolished in 1835. It is the finest town in Switzerland, and one of the finest of its size in Europe. Three principal streets extend in a parallel line from E. to W., and are intersected by a number of lateral streets. The houses are massive structures of freestone. Piazzas run along the houses on both sides of the principal streets, which are also adorned with handsome fountains. Principal public edifices—the cathedral, a fine Gothic structure, founded in 1421, and finished in 1502, 160 ft. long, and 80 ft. broad; the steeple, though unfinished, is 190 ft. high. It has some fine glass paintings, and various trophies and monuments. The church of the Holy Ghost, founded in 1722, is also a fine structure, as well as the Mint, built in 1790; the general *burgerspital* (hospital of the citizens), built from 1730 to 1740; another magnificent hospital called the *Insel* (island), founded in 1718, occupying one whole street, and affording a splendid prospect from the Aar; the state-house of the avoyer, previously to 1831 the residence of, and now partly occupied by, the French embassy; the house of correction, the largest building of the kind in Switzerland, and one of the best contrived in Europe, finished in 1833, at an expense of 1,200,000 Swiss fr.; the corn magazine, a large and massive edifice, having on the floor an extensive open hall, with forty-three pillars, in which the corn-market is held twice a week; the *Hôtel de Musique*, in which a theatre is established for the winter season, is also worth notice. Bern has also an arsenal and a large town-hall, both old edifices. The charitable institutions are—two large hospitals; two orphan houses, one for boys and another for girls; a fund for the support of poor students; a lunatic asylum, situated about 2 m. from Bern; and an asylum for old poor persons. The university, gymnasium, &c. noticed in the preceding article, are situated in the town. There are also a Swiss economical and a Swiss historical society; with societies of natural history, medicine, and arts; a botanic garden; a public library, with valuable MSS. relating to Swiss history, and a collection of Roman, Greek, Gothic, and Swiss medals, Roman antiquities, and portraits of the Bernese avoyers, &c. There is also a museum of natural history, with bas-reliefs of the Bernese *Oberland*, of the cantons of Vaud and Valais, and of St. Gothard; and many private scientific collections well worth notice. The trade of the town is of little importance. Three newspapers are published. Two fairs are annually held; one after Easter and another in November. Some woollen cloth and stockings are manufactured, and there are tanneries, breweries, &c. About 2 m.

from Bern there is a gunpowder-mill, the powder made in it being formerly reckoned the best in Europe. The corporate property of the citizens is large, amounting, it is said, to 30,000,000 of Swiss *fr.*; and the revenue, besides defraying the municipal expenditure, supplies every citizen, gratis, with fuel, and leaves, over and above all this, a surplus sum, which is annually distributed among the citizens! House-keeping in Bern is less cheap than in Zurich, but not so dear as in Geneva. The price for a pound of meat is 3½*d.* sterl.; bread, 1½*d.* to 1¾*d.*; wine, 4*d.* to 8*d.* a bottle; cheese 4*d.* to 8*d.* per lb. The inhab. are serious and reserved, and proud of the ancient glory of their city. The aristocracy live secluded from the other classes. Bern is the birthplace of Haller; it has not, however, to boast of so many distinguished men as Zurich, Basle, and Geneva. The town has bears for its arms; and some of these animals are maintained in a place called *Bärengrabrs* (bear's ditch), on funds appropriated to that special purpose.

Bern was founded in 1191, by the Duke Berthold V. of Zaehringen. Its history is the same as that of the canton. The environs are beautiful, affording the most splendid views of the Alps on the one hand, and the Jura on the other. There are many fine public walks: among which are the *Plateform*, a terrace near the cathedral, 180 ft. above the Aar; and the *Engi*, a magnificent walk, affording a fine prospect over the river, the city, and the lower mountains to the high Alps. Hofwyl (which see) is about 4 m. from Bern. There are also several mineral baths in the vicinity, such as Blumenstein and Gurnigel.

Mr. Inglis speaks very favourably of the advantages of Bern as a place of residence. "It is," says he, "greatly superior to Basle, Lucerne, or Geneva. It is a pleasant thing to walk in wide airy streets, and at the same time to have the advantage of shade, if required. Where there are arcades, one may always choose between bustle and quiet: bustle under the arcades, quiet in the centre of the streets; and in the *agréments* of a city, Bern has decidedly the advantage of its rivals. It possesses all those public establishments which make a place agreeable as a residence. It has excellent libraries, excellent academies, delightful promenades, convenient and well ordered baths; a theatre; concerts and balls during winter; clever lecturers upon most of the sciences; eloquent and pious clergymen of almost every denomination; and to this list may be added abundance of shops, where all that contributes either to comfort or luxury may be found." (See *Description of Bern*, by Wagner; *History of Bern*, by Stapfer, late minister of the Helvetic Republic; *Inglis's Switzerland.*)

BERNARD (GREAT ST.), the name given to a famous pass of the Pennine Alps, leading over the mountains from Martigny to Aosta. In its highest part it attains to an elevation of above 8,000 ft., being almost impassable in winter, and very dangerous in spring, from the avalanches. Very near the summit of the pass, and on the edge of a small lake, is the famous hospice founded in 962, by St. Bernard, and occupied by brethren of the order of St. Augustine, whose especial duty it is to assist and relieve travellers crossing the mountain. In searching for travellers who have lost their way, or been buried in the snow, they avail themselves of the assistance of a peculiar breed of dogs of extraordinary size and sagacity. The brethren have faithfully discharged the arduous duties imposed on them, and have rescued hundreds of travellers from a premature death. The hospice is a massive stone building; it possesses some, but not much, independent property, and is principally dependent on collections made in the Swiss cantons and other states, and on donations from the richer class of travellers. In 1800, when the road was not nearly so good as it has since been made, Napoleon led an army of 30,000 men, with its artillery and cavalry, into Italy by this pass. The hospice contains a monument, erected by order of Napoleon, in honour of Dessaix, who fell at the battle of Marengo. (*Brockedon's Passes of the Alps; Murray's Handbook, &c.*)

BERNARD, t., Somerset co., N. J., 7 m. N.E. Somerville. Bounded W. by the north branch of Raritan river. It contains seven stores, one fulling-mill, two woollen-factories, five grist-mills, nine saw-mills, four tanneries, one distillery, 7 schools, 231 scholars. Pop. 2059.

BERNARDSTON, p. t., Franklin co., Mass., 99 m. W. by N. Boston, 7 m. N. Greenfield, 409 W. Incorporated in 1766. Drained by Fall river, a branch of Connecticut river. It contains four churches, one Congregational, one Unitarian, one Baptist, and one Universalist; two stores, one fulling-mill, two grist-mills, five saw-mills; 6 schools, 252 scholars. Pop. 992.

BERNAU, a town of the Prussian States, prov. Brandenburg, on the Panko, 15 m. N.E. Berlin. Pop. 3000. It is in part fortified, and has fabrics of silk, velvet, calicoes, linen, &c., with numerous and celebrated breweries. In the church and town-house are tents, bows, arrows, &c., taken from the Hussites.

BERNAY, a town of France, dep. Eure, cap. arrond., on the Charentonne, 26 m. W.N.W. Evreux. Pop. (town *cs* cant.) 5069. This is a thriving town, and has latterly been a good deal improved. It has a court of primary jurisdiction, a commercial tribunal, a communal college, and a theatre;* with manufactures of woollen goods, linens, cotton yarn, paper, wax, &c., and bleach-fields and tanneries. The arrond. of Bernay was estimated by M. Dupin, in 1827, to have 8714 manufacturing work-people, the yearly value of whose produce amounted to 5,651,152 frs.; and if this estimate was nearly accurate when framed, both these sums must now be considerably greater. The greatest of the French fairs for horses is held here on the Wednesday of the fifth week of Lent. It is said to be attended by from 40,000 to 50,000 jockeys, amateurs, and other individuals, some of them from great distances. There is an immense show of Normandy horses. (*Hugo*, art. *Eure.*)

BERNBURG, a town of Germany, cap. duchy Anhalt Bernburg, on the Saale, by which it is intersected, 23 m. S. Magdeburg. Pop. 6000. It consists of three parts; two on the left, and the other on a hill on the right bank of the river, which is here crossed by a bridge. The first two parts are surrounded by walls; the other, or the Mount town, has a castle on its summit, and is open. Bernburg is well built, well paved, and clean. It is the seat of the ducal government, and has several literary and charitable institutions, with some manufactures and trade.

BERNE, a town of France, dep. Bouches du Rhone, cap. cant., on the E. side of the lagune of the same name, 16 m. N.W. Marseilles. Pop. 1928. It is agreeably situated, and is regularly built, but the vicinity of the lagune makes it unhealthy. It was formerly fortified, and its ramparts still exist.

BERNE, p. t., Albany co., N.Y., 23 m. W. Albany, 368 W. The Helderberg hills here rise precipitously, from 100 to 500 feet. Watered by Foxes cr., a branch of Scoharie cr. The land is held on lease from the Van Rensselaers. It contains nine stores, one fulling-mill, two grist-mills, twenty-two saw-mills, two tanneries, 24 schools, 1106 scholars. Pop. 3740.

BERNE, t., Athens co., O. Drained by a branch of Hocking river. It contains one saw-mill, one school, 15 scholars. Pop. 361.

BERNE, t., Fairfield co., O. The post-office, called Amesville, is 84 m. S.E. Columbus, 327 W. Pop. 2419.

BERNE, t., Berks co., Pa. Divided into Upper and Lower Berne townships. Watered by Schuylkill river and Tulpehocken creek. The Lower town. contains two churches, and the Upper, one church, common to Lutherans and Presbyterians. It contains six stores, one flouring-mill, six grist-mills, seven saw-mills, one powder-mill, three tanneries. Pop. 3149.

BERNECASTEL, a town of the Prussian States, prov. Lower Rhine, on the Moselle, 21 m. N.E. Treves. Pop. 2000.

BERNESTADT, a town of the Prussian States, prov. Silesia, reg. Breslau, on the Wida, 24 m. E. Breslau. Pop. 3300. It has an old castle, two churches, a hospital, and manufactures of cloth and linen.

BERRIEN, county, Mich. Situated in the S.W. corner of the state, and contains 576 sq. m. Drained by St. Joseph's river, and its branches, and by Galien river, which afford water-power. It contained, in 1840, 4934 neat cattle, 2407 sheep, 10,067 swine, and produced 56,683 bushels of wheat, 97,603 of Indian corn, 53,692 of oats, 35,535 of potatoes, and 45,560 pounds of sugar. It had five commission houses engaged in foreign trade, and twenty-one retail stores; three flouring-mills, seven grist-mills, twenty-seven saw-mills, two tanneries, four distilleries, one brewery, two printing-offices, two weekly newspapers, one college, 38 students, 23 schools, 690 scholars. Pop. 5011.

BERTHOUD, or BURGDORF, a town of Switzerland, cant. Berne, on a hill on the bank of the Emmen, 13 m. N.E. Berne. Pop. 2000. There is a public library and a castle, in which Pestalozzi laid the foundations of his establishment. A newspaper called the *Volksfreund* (Friend of the People) is published here. The commercial business of the place is rather important, it being the depôt for the Emmenthal cheese.

BERTIE, county, N. C. Situated in the N.E. part of the state, and contains 1000 sq. m. Bounded E. by Chowan river, and S. and S.W. by Roanoke river. Watered by Cashie r. and its branches. It contained, in 1840, 9484 neat cattle, 7222 sheep, 39,448 swine, and produced 2830 bushels of wheat, 545,185 of Indian corn, 6504 of oats, 65,444 of potatoes, 2,121,449 pounds of cotton, 22,439 barrels of tar, pitch, and turpentine. It had seventeen stores, twenty-four grist-mills, ten saw-mills, thirty tanneries, eighty-two distilleries, 14 schools, 294 scholars. Pop.: whites, 5144; slaves, 6728; free coloured, 303; total, 12,175.

* Hugo says nothing of the theatre, nor is it mentioned by some other authorities, but it is specified in the *Dict. Geographique.*

BERTINORO, a town of the Papal States, prov. Romagna, on a mountain having the Ronco at its foot, 7 m. S.E. Forli; lat. 44° 19′ N., long. 12° 9′ 15″ E. Pop. 4000. It is the seat of a bishopric; has a cathedral and four parish churches. The wines produced in its environs have a considerable reputation.

BERTRAND, p. t., Berrien co., Mich., 186 m. W. by S. Detroit, 631 W. Watered by St. Joseph's river. It contains two stores, one flouring-mill, two grist-mills, six saw-mills, one distillery, 5 schools, 246 scholars. Pop. 1298. The village is situated on the E. side of St. Joseph's river, and has several stores, considerable trade, and about 600 inhabitants, and is advancing in wealth and population.

BERVIE, or **INVERBERVIE**, a royal bor. and sea-port of Scotland co. Kincardine, on the coast-road from Dundee to Aberdeen, on the S. bank of the small river Bervie, where it joins the sea. Pop. (including Gourdon), 995. It was created a royal burgh in 1362 by David II., who, after having narrowly escaped shipwreck on the coast, and having been kindly treated by the inhabitants of this small fishing village, testified his gratitude by conferring on it the honour in question. The inhabitants have from the earliest period been employed chiefly as fishers. They engage not only in the salmon and whale fishings in the mouth of the river and on the coast, but in the herring fisheries on the N. shores of Scotland. Manufactures, also, have been introduced into the burgh; namely, the duck and dowlas linen weaving, which affords employment to 112 persons. This employment is furnished by manufacturers of Montrose, Arbroath, and Aberdeen. In addition to periodical markets, there is a grain-market, which is well attended. The quantity of grain annually purchased here is about 40,000 qrs., of which nearly the whole is shipped at Gourdon, a port about 1 m. S. of the town, where have lately been erected large and excellent granaries. The harbour at the mouth of the Bervie is very inferior to that at Gourdon, and admits only small vessels and boats. The staple business of this latter place, however, is fishing. Bervie joins with Montrose, Arbroath, Forfar, and Brechin, in sending a mem. to the H. of C. Registered electors in 1838, 40.

BERWICK, a marit. co. of Scotland, having N. and N.E. East Lothian and the German ocean, and on the S.E., S., and W., part of England and the cos. of Roxburgh and Mid-Lothian. Area, 262,880 acres, of which about 120,000 are arable. The N. parts of the co. are occupied by the cold, bleak, unproductive range of the Lammermoor hills; but the Merse or level portion, lying between the Lammermoor hills and the Tweed, by which the co. is separated from England, comprising about 100,000 acres, is one of the most fertile and best cultivated districts in the empire. The farms in the Merse are large, the farmers opulent and intelligent, and the land cultivated according to the most approved principles of the modern husbandry. Wheat and turnips are here the great objects of attention; but barley and oats are also raised in considerable quantities. Steam-power is employed in several thrashing-mills in this co. Few small, but no very large estates. Average rent of land in 1810 (from which, probably, it does not differ materially in 1839), 16*s.* 5*d.* an acre. The Lammermoor hills are principally depastured by sheep of the Cheviot breed. The co. is rather scantily supplied with wood, but some proprietors have made considerable plantations. Manufactures and minerals, of no importance. Principal rivers, Tweed, Whittadder, Blackadder, and Leader. Berwickshire contains 33 pars.; and had, in 1831, 7405 inhab. houses, 7385 families, and 34,427 inhab. The co. returns one mem to the H. of C. Registered electors, 1838–9, 1167; and the bor. of Lauder joins with Haddington and other bors. in returning a mem. Dunse is the co. town. Valued rent, £178,366 Scotch. Ann. val. of real prop. in 1815, £245,379.

BERWICK-UPON-TWEED, a fortified town and sea-port of England, N.E. extremity of the kingdom, on the N. bank of the Tweed, and close to its mouth, 300 m. N. by W. London; lat. 55° 46′ 91″ N., long. 1° 59′ 41″ W. Pop., in 1821, 8723; in 1831, 8920: houses at the latter date 1286. It is built on the declivity and flat summit of an elevation rising abruptly from the estuary of the river; many of its streets are narrow and irregular; but the principal one is spacious, well paved, and lighted with gas; and, on the whole, the town has a respectable appearance, and contains many well-built houses. It is connected with its suburbs, Tweedmouth and Spittal, on the S. side of the river, by a stone bridge of 15 arches, built in the reign of Charles I.: these are meanly built villages, the inhab. being almost wholly employed in the fisheries, or the businesses connected with them. Spittal, however, is occasionally resorted to by visiters for sea-bathing, and there are a few respectable lodging-houses for their accommodation. The pop. of these suburbs, in 1831, amounted to 4000; and as they are now included in the parl. bor., the pop. of the latter, at the above-mentioned date, was 12,920; and it is believed to have undergone very little change in the interim. The present fortifications of Berwick were erected in the reign of Elizabeth, and are about 1¾ m. in circ., forming an irregular pentagon: a battery of 22 guns commands the English side, and a 4 and 6 gun battery defends the entrance of the harbour. The ramparts form an agreeable promenade. The Tweed is navigable as far as the bridge, beyond which the tide flows about 7 m. The harbour is defended by a pier ¼ m. in length, with a light-house at the head, projecting in a S.E. direction from the N. extremity of the river's mouth. But notwithstanding the protection afforded by this barrier, and though there be 18 ft. water over the bar at ordinary tides, and 26 at springs, the harbour is very indifferent: the channel is very narrow: a large portion of the harbour, particularly on the Berwick side, dries at low water, and is rocky and incapable of being deepened; and after heavy rains the *freshes* run out with great violence. The chief public structures are, the church (in the decorated Gothic style), built in the time of the Commonwealth, and, consequently, without a tower; seven dissenting-chapels; a free grammar-school, and six other free schools, supported by the corporation, and educating in all about 300 children. The town-hall, in the centre of the high street, with a spire and ring of bells: the under part of which (called the Exchange) is used as a market-place; over it are halls for the courts of justice and corporation-meetings; and above these is the gaol: a pauper lunatic asylum; a dispensary, through which medical relief is afforded to the poor resident within 12 m.; a theatre; a public library; and assembly rooms. There are annual races in July, the course being at Lamberton, 5 m. distant. There is a good supply of water brought from a spring 1½ m. off, to several public conduits conveyed by pipes to the more respectable houses. At the N.W. end of the town are infantry barracks. There is an iron foundry near the bridge, on the Tweedmouth side, which employs from 60 to 70 hands, and at which steam-engines, mill machinery, &c., are made. This is the only manufactory of any kind in the place or neighbourhood, although there are several coal mines within 2 or 3 m. of the town, on that side the river, and also available water-power. The fisheries form the principal business of the place. Those of salmon in the Tweed have long been among the most celebrated and productive of any in the empire. Latterly, indeed, both their produce and rental, though still very considerable, have greatly declined. The principal fisheries are within a short distance of Berwick; and the fish, excepting a small portion retained for home consumption, is all packed in ice, and shipped for the metropolis. (*See* TWEED.) Trout, whiting, &c., also abound in the Tweed.

The sea fishery of the bay consists chiefly of cod, ling, holibut, haddock, and whiting: crabs and lobsters also abound, and these last are forwarded to the London market. The imports consist chiefly of timber, staves, iron, hemp, and tallow, from Norway and the Baltic, and of groceries, &c., coastwise; the exports, of salmon, corn, wool, and other agricultural products, coals to London and a few other ports coastwise. Ale, from the Ednam brewery, and whisky, from the distilleries of Gunsgreen and Kelso, have also, of late years formed part of its exports to the metropolis. There used also to be a large export of eggs, but it has been nearly annihilated in consequence of their being obtained cheaper from the continent. One vessel belonging to the port is engaged in the Greenland fishery. The customs duties, in 1836, were £7189 11*s.* 5*d.* There belonged to the port, in the same year, fifty-nine vessels of 4926 tons burden. By a treaty between Edward VI. and Mary II., of Scotland, it was made a free town, independent of both kingdoms; but, by the recent Municipal Reform Act, it is constituted an English co. for all purposes except parliamentary elections. Its present municipal limits comprise that portion of the par. on which the town stands and the suburbs of Tweedmouth and Spittal, excluding all the agricultural portions. It is divided into three wards, and has eighteen councillors.

The revenue of the corporation is derived from town and harbour dues; rental of the fisheries, tenements, and tithes in Berwick; lands (including collieries) on the W. side of the river, and a tract called Meadows and Stints; the whole averaging £10,000 a year. Their debt, in 1835, amounted to £55,411. The tract last named lies near the town, and was granted to the corporation by James I. It is divided in three portions: the first is let in farms, and the rent appropriated to defray the general expenses of the corporation; the second is subdivided in parcels of 1½ to 2½ acres, whose value varies from £1 14*s.* to £9: there are 954 of these, called meadows; the third is parted in farms of about 40 acres each, the rents of which are each divided in 11 or 22 equal parts, called stints; of these, there are 561. These meadows and stints are allotted to the burgesses for life, with remainder to their widows; and, as vacancies occur, are allotted to others at annual public meetings held for the purpose, and called "meadow and stint guilds."

The first English charter of Berwick was in 30th Edw. I., by which it was made a free borough, with a market and fair: others, in 30th Edw. III., and 22d Edw. IV., confirm the laws and privileges originally enjoyed under Alexander I. of Scotland. The governing charter, previously to the Municipal Reform Act, was granted in 2d James I. The assessment of the town for lighting, paving, &c., averages about £450 a year. The annual value of real property in Berwick, in 1835, was £29,666; in Tweedmouth township, £12,086 13*s.* 4*d.* Under the Poor Law Amendment Act, Berwick is the central town of a union of 20 parishes and chapelrie: its own rates average £3638, and it has 9 guardians. The town has returned two mem. to the H. of C. since the reign of Mary. Previously to the Reform Act, the privilege was restricted within the limits of the ancient bor., and to the free burgesses. Rateable tenements, in 1831, 458; registered electors in 1838, 725.

The first authentic notice of Berwick occurs in the early part of the 12th century, when it belonged to Scotland, and was the chief town of Lothian. During the reigns of Alex. I., David I., and Malcolm IV., it had a castle, and several churches and religious establishments. It was at that period the chief sea-port of Scotland, and one of the four royal burghs. Its castle was surrendered to England in 1174, under a treaty for the ransom of William the Lion; subsequently to which it was repeatedly taken and retaken, being, from its frontier situation, almost invariably the first object of attack at every renewal of hostilities, till, on the accession of James VI. of Scotland to the English throne, its importance in this respect ceased. During the last civil war it was garrisoned by the parliamentary forces. (*Redpath's Border Hist.; Baines's Hist. North Durham; Parliamentary Reports and Papers.*)

BERWICK (NORTH), a royal burgh, par., and sea-port of Scotland, co., Haddington, at the S. entrance to the Frith of Forth, 22 m. E. Edinburgh. It was created a burgh by James VI. Pop. of burgh and par., in 1831, 1834. The burgh consists of two main streets, one running E. and W., the other leading N. to the harbour. It is a place of little or no trade, and has no manufactures. Its pier is good; but its harbour, which is dry at low water, is difficult of access. From its being in the neighbourhood of one of the best corn-growing districts of Scotland, grain is a considerable article of export. It is a good deal frequented in summer as a bathing-place. It joins with Haddington, Dunbar, Lauder, and Jedburgh, in sending a mem. to the H. of C. Registered electors, 1838-39, 30. About 2 m. to the E. of the burgh stands the famous castle of Tantallan, one of the strongholds of the Douglas family; and nearly opposite Tantallan is the Bass, which see.

BERWICK, p. v., Brier creek t., Columbia co., Pa., 17 m. N. by E. Harrisburg, 28 S.W. Wilkesbarre, 207 W. Situated on the N. side of Susquehanna river, and connected with Nescopec village on the opposite side of the *r.* by a covered bridge, 1256 feet long, which cost $52,435. It contains a Methodist church, five stores, 100 dwellings, and 800 inhabitants. The Pennsylvania canal passes through the village.

BERWICK, t., York co., Me., 16 m. N.W. Portsmouth, 103 S.W. Augusta. Bounded S.W. by Salmon Falls river, which affords water-power. The town contains five stores, one grist-mill, five saw-mills, four tanneries, one pottery, 15 schools, 640 scholars. Pop. 1698.

BERWICK, t., Adams co., Pa., 41 S.W. Harrisburg, 11 m. E. Gettysburg. Conewago creek bounds it on the W., and Beaver cr. on the E. It contains five stores, three flouring-mills, three grist mills, two saw-mills, three tanneries, three distilleries, one printing-office, two weekly newspapers, 6 schools, 493 scholars. Pop. 1462.

BESANCON, a town of France, cap. dep. Doubs, on the river of that name, by which it is intersected, 47 m. E. Dijon. Lat. 47° 13′ 45″ N., long. 6° 2′ 45″ E. Pop. (town *ex* cant.) 24,790. It is very strongly fortified, and is one of the bulwarks of France on the side of Switzerland. The works were improved by Vauban; but they have been since much extended and strengthened. Exclusive of the fortifications round the city, it has an extremely strong citadel, on an almost inaccessible rock, and outworks on some of the adjoining heights. The town is generally well built; but its streets are narrow and gloomy, "*et ses constructions ont une sévérité, une uniformité de style, qui leur donne une grande monotonie.*" The part called the city is almost surrounded by the Doubs; the communication with the suburb on the opposite bank, called Arènes, being kept up by an old, narrow, inconvenient bridge. Principal buildings, the cathedral, hotel of the prefect, hall of the courts of justice, the royal college, erected in 1697, the arsenal, hôtel de ville, barracks, theatre, public library, containing 50,000 volumes, exclusive of manuscripts, and several fine public fountains. The hospital of St. Jacques is a vast establishment, with 500 beds, and is said to be extremely well managed. A Roman triumphal arch, though a good deal mutilated, still exists, and serves as a sort of portico to the cathedral. Besançon is the seat of an archbishopric, of a royal court for the depts. of Doubs, Jura, and Haute Saone, with tribunals of primary jurisdiction and commerce. The university, which existed previously to the revolution, has been replaced by an *académie universitaire*, or *faculté des lettres;* and it has also a royal college of the second class, with about 250 pupils; a diocesan seminary, a secondary medical school, a primary model school, two schools for the instruction of deaf and dumb, a royal academy of science and belles-lettres, a lyceum, a society of agriculture and arts, a museum of antiquities, and a free school of design and sculpture for 120 pupils. There is, adjoining to the town, a house of correction and refuge. Watch-making, introduced from Switzerland about 45 years ago, is the most important branch of industry carried on here. It employs about 2000 hands, who annually furnish above 60,000 watches. About 200 work-people are employed in the carpet manufacture, and there are besides fabrics of jewellery, hosiery, hats, hardware, including coach and carriage springs, gloves, &c. Its breweries and tanneries are both on an extensive scale. Among other articles, it annually furnishes about 600,000 bottles of Seltzer water: it is also the seat of a considerable and growing commerce.

Besançon is very ancient. It was laid waste by Attila; and has since undergone many vicissitudes. It came, along with Franche Comté, into the possession of France in 1674. (*Huge, art. Doubs; Diction. du Commerce; Dict. Géog.*)

BESSARABIA, or EASTERN MOLDAVIA, the most southwesterly prov. of Russia in Europe, having E. the Dniester, S. the Black sea and the Danube, W. the Pruth, and N. Gallicia. The estimates of its area differ exceedingly, Hassel giving it 891, and later authorities only 433 German sq. m.! Perhaps it may amount in all to from 12,000 to 14,000 Brit. sq. m. Pop. in 1830, 504,000. Exclusive of the great rivers by which it is nearly surrounded, it is intersected by several considerable streams, most of which, however, are either wholly dried up, or greatly diminished during the heats of summer. The N.W. portion, contiguous to Gallicia, is hilly, or, rather, mountainous, and is occupied by extensive forests, but elsewhere the surface is nearly flat; soil abundantly fertile, and, with the exception of the tract along the Danube, which is marshy and encumbered with lakes, it is suitable for most agricultural purposes. "No trees, a few shrubs only, are observed near the rivers; the lakes, or stagnant waters, are covered with reeds, and in the plains between the marshes, the ox, buffalo, and bisons, wander among pastures where the herbage rises to the height of their horns. In the cultivated land millet yields 100, and barley 60 fold. The horse and the sheep exist in a wild state." (*Malte-Brun*, vi., 379, Eng. trans.) But there can be no question that these returns are very greatly exaggerated. Wheat, barley, and millet, are the only species of corn that are raised; and, according to Hassel, they yield from 8 to 20 for 1; and even this, we have little doubt, is decidedly beyond the mark. According to the official accounts, 129,141 chetwerts, sown in 1829, produced a return of 651,320 chetwerts, that is, of about 5 to 1; and in 1830 the return was not so great. Hemp, flax, and tobacco, are produced in considerable quantities. The breeding of cattle is the principal business of the inhabitants, and they are largely exported, with hides, tallow, &c. With the exception of tanneries, distilleries, and tallow and soap-works, there are either no manufacturing establishments in the country, or none worth notice. Large quantities of salt are produced from the lakes contiguous to Akerman (which see). A good deal of inferior wine is made. Education is at the very lowest ebb; there being in 1830 only 838 pupils at *all* the seminaries in the prov. (*Schnitzler, La Russie, &c.; Russian Official Ret.*)

BESSE, a town of France, dep. Puy de Dôme, cap. cant., 20 m. S.S.W. Clermont. Pop. 2027. It is built of basalt, in the middle of a volcanic country; and the environs offer several natural curiosities. It has some trade in cattle and cheese.

BESSINES, a town of France, dep. Haute Vienne, cap. cant., on the Gartempe, 10 m. E. Bellac. Pop. 2713.

BETHANY, p. t., New Haven co., Ct., 46 m. S.W. Hartford, 316 W. Taken from the N. part of Woodbridge in 1832. Watered by a branch of West river. It contains one Congregational and one Episcopal church, five stores, one flouring-mill, two saw-mills, one fulling-mill, two tanneries, one academy, 38 students, seven schools, 210 scholars. Pop. 1719.

BETHANY, p. t., Genesee co., N. Y., 252 m. W. Albany, 370 W. Drained by Little Tonawanda and Black creeks. It contains two stores, two furnaces, two grist-mills, five saw-mills, one academy, 151 students, fifteen schools, 462 scholars. Pop. 2288. The village contains two churches, thirty-five dwellings, and about 200 inhabitants.

BETHANY, p. b., Dyberry t., capital of Wayne co., Pa., 2 m. N. Honesdale, 165 m. N.E. Harrisburg, 272 W. Site

ated on Dyberry creek. Incorporated in 1821. It contains a court-house, county offices, which are fire proof, one Presbyterian church, eight stores, three fulling-mills, one flouring-mill, one glass-factory, one glass-cutting establishment, two printing-offices, two weekly newspapers, one academy, 36 students, one school, 55 scholars, fifty dwellings, and 299 inhabitants.

BETHEL, p. t., Oxford co., Me., 18 m. N.W. Paris, 63 m. W. Augusta, 603 W. Incorporated in 1796. Watered by Androscoggin river. It contains one academy, 80 students, twenty-three schools, 716 scholars. Pop. 1904.

BETHEL, p. t., Windsor co., Vt., 34 m. S. by W. Montpelier, 483 W. Chartered in 1779. Watered by White river and its branches, one of which affords good water-power. It contains an inexhaustible quarry of steatite or soap-stone, which is extensively wrought and exported. It has six stores, two fulling-mills, two woollen-factories, two grist-mills, seven saw-mills, three tanneries, fourteen schools, 536 scholars. Pop. 1886.

BETHEL, p. t., Sullivan co., N. Y., 60 m. W. Newburg, 121 m. S.S.W. Albany, 303 W. Drained by branches of Delaware river. The outlet of a pond affords water-power. It contains three stores, one fulling-mill, two grist-mills, eight saw-mills. Pop. 1483.

BETHEL, p. t., Berks co., Pa., 52 m. E. Harrisburg, 162 W. Little Swatara and Grosskil creeks afford water-power. It contains five stores, one fulling-mill, one woollen-factory, four grist-mills, six saw-mills, two tanneries, four distilleries. Pop. 1458. The village contains one church, common to German Presbyterians and German Lutherans, and about thirty dwellings.

BETHEL, t., Bedford co., Pa., 21 m. S.E. Bedford borough. Drained by Great Conoloway creek, a branch of Potomac river. It contains one store, five grist-mills, seven saw-mills. Pop. 1402.

BETHEL, t., Delaware co., Pa., 22 m. S.W. Philadelphia. Watered by a branch of Chester creek. It contains one store, two flouring-mills, three grist-mills, eight saw-mills, three tanneries, one distillery. Pop. 386.

BETHEL, t., Lebanon co., Pa., 7 m. N. Lebanon borough. Watered by Swatara creek and its branches. It contains four stores, one furnace, three grist-mills, one saw mill, two tanneries, two distilleries, three schools, 120 scholars. Pop. 1662.

BETHEL, t., Clark co., O., bounded S.E. by Mad river. It has ten schools, 509 scholars. Pop. 2033.

BETHEL, t., Posey co., In. Pop. 449.

BETHEL, t., Branch co., Mich. It has three schools, 46 scholars. Pop. 335.

BETHEL, t., Monroe co., O. Pop. 545.

BETHEL, t., Miami co., O., bounded W. by Miami river. It has one store, two saw-mills, six schools, 204 scholars. Pop. 1574.

BETHLEHEM (*Beit-el-Lahm, House of Bread*), a famous town of Palestine, 6 m. S. Jerusalem: lat. 31° 44′ N., long. 35° 15′ E. Pop. from 3000 to 4000, of whom by far the greater part are Catholic, Greek, and Armenian Christians. A splendid church, erected by the Empress Helena, stands over a grotto or cave, said to be the birth-place of Christ. Connected with the church are convents for the three sects of Christians noticed above, of which that belonging to the Latins is a fine building; but more resembling, externally, a fortress than a religious establishment. Some remains of an old aqueduct, formerly 16 or 18 m. in length, exist on the W. side of the town; but the chief buildings consist of almost innumerable chapels, and other memorials of holy persons, and of the events for which the place and neighbourhood are celebrated in sacred history. The houses of the inhabitants are mean in the extreme.

The country round Bethlehem is extremely fruitful, yielding figs, grapes, olives, and sesamum in great abundance; but here, as in other parts of this neglected land, cultivation is wanting. There is no deficiency of water; three extensive reservoirs, called the pools of Solomon (Eccles., ii., 6), and a copious fountain, said to be the "*sealed fountain*" of the same prince (Sol. Song, iv., 12), lie on the S.; on the N.W. is a large cistern of rain water, said to be the "well by the gate," whence David's mighty men drew water, while the place was in the hands of the Philistines (2 Sam., xxiii., 16); and the whole neighbourhood abounds in springs and rills.

The tract between Bethlehem and Jerusalem is the valley of Rephaim (*Giant's Valley*, Josh., xv., 8), the scene of many combats between the Jews and Philistines. (2 Sam., v., 18, *et al.*) Here are shown many pretended relics of the Scriptural age; as the house of Simeon, the tomb of Rachael, the village of Rama, the cave of Engadi, the well in which was seen the star of the Messiah, and many others. The original name of Bethlehem was Ephrath (Gen., xxxv., 19); a term which, like its present designation, referred to the fertility of its soil. It was never very considerable in respect to size (Micah, v., 2), but seems to have been always regarded as important; and being the scene of the pastoral tale of Ruth, and the birth-place of David and Jesus Christ, it has acquired a celebrity hardly surpassed even by that of Jerusalem. It was fortified by Rehoboam (2 Chron., xi., 6), and, in a subsequent age, the Emperor Hadrian is said to have built a temple here to Adonis. Of this, however, no vestige remains. The present inhabitants enjoy a considerable share of liberty: they are bold and hardy, and successfully resist every attempt at oppression by their governors. They are consequently stigmatized by the Turks as of a rebellious spirit. There was formerly another Bethlehem, more to the N., belonging to the tribe of Zabulon, Joshua, xix., 15. (*Maundrell*, 116–123; *Volney*, ii., 270, 271; *Robinson*, i., 128–156; *Abul-Feda, Tab. Syr.*, 183.)

BETHLEHEM, p. t., Grafton co., N. H., 88 m. N.W. Concord, 549 W. Watered by Great Ammonoosuc river. Incorporated in 1799. It contains one store, one fulling-mill, two grist-mills, three saw-mills, eleven schools, 285 scholars. Pop. 779.

BETHLEHEM, p. t., Hunterdon co., N. J., 12 m. N.W. Flemington, 40 m. N. by W. Trenton, 202 W. It contains one Presbyterian church, five stores, five grist-mills, three saw-mills, one oil-mill, four tanneries, six schools, 166 scholars. Pop. 2370.

BETHLEHEM, t., Albany co., N. Y., 5 m. S. Albany. Several streams flowing into Hudson river afford water-power. It contains seven stores, four fulling-mills, three woollen-factories, one grist-mill, two saw-mills, and has 800 scholars in schools. Pop. 3238.

BETHLEHEM, p. b., Northampton co., Pa., 58 m. N. by W. Philadelphia, 93 m. E.N.E. Harrisburg, 186 W. Situated on the N. side of Lehigh river, at the mouth of Monokicy creek. First settled in 1741 by Moravians under Count Zinzendorf. The ground rises gradually from the river and the creek, giving the village a commanding situation. It is compactly built on a street running N. and S., from which two other streets proceed E. from the main street. The ground was purchased by influential individuals among them, and the early supplies of the colonists, who were generally poor, by loans. The fee of the lands is held as security for the payment of the loans, and the avails of the lease of them is devoted to the payment of the interest of the loans, and for the ultimate payment of the principal. The society is distinguished by great simplicity of manners and their love of music, which is used not only in their religious services, but in the burial of their dead. A solemn requiem is sung on a dome of the church on the death of a person, and after remaining three days in the "corpse-house" it is borne to the grave accompanied by music. The grave-yard is divided into plots, by avenues planted with trees, and separate parts are devoted to males, females, adults, children, and strangers. Each grave has a marble slab on it, about a foot square, on which is inscribed only the age and birth-place of the deceased. The graves have the head to the N. This community has supported missions, particularly among the German population of the state, and the Indians. The village contains a large stone church of Gothic architecture, 142 feet long and 68 feet wide, with a tower rising from the centre, surmounted by an elegant dome. The village is supplied with water from a large spring at the foot of a hill, from which it is raised by water-power 114 feet perpendicularly, to a reservoir on its summit, whence it is distributed in iron pipes to every street. It contains 200 dwellings besides other buildings. A bridge 400 feet long crosses the Lehigh. The Lehigh canal passes through its lower part. It is particularly distinguished for an excellent boarding school for young ladies, founded in 1788, in which many ladies from the cities in the Middle states have been educated. It has, on an average, seventy boarders. The village contains four stores, one furnace, four flouring-mills, five grist-mills, one saw-mill, one distillery, one brewery, two tanneries, one college, 8 students, two academies, 175 students, two schools, 169 scholars. Pop. 1629.

BETHLEHEM, p. t., Stark co., O., 190 N.E. Columbus, 327 W. Watered by Tuscarawas river. The Ohio canal passes through it. It has several stores, three schools, 82 scholars. Pop. 2019. The village is situated on the Ohio canal.

BETHLEHEM, t., Coshocton co., O., drained by Walhonding river. Pop. 827.

BETHLEHEM, p. t., Litchfield co., Ct., 43 m. W.S.W. Hartford, 32 m. N.W. by W. New Haven, 315 W. It contains two churches, one Congregational and one Episcopal; two stores, one fulling-mill, one grist-mill, four saw-mills, two distilleries, nine schools, 200 scholars. Pop. 776.

BETHUNE, a town of France, dep. Pas de Calais, cap. arrond., on a rock, at the foot of which is the Brette, 18 m. N.N.W. Arras. Pop. (town *ex* cant.) 4495. It is well fortified, by works partly constructed by Vauban. Its plan is that of an irregular triangle; the citadel, which is isolated, occupying one of the angles. It has a tribunal of primary jurisdiction, a communal college, two hospitals, manufactures of linen and cloth, breweries, and a considerable

trade in linen, cheese, and rape oil; the canal of the Leve, which unites with the Lys, facilitating its trade. It was taken by the allies in 1710, but was restored to France by the treaty of Utrecht. (*Huge*, art. *Pas de Calais.*)

BETLIS, or BITLIS, a town of Turkish Armenia, 18 m. W. from the W. extremity of Lake Van, and about 130 m. E. by N. Diarbekr; in probably about lat. 38° 35′ N., long. 42° 50′ E.* It stands in a wide ravine, open to the E., but closed by high mountains to the W.; the houses being dispersed over the steep banks of a stream which runs through it, and on several of the neighbouring hills; it is, therefore, most irregular. The houses are built of red stone, and are generally of two stories, with grated windows to the streets, the latter being paved with round stones. The houses being much scattered and intermingled with gardens, the town covers a large extent of ground: it is not enclosed by a wall, and this is hardly necessary; each house being, in fact, a pretty strong fortress. It is said to contain 1500 houses, of which 300 belong to Armenians; and if so, its population may amount to about 9000. It contains four caravanseras, three large and twelve small mosques, three baths, eight Armenian churches, and one Nestorian. The most remarkable object in the town is the old castle, in its centre, on a rock 30 feet in height, and built up with thick walls to an elevation of 100 feet. There are a considerable number of butchers, bakers, gunsmiths, and silversmiths; but the principal manufacture consists of coarse cotton cloth, and tobacco. The territory produces fruits and vegetables in perfection. The army of the Turkish sultan, Soliyman the Magnificent, sustained a signal defeat by the Persians, near Betlis, in 1554. (These particulars have been derived from Colonel Shield's paper in the *Journal of the Geographical Society*, viii., 73; see also *Kinneir's Persia*, p. 330, &c.)

BEUTHEN, a town of the Prussian states, prov. Silesia, reg. Oppeln, cap. circ. 35 m. N.E. Ratibor. Pop. 3300. It has three Catholic churches, three convents, with fabrics of coarse cloth, pottery, zinc, and calamine, and breweries. There is another town of the same name in Silesia, reg. Lignitz, on the Oder, 12 m. W. by N. Glogau. Pop. 2600. It has fabrics of cloth, earthenware, and straw hats, and some boat building. Its environs are very fertile.

BEVEREN, a town of Belgium, prov. E. Flanders, 6 m. W. Antwerp. Pop. 6050, com. included. It stands on the road from Antwerp to Ghent, is well built, and has a fine church, with a lofty spire. About 2000 women are employed in the lace manufacture, and there are several breweries, tanneries, &c.

BEVERLEY, a parl. bor. and market town of England, E. riding co. York, of which it is the cap., near the Hull river, to which it is united by a canal, 157 m. N. London, 28 m. E.S.E. York, and 9 m. N.N.W. Hull. Pop. of parl. bor., that is, of the old bor. and liberties, 1821, 7503; 1831, 8302. It is believed to owe its origin to an ancient monastery, which, after having been sacked by the Danes in 867, was restored by Athelstan, who granted the place several privileges, and made the monastery a sanctuary for criminals. It is a well-built, handsome town; in fact, "very few towns in England can compare with Beverley in cleanliness and general neatness of appearance. It deserves to be represented as most respectable and substantial." (*Boundary Report.*) The great glory of Beverley is the minster, or collegiate church of St. John, which, in size and beauty of architecture, is far superior to many cathedrals. This splendid structure, which has been erected at different periods, in what are called the decorated and perpendicular English styles, is 334 feet from E. to W., the length of the great cross aisle is 167 feet, and the two towers at the W. end are each 200 feet in height. The W. front is said by Mr. Rickman to be the finest of its kind in England. Near the altar is the seat of refuge, with an inscription assuring criminals of their safety while there, and a tablet with effigies of St. John of Beverley and Athelstan. The parishes of St. John and St. Martin have the minster as a church common to both. It is kept in excellent repair by the rent of estates appropriated to that purpose by Queen Elizabeth and Sir Michael Warton. St. Mary's church is also a magnificent structure in the old Norman style; and lands producing above £800 a year have been left for its support. The churches of St. Martin and St. Nicholas are in ruins. The Primitive and Wesleyan Methodists, Independents, Baptists, and Society of Friends, have chapels here. The sessions-house, and house of correction for the E. riding, are situated in the immediate vicinity of the town: the latter, which is a very large establishment, and constructed on the most approved principles, cost above £40,000. Here also is the Register-office for the E. riding. The endowed schools are, a grammar school, of great antiquity, to which is attached two fellowships, six scholarships, and three exhibitions to St. Johns, Cambridge; a Blue-coat School, founded in 1709; Graves's School, founded in 1804; and schools on the systems of Lancaster and Bell. There are also several almshouses, a hospital, dispensary, mechanics' institute, public reading-rooms, a savings' bank, a theatre open occasionally, and assembly-rooms. Races are held near the town every June. The corporation of "the town and liberties of Beverley," consisting of a mayor, recorder, twelve aldermen, thirteen capital burgesses and freemen, who hold by birth, apprenticeship, purchase, or gift, enjoys several valuable privileges; the principal are, exemption from tolls throughout England, from sitting on juries without the borough, and from the jurisdiction of the sheriffs of York; the burgesses have also the right of pasture for thirteen head of cattle each, on a common of about 1900 acres. The corporation holds a criminal court, with power of life and death, which, however, is never exercised; a court of session, called the Provost's Court, for all pleas to any amount, except those for landed property; and a court of request for debts under £5. The public business is transacted in the Haligarth or Guildhall, where the quarter sessions for the riding are held. The elective franchise, granted by Edward I., was not exercised till the beginning of Elizabeth, since which time the borough has continued to return two members to the H. of C., the right of election, previously to the Reform Act, being vested in the freemen, whether resident or not. The electoral boundaries comprise the parishes of St. Mary, St. Martin, and St. Nicholas, and the part of St. John's within the liberties. Constituency, in 1837–38, 1062. The election for the members of the E. riding is held here. The town is situated in a fertile country, and has an extensive retail trade; tanning is also extensively carried on. Near the town is a large factory for paints, cement, and Paris white, which last is made from the cliff-stone raised at Queen's Gate, and found to be peculiarly adapted to the purpose: there are also factories for patent wrought-iron wheels, and for fancy ironwork and agricultural implements of all descriptions. A brisk corn trade is carried on. Markets for general purposes on Saturdays, and for cattle on alternate Wednesdays, held in an enclosed area of four acres, ornamented by a stately cross resting on eight columns. There are here eight great cattle fairs. Two private banking-houses, a branch of the Hull Banking Co., and a saving's bank have been opened here. Fisher, bishop of Rochester, who suffered martyrdom under Henry VIII., was a native of the town. (*Allen's Hist. of Yorks.; Bigland's Yorks.; Sessional Papers.*)

BEVERLY, p. t., Essex co., Mass., 16 m. N.E. Boston, 456 W. Incorporated in 1668. It is connected with Salem by a bridge, built in 1788, 1500 feet long. It has considerable navigation employed in the coasting trade and the fisheries. The Eastern rail-road passes through it. It contains four churches, two Congregational, one Unitarian, and one Baptist, a bank with a capital of $100,000, one foreign commercial house, twenty-two retail stores, two grist-mills, one saw-mill, one ropewalk, one academy, 29 students, ten schools, 898 scholars. Pop. 4609.

BEVERLY, p. v., capital of Randolph co., Va., 205 m. N.W. Richmond, 232 W. Situated on the E. Fork of Monongahela river, and built on three parallel streets. It contains a court-house, jail, and county offices, and twenty dwellings. The country around it is fertile and well cultivated, and, for several miles in every direction, appears like an extended village.

BEWDLEY, an ancient market town, bor., and chapelry of England, co. Worcester, 14 m. N.N.W. Worcester, 19 m. S.W. Birmingham, 108 m. N.W. London. Pop., 1831, 3998. It is locally in the hund. of Doddingtree, but has separate jurisdiction. It is built on the descent of a hill, on the W. bank of the Severn, over which there is a fine stone bridge. The more ancient part of the town was built at some distance from the river. It had formerly four gates, two of which were standing in 1811, but they have been since pulled down: the principal street is well built and paved. The town-hall is a fine modern building, erected on three arches, with handsome iron gates leading to the market-place. The church is a neat stone edifice, with a tower. A charter was granted by Edward IV., but the governing charter was given by James I., and confirmed by Anne. The corporation hold a court of sessions annually, and a court of record for all pleas, and for the recovery of debts not exceeding £100. The lord of the manor holds an annual court leet, at which constables and other officers are appointed. In the reign of Henry VI., Bewdley enjoyed many privileges; among them, that of being a sanctuary for persons who had shed blood. This town has sent one member to the H. of C. since 3d James I., who, previously to the Reform Act, was returned by the corporation, a self-elected body. The new boundary act defines the limits of the bor. to be the par. of Ribbesford, and the hamlets of Wribbenhall, Hoarstone, Blackstone, Netherton, and Lower Mitton, with Lickhill, having a pop. of from 7000 to 8000,

* There is a great discrepancy in the statements as to the latitude and longitude.

and about 500 qualifying tenements. Registered electors, in 1837–38, 400. There are several well-endowed charities. The manufacture of woollen caps, called Dutch caps, formerly flourished here, but has many years since disappeared. The principal trades and manufactures now existing are in salt, ironware, malt, tanning and currying leather, and making combs; besides which there are some rope-works and a brass-foundry. There is also a considerable carrying trade, connected with the Severn; near the town is a mineral spring. Market-day, Saturday. Fairs, 23d April, 24th July, and 11th December, for cattle, pedlary, &c. (*Boundary Report, &c.*)

BEX, a town of Switzerland, cant. Vaud, cap. circ., in the fertile plain of the Rhone, on the Avençon, 26 m. S.E. Lausanne. Pop. 3000. It is chiefly celebrated for the salt springs and salt mines in its vicinity.

BEYROUT, or BEIROUT (an. *Berytus*, Βηρυτος), a seaport town of Syria, on the S. side of an extensive bay open to the N., 48 m. S.S.W. Tripoli, 19 m. N.N.W. Sidon, and about 3 m. E. from Cape Beyrout, the latter being in lat. 33° 49′ 45″ N., long. 35° 27′ 54″ E. Pop. 12,000 or 15,000. There are here no public buildings of any beauty or importance, nor are many remains of antiquity to be met with; for though the modern town occupies the site of the ancient one, the latter was long since destroyed by repeated earthquakes, and the recent buildings are erected over the ruins of those which they have superseded. Along the shore, however, and in part under the water, are some mosaic pavements, fragments of columns, and (W. of the town) a thick wall, supposed to be of the time of Herod the Great. The bazars are large and well frequented; but there seems to be a deficiency of private shops, and the streets are, in general, narrow and crooked. A plentiful supply of water from a tolerably large river (*Nahr-Beyrout*), and a great number of wells, modify, in some degree, the heat of the atmosphere, and render the town much cleaner than the generality of those in the E. The walls (of a soft sandstone) are about 3 m. in circ., and the suburbs are perhaps equal in extent to the town itself. The neighbourhood is very fertile, producing all kinds of fruit; but the chief article of cultivation is the mulberry tree, an extensive and important manufacture being carried on here of silk goods especially of sashes. Beyrout had formerly a small port, formed by a strong mole, but its present mole or jetty is of very inferior dimensions, and is scarcely sufficient to shelter boats. There is, however, good anchorage ½ m. from the town, in six or seven fathoms; and large ships may anchor a little farther out in 10 or 11 fathoms. After centuries of neglect, it seems to be again rising into some importance as a place of trade. Its exports are—galls, madder, gums, silk (raw and wrought), wine, and oil. The imports are—muslins, cottons, tin, hardware, cloths, and West India produce: there are about 12 European establishments in the place, and, previously to 1829, the only English consul in Syria was resident here.

Berytus was a very ancient town of the Phœnicians, deriving its name, according to Stephen of Byzantium (art. Βηρυτος), from the number of its wells, the prefix *beer* signifying *a well* in the language of the country. Under the Romans it rose to great eminence, notwithstanding it had been entirely destroyed in the wars of Alexander's successors, about 80 years before the Roman conquest of Syria. Augustus planted in it a colony, gave it his daughter's name, with the addition of the epithet Felix (*Berytus Colonia Julia Felix; Pliny*, v. 20.) A school of law, established here in the beginning of the third century (probably by Alexander Severus), continued for 300 years, or till the town was overwhelmed by an earthquake in 551, to be the most celebrated institution of the kind in the empire (*Gibbon*, cap., 17). But the town again revived; and, under the Saracens, attained to considerable importance. It was frequently captured and recaptured during the crusades, at which period the mole, forming its port, was destroyed. In the 17th century it was, for a short while, the capital of the famous Druse Emir, Fakr-ed-Din, and latterly it fell into the hands of Djezzar, pasha of Acre, who built its present walls, cut a canal from the river to the town, erected several fountains, and otherwise improved and beautified the place. At present it is the capital of a small pachalic, the pacha being a French renegade, formerly a colonel in Napoleon's army. The Phœnician deity Baal-Beerith (Lord of Wells) is said to have been named from, or to have given name to, this place, which is also famous in Christian legends as the scene of St. George's victory over the dragon. (*Maundrell*, 50–47; *Volney*, ii., 156–159; *Robinson*, ii., 1–6, 35; *Addison*, ii., 4–12, 36–41.)

BEZIERS, a city of France, dep. Herault, cap. arrond., agreeably situated on a fertile hill, in a rich country, at the junction of the *Canal du Midi* with the Orb, 38 m. S.W. Montpelier: lat. 43° 20′ 31″ N., long. 3° 13′ E. Pop. (town ex com.) 14,710. At a distance the city has a fine appearance, but on entering the illusion vanishes. The houses are mean, and the streets narrow, crooked, and filthy. Its citadel has been demolished; but it is still surrounded by old walls, flanked with towers, round which is a newly-planted promenade. The cathedral, a Gothic building, has a noble interior, and its sharp towers and castellated walls give it at a distance the appearance of a superb Gothic mansion. The view from its terrace is extensive and delightful. One of the churches that existed previously to the Revolution is now the corn-market, and the ancient episcopal palace is the seat of the courts and government offices. Its convents have all been abolished. Beziers has tribunals of primary jurisdiction and commerce, a communal college, an agricultural society, a public library with 5000 volumes, and a theatre. It produces silk-stockings, dimities, parchment, verdigris, starch, gloves, glass, and highly-esteemed sweetmeats; but it is principally distinguished by its distilleries, which are extensive, and produce brandy, little, if at all, inferior to that of Cognac. Its situation makes it the centre of a considerable trade.

Beziers is very ancient; and the remains of an amphitheatre, and of cisterns and other Roman works, may still be recognised. In 1209, during the first crusade against the Albigenses, Beziers having afforded protection to numbers of the fugitives, was besieged by the Catholic army, who, having carried it by assault, committed, at the instigation of the pope's legate, an indiscriminate massacre of those found within its walls, whether heretics or not! It also suffered severely during the religious wars of the sixteenth century.

Barbeyrac, the learned translator and annotator of Grotius and Puffendorf; and Riquet, the engineer of the *Canal du Midi*, were both natives of Beziers. (*Hugo*, art. *Herault; Dictionnaire Géographique, &c.*)

BHADRINATH (*Badarinatha*), a small town in N. Hindostan, prov. Kumaon, in a valley of the Himalaya, 80 m. N. Almorah, and 10,294 ft. above the level of the sea; lat. 30° 43′ N., long. 79° 30′ E. It is remarkable only for a temple, much venerated by the Hindoos; said to possess 700 villages, in different parts of Gurwal and Kumaon, and visited annually by 50,000 pilgrims, from all parts of India. It has warm, sulphureous, and cold springs. (*Hamilton's E. I. Gaz.*, i., 224.)

BHAMO, or BANMO, one of the chief towns in the Birman emp., cap. of a Shan principality, and chief seat of the Chinese trade with Birmah; on an elevated bank of the Irrawadi, 170 m. N.N.E. Ava, and 20 m. W. the Chinese border; lat. 24° 10′ N., long. 96° 45′ E. Next to Ava and Rangoon it is the largest place in the empire, and contains 2000 houses, inhabited mostly by Chinese; is surrounded by numerous well-peopled villages, and defended by a wooden stockade. The houses in Bhamo and its district are better than those in most parts of the Birman dominions; those of the Chinese are built of brick, and those of the natives, of reeds, thatched with grass, and separately railed in: there is a good bazar. The trade in woollens, cottons, and silks, is wholly in the hands of the Chinese, who mostly arrive here in caravans in December and January, but 500 of them live constantly in the town, as well as many other foreigners.

The Shans, Shingphos, and others, purchase salt, *gnapee* (dried fish), and rice, in large quantities, especially salt, which fetches a very high price. All payments are made in silver; and, were it not for a prohibition of the export of bullion from the Birman empire, it might answer the purpose of some European merchants to settle here. The people appear opulent; have adopted in great part the Chinese costume; and wear more ornaments than in any town in Birmah. The revenue of the district, which is of no great extent, is said to amount to three lacs of rupees a year. Old Bhamo, the original Shan town, is situated two days' journey up the Tapan, the nearest tributary of the Irrawadi. (*Crawfurd's Embassy; Asiat. Journal, Calcutta*, No. lxiv., April, 1837.)

BHATGONG, a city of N. Hindostan (*Nepaul*), said formerly to contain 12,000 houses: once the seat of an independent chief, and, though much decayed, still the favourite residence of the Nepaulese Brahmins; 8 m. E.S.E. Catinandoo; lat. 27° 40′ N., long. 85° 8′ E. The palace and other buildings have a striking appearance, owing to the excellent quality of the bricks and tiles.

BHATNEER, a t. of Hindostan, prov. Rajpootana, the mod. cap. of the Bhatty country, and the most E. town in the presid. Bengal, 195 m. W.S.W. Delhi; lat. 29° 36′ N., long. 74° 12′ E. It was taken and destroyed by Timour, in 1398, and again taken by the rajah of Bicanere in 1807, who retained possession of it for several years.

BHAUGULPORE, or BOGLIPOOR, a distr. of Hindostan, principally in prov. Bahar, but the E. portion (Rajemahal) in Bengal, between lat. 23° 4′ and 25° 49′ N., and long. 86° 15′ and 87° 31′ E., having N. Tirhoot and Purneah distr.; E. the latter and Moorshedabad; S. that of Beerbhoom; and W. Bahar and Ramghur: length, N.W. to

S.E., 123 m.; breadth, 80 m.; area, 8925 sq. m. Pop. 2,020,000. It comprises a territory on both sides the Ganges, is divided into twenty-two thannahs, and contains the towns of Mungger, Rajemahal, and Bhaugulpore. S. of the Ganges it is hilly, and its hills are connected with the Vindhyan chain; they are in two separate clusters, one in the E., the other in the W., and connected by a third lateral range: the E. hills approach nearer than any other to the Ganges. Besides this river, which runs through Bhaugulpore for 60 m., the chief rivers are the Goggree and Gandahi. To the S. of the Ganges the streams are mere hill torrents, which, though wide, are usually fordable. The *jheels*, or marshes, are neither large nor numerous. In the dry season their beds are often partly overgrown with the wild rose, a sign of the fertility of the soil, which is, however, not universal, much of Bhaugulpore, even in the plains, being stony and bare. The climate is warmer than in Purneah, the hills hotter than the plains. E. and W. winds are the most prevalent: night frosts with the latter often occur to the S. of the Ganges; but, for a warm climate, the W. part is remarkably healthy, and fevers are common only in the E. Vegetation very similar to that about Calcutta. There are a few wild elephants on the E. hills, but the most remarkable quadruped is the Hanuman ape, which abounds in immense numbers. Some tribes of people inhabit the E. hills, differing greatly from the rest of the population, and thought to be descendants of the aborigines. In person they resemble the other tribes of the Vindhyan inhabitants; their faces are oval, but not lozenge-shaped, as in the Chinese; eyes similar to those of Europeans; noses obtuse, seldom arched, but not flat; lips full, but not like the negro's. They call themselves *Maler*, and number about 58,000, divided into two sections, called the N. and S. mountaineers, who differ materially in many of their manners and customs, and do not intermarry. They are good-natured, but not hospitable; less civilized, but in quite as comfortable a condition as the inhabitants of the low country; their houses are neater, and the ornaments of their women more numerous and valuable. Their chiefs were formerly much addicted to predatory descents, but have been pensioned by the government to refrain from them. Such is the fondness of this people for ardent liquors, that they generally spend all they receive in drink at Bhaugulpore. They respect Brahmins, although of a different religion: their own deities have neither images nor temples. Another rude tribe, called *Maipas*, of about 100 families, live on the W. hills, and subsist by felling and selling timber. The land in the E. parts of this district is more fertile than that in the W.: rice, wheat, garden produce, at Mungger; legumes, *ricinus*, cotton, and sugar-cane, are the chief objects of culture; about 3000 sq. m. are under tillage. The high rice-lands are manured, and drill husbandry practised; and some of the implements of agriculture are a decided improvement upon those of Bengal. The farms are small, and sometimes cultivated by several farmers clubbing together; most of the zemindars cultivate their own estates, employing their poorer relatives in the operative duties. Two hundred and thirty-four thousand begas were once purchased by government, to afford a land settlement to veteran and invalid soldiers; but the plan was not found to answer, and has been given up. The total land revenue, in 1829–30, was £45,760. Cottons, mixed cloth (silk and cotton), sugar, fire-arms, and metallic and domestic articles are the principal manufactures; but trade is impeded by bad roads, and the want of a few bridges. The Mohammedans form about a sixth part of the population.

Portions of the four ancient countries of Angga, Gaur, Mithila, and Magadha, are comprised in this district, which contains many Buddhic, Brahminical, and Mohammedan antiquities. In the 12th century, W. Bhaugulpore was seized by the Moslems, and the E. by the Bengalese, and down to the time of British supremacy both were in a state of constant anarchy. Cossim Ali intrenched himself in this district; but after his works were destroyed, in 1763, the British dominion was soon quietly established. (*Martin's Hist. of E. India*, ii., 1–200; *Hamilton's E. I. Gaz.*, i., 251–256; *Rep. on E. I. Affairs*, 1832.)

BHAUGULPORE (*the abode of refugees*), cap. of the above distr., seat of a gov. resident and court of circuit; beautifully situated, 2 m. S. of the Ganges, 110 m. N.W. Moorshedabad, 240 m. N.W. Calcutta: lat. 25° 13′ N., long. 86° 58′ E. Pop. about 30,000, chiefly Mohammedans. It covers a great extent of ground, but is meanly built, consisting of scattered market-places, badly supplied, and inconveniently placed on declivities. Its greatest ornaments are the European and Moslem places of worship; the latter are of brick, and among the handsomest in the prov., although small, and some of them ruinous; the monument of Hoseyn Khan, a square building with five neat domes, is worth notice. There are a gaol and hospital, a Mohammedan Arabic college, with about 40 pupils, and an English school, with (1829–30) 134 scholars, chiefly belonging to the mountain tribes. The Roman Catholics, of whom there are about 80 individuals, partly descendants of the Portuguese and partly native Hindoos, have a small church. A monument to the memory of Mr. Cleveland, by the council of Bengal and the inhab. of Bhaugulpore, has been erected about 1 m. from the town. A little to the N.W. are two remarkable round towers, respecting which no tradition exists, but they continue to be visited by the Jain sect. Bhaugulpore is embosomed in groves of palmyra, tamarind, and mango; its vicinity abounds with swelling hills, and is extremely fertile, well cultivated, and healthy, though said to be infested with serpents. (*Hamilton's E. I. Gaz.*, i., 206; *Med. Trans.*, ix., 170–173.)

BHOOJ, a city of Hindostan, prov. Cutch, of which it is the modern cap.; built about two centuries ago, in a plain S.W. of a hill called Bhoojan, 50 m. N.E. the Indian Ocean; lat. 23° 15′ N., long. 69° 52′ E. Pop. (1818) about 20,000, which, owing to bad and oppressive government, is much less than its amount at the beginning of the present century. From the N. the city has an imposing appearance; its white buildings, mosques, and pagodas, being intermixed with plantations of date-trees; but the interior has a very different appearance. It is surrounded by a high, thick, and well-built stone wall, flanked with round and square towers, mounted with artillery. Streets narrow and dirty, and turning at sharp angles: houses generally within strong walled enclosures, provided with loopholes, and each forming in itself a complete fort. The palace is a well-built castle, adorned with several cupolas, and domes covered with enamel in the Chinese style; temples numerous, many of them large, and presenting a multitude of elaborate decorations. Everywhere are seen memorials of *suttee* and other immolations: the mausoleum of Row Lacha, grandfather of the present ruler, and of a lady who ascended his funeral pile, is the most remarkable, and would be considered a beautiful ornament in any European city. Some others are in Moorish architecture, worked up with stucco to resemble marble. The hill Bhoojan is surmounted by extensive but ill-built fortifications, which are no protection to the town; they enclose a temple dedicated to the *Nag*, or cobra-de-capello. This fort was taken by escalade by the British, in 1819. West of the city, and close to the walls, there is a large tank or pool containing an elevated terrace, formerly a place of recreation for the chiefs; but the buildings are now in ruins. Bhooj is celebrated for its gold and silver works. (*Trans. Bombay, Lit. Soc.*, ii., 217; *Med. Trans.*, x., 172–175.)

BHOPAUL, a state of Hindostan, tributary to the British, prov. Malwa and Gundwanah; between lat. 22° 30′ and 23° 40′ N., and long. 76° 40′ and 79° E. having N. and W. Scindia's dominions; E. and S. those of the presid. of Bengal and the Nerbudda river, which forms its entire S. boundary: length, E. to W., 145 m., greatest breadth 80 m.; area, 6772 sq. m. (*Sutherland.*) The country is full of jungles, and uneven; the chief range of the Vindhyan mountains intersects its S. portion; but the soil is generally fertile, especially in the valleys, and watered by numerous streams. The ruling people are Patans, established here by Aurungzebe early in the 18th century, and, of course, Mohammedans. In 1812, the vizier Mahomed made a vigorous defence against Scindia, the rajah of Berar, and the Pindarries; but on his death, in 1816, the British interfered to protect his dom., and the marquis of Hastings conferred on his successor, Nuseer Mahomed, in 1817, a considerable part of the present territory in reward for his hearty co-operation with the British. It was then calculated that in five years the revenues of the rajah would increase to nearly 30 lacs a year. Bhopaul continues in a tranquil, and evidently prosperous condition.

BHOPAUL, the cap. of the above state, placed on the boundary between Malwa and Gundwanah, lat. 23° 17′ N., long. 77° 30′ E.; 110 m. E. Oojein; 310 m. S.W. Allahabad. It is surrounded by a stone wall, but is in a dilapidated state, as well as its suburb, and a Hindoo fortress at its S.W. extremity. There are two considerable tanks immediately adjoining it, from which two rivers take their rise.

BHURTPORE, a small territory of Hindostan, prov. Agra, including the small pergunnah Tanna; shape somewhat triangular, having N.E. the British dom.; S.E. those of Scindia; and W. the Rajpoot state of Macherry: area, 1946 sq. m. (*Sutherland.*) It is inhabited by Jauts, who migrated from the banks of the Indus, and settled here about 1700, and who have assumed to themselves the title of the military caste, and their chief that of rajah. The soil of Bhurtpore is light, but well watered and cultivated: cotton, corn, and sugar, are the chief agricultural products. Wood is very scarce and dear; the houses are all of red sandstone, and the villages in good condition and repair. Wells are numerous, and constructed by building the masonry first, which is afterward undermined and sunk. The peacock is an object of veneration. The chief towns are

Bhurtpore and Deeg. Large quantities of salt are produced from brine springs at Combher. In 1768 this territory was at its greatest extent; stretching along the course of the Jumna river, from near Delhi to Etawah; but the greater portion was soon after conquered by Nudjiff Khan. In 1826, having been usurped from its rightful sovereign, the British interfered and took the capital, since which it has been under their protection.

Bhurtpore, the cap. of the above territory, and seat of its rajah, 31 m. N.W. Agra; lat. 27° 17′ N., long. 77° 23′ E. It is about 8 m. in circum., and was formerly surrounded by a mud wall 60 feet thick, flanked by many bastions, and defended by a strong fort; but these fortifications have been mostly blown up and demolished. This city was built with part of the spoil pillaged by the Jauts from the baggage of Aurengzebee's army during his last march to the Deccan, and became afterward a celebrated mart for military stores. It resisted with great vigour the forces of Lord Lake, who lost, in 1805, 3100 men under its walls; but it at last capitulated to him. In 1826 it was stormed and taken by Lord Combermere from the usurper Doorjun Sál, when the present rajah, Bulwunt Sing, was established in its possession. (*Hamilton's E. I. Gaz.*, i., 239-234; *Heber's Narrative*, ii., 357-369.)

BIAGGIO (ST.), a town of Naples, prov. Calabria Ultra, 3 m. W. Nicastro. Pop. 3000. Its situation is insalubrious, and it suffered severely from an earthquake in 1783. Its territory produces good wine, and has some mineral springs.

BIALYSTOCK, a prov. of Russia, in Europe, formerly belonging to Poland, having the government of Grodno on the E., and being surrounded on all the other sides by the modern kingdom of Poland. Area, 3436 sq. m. Pop. variously estimated, but probably 260,000. Surface flat, with some slight undulations; soil generally sandy, but not infertile. It is bounded on the S. by the W. Bug, a navigable affluent of the Vistula, which is its principal channel of communication. Forests extensive and valuable, but much dilapidated, through want of proper regulations as to their management. Agriculture is almost the only employment, and considerable quantities of corn (especially rye and wheat), with linseed, hops, and timber, are sent to Dantzic and Elbing. The nobles are very numerous, being estimated to amount to 9000 families, or nearly 50,000 individuals; but the great bulk of them are steeped in poverty, many being compelled to cultivate their little patches of land with their own hands, or hire themselves to others. Manufacturing industry is all but unknown, and only the most common and indispensable trades are carried on. (*Schnitzler, La Russie, &c.*, p. 557.)

Bialystock, a town of Russia, in Europe, cap. prov. same name; lat. 53° 7′ 35″ N., long. 23° 18′ E. Pop. 8218. It is a handsome town; houses of brick, with the gables to the streets, which are straight and well-paved. The castle of Count Branicki grand hetman of the crown, called the Versailles of Poland, is the distinguishing feature of the town. (*Schnitzler, La Russie, &c.*, p. 558.)

BIANA, a t. of Hindostan, prov. Agra, territ. Bhurtpore, 80 m. W.S.W. Agra, lat. 25° 57′ N., long. 77° 8′ E. It stands at the foot of a hill, the ridge of which is covered with the remains of buildings, including a fort and a high pillar, conspicuous at a great distance. The town is large, contains many stone houses, and a good bazar. It preceded Agra as the cap. of the prov., and is often mentioned in the memoirs of the Emp. Baber.

BIBB, county, Ga., situated in the central part of the state, and contains 450 sq. m. Watered by Ockmulgee river and its branches. It contained, in 1840, 4137 neat cattle, 1178 sheep, 7913 swine; and produced 4560 bushels of wheat, 143,145 of Indian corn, 5660 of oats, 8730 of potatoes, 1,261,000 pounds of cotton; had nine commission houses in foreign trade, eighty-two stores, nine grist-mills, eleven saw-mills, three printing-offices, issuing three weekly newspapers and one periodical, one college, 150 students, three academies, 200 students, two schools, 75 scholars. Pop.: whites, 3355; slaves, 4420; free coloured, 27; total 9802. Capital, Macon.

Bibb, county, Ala., situated in the central part of the state, and contains 800 sq. m. Drained by Cahawba river and its branches. It contained, in 1840, 8711 neat cattle, 2340 sheep, 11,480 swine; and produced 23,418 bushels of wheat, 1263 of rye, 235,237 of Indian corn, 20,533 of oats, 16,158 of potatoes, 7724 pounds of tobacco, 968,408 of cotton. It had five stores, three forges, one cotton factory with 984 spindles, two flouring-mills, twenty-seven grist-mills, twenty-one saw-mills, ten distilleries, two tanneries, fifteen schools, 418 scholars. Pop.: whites, 6256; slaves, 2023; free coloured, 5; total 8284. Capital, Centreville.

BIBERACH, a town of Wirtemberg, circ. Danube, cap. bailiwick, in a fertile valley on the Reiss, 22 m. S.S.W. Ulm. Pop. 4600. It is encircled by walls flanked with towers, and has a town-house, four churches, one of which is common to Catholics and Protestants; a college, three schools, a well-endowed hospital, &c. Some branches of the linen and woollen manufactures are carried on, and there are numerous tanneries and breweries, and a bell-foundry. The mineral waters of Jordansbad are at a short distance from the town. It is the birthplace of Wieland; and in 1796 the French, under Moreau, defeated the Austrians in its vicinity.

BICANERE, or BICKANEER, a territ. of Hindostan, prov. Rajpootana, divis. Marwar, chiefly between lat. 27° and 29° N.; having N. the Bhatty country; S. the Jondpoor and Seypoor dom.; E. Hurriana and the Shehawutty country, and W. Jesselmere and the great desert, of which it forms a part: area, 18,000 sq. m. (*Sutherland.*) The surface is elevated, but flat, sandy, and destitute of water where not irrigated by wells, which are from 100 to 200 ft. deep. The crops are very precarious, and greatly dependant on the periodical rains: rain-water is carefully preserved in cisterns. *Bejurah* and other Indian pulse are almost the only articles grown, other necessaries being supplied from the contiguous provinces. Coarse and fine rice are imported from Lahore; wheat from Jeypoor; salt from Combher; spices, copper, and coarse cloth from Jesselmere. The other imports are sugar, opium, and indigo: horses and bullocks of an inferior breed are nearly the sole exports. Bicanere and Chooro are the chief towns. In 1818 the rajah was admitted under British protection, without a subsidiary allowance.

Bicanere, the cap. of the above dom., and residence of its rajah, in the Indian desert; 240 m. W.S.W. Delhi, and 145 m. N.N.W. Ajmeer; lat. 27° 57′ N., long. 73° 2′ E. It is fortified by a strong wall strengthened with many round towers, and contrasts imposingly with the desolation around it, which is as great as that of the wildest tract of Arabia, except on its N. side, where there is a wooded valley. Most of the dwellings in the town are mere mud huts painted red: there are some lofty white houses and temples; and at one corner a citadel about ½ m. sq., encompassed by a wall 30 feet high, and a good dry ditch, a confused assemblage of towers and battlements, overtopped by crowded houses. Its best security is in the scarcity of water in the country around. (*Hamilton, E. I. Gaz.*, i., 237, 238; *Elphinstone's Account of Caubul*, i., 15-20.)

BICESTER, a par. and town of England, co. Oxford, hund. Ploughley, 52 m. N.W. by N. London. Area of par., 2590 acres. Pop. of par. in 1821, 2544; 1831, 2868. The town is well built on a small stream, that joins the Charwell at Islip. The church, built in 1400, on the site of an older one, contains many ancient monuments, and has a lofty tower. There is a charity school, where 30 boys are clothed and educated; and another for the instruction of 60 girls. The weekly market is held on Friday, and annual fairs on Easter Friday, 1st Friday in June, Aug. 5, Friday after old Michaelmas, and two following Fridays, and the first Friday in Dec.; they are for cattle, and both fairs and market are well attended. Its proximity to the Oxford canal gives it some business, but no particular manufactures are carried on, except that of bone lace by a few of the females, and the brewing of ale, noted for its excellence. The par. is divided into two townships, King's End and Market End. In the latter the town is situated.

BIDACHE, a town of France, dep. Basses Pyrenées, cap. cant., on the Bidouse, 18 m. E. Bayonne. Pop. 2722.

BIDEFORD, a sea-port, bor., and par. of England, co. Devon, hund. Shebbeare, on the Torridge, about 1½ m. above where it unites with the estuary of the Taw; 180 m. W. by S. London. Pop., in 1821, 4053; in 1831, 4846: houses at last census, 997. The greater part of the town stands on an acclivity on the W. of the river, and is connected with its E. division by a stone bridge of 24 arches, built in the 14th century. It consists chiefly of two spacious streets, paved, and partially lighted: the houses, though improved, are, for the most part, but indifferent structures of timber framing, filled up with bricks. Besides the church (in the earlier Gothic style), the Baptists, Independents, and Wesleyans, have each a chapel. There is a neat town-hall, and another hall, with a school, is attached, belonging to the trustees of the Bridge estate. Being a place of frequent resort from the neighbouring watering-town of Appledore, it has public assembly-rooms. The river is faced by a fine quay, 1200 feet in length, broad and convenient. It has an ancient endowed grammar school, a national school for 300 children, and a school supported by the dissenters. An endowed hospital maintains seven aged poor. Ropes, sails, and a considerable quantity of common earthen ware, are manufactured; it has also a small lace manufactory, and several docks, in which the smaller class of vessels are built: in the vicinity are several tan-yards. The port is within Barnstaple bar (*see* Barnstaple), and is accessible for vessels of 200 tons as far as the bridge; about 2½ m. above which the Torrington canal unites with the river. Ships of larger size unload at Appledore. Its principal imports consist of timber, from the Baltic and from Canada;

coals, from Bristol and Wales; and groceries and other colonial produce, from Bristol and other ports. Its chief exports are salts, cordage, and articles of general supply, for the Newfoundland fisheries; oak bark, to Ireland; earthenware, to Wales; and corn and flour, to Bristol. It had, on the 1st of January, 1836, 115 registered vessels, of the burden of 9509 tons, manned by 545 seamen, mostly employed in the coasting trade; and about 160 licensed boats employed in the coast fishery. The port comprises those of Clovelly and Hartland in its jurisdiction. The market days are—Tuesday for corn; Saturday for general provisions. There are three fairs; Feb. 14, July 18, Nov. 13.

Its municipal affairs are managed by a mayor, three aldermen, and twelve councillors. Previously to the municipal act (5 & 6 W. 4, c. 76), it was governed by a charter of 16 James I., confirming and extending a previous one (16 Elizabeth). The corporation revenue does not exceed £50 a year, derived from tenements in the bor.: the quay dues belong to the lord of the manor, and are regulated by an act passed in 1828. The living is a rectory in private patronage. Bideford is styled a bor. in the Saxon records. It sent members to the H. of C. during the reigns of Edward I. and II., but grudging the expense which this occasioned, it got relieved from the obligation, and has not since been represented! In 1271 it obtained a market and fair. The expeditions under Raleigh and Greenville, to Carolina, appear to have originated its foreign commerce. Silk weaving was introduced in 1650, and in 1685 many French refugees settled in it, and increased its trade. At the close of this century its Newfoundland trade had become extensive; and for the first half of the 18th century its imports of tobacco were only exceeded by those of London. Dr. Shebbeare, of pamphleteering notoriety, was a native of Bideford.

BIDDEFORD, t., York co., Me., 21 m. N.E. York, 105 m. N.E. Boston, Mass. Bounded N. by Saco river, over which is a bridge connecting it with Saco. On an island off a point of land in the E. part of the town is a light-house, with a revolving light. It contains fifteen stores, one furnace, one fulling-mill, two grist-mills, nine saw-mills, two tanneries, one pottery, thirteen schools, 563 scholars. Pop. 2574.

BIDSCHOW, or BICZOW, a town of Bohemia, cap. circ., on the Czidlina, 16 m. W. Konigratz. Pop. 4000.

BIELEF, a town of Russia in Europe, gov. Toula, on the Oka, 56 m. S.W. Toula. Pop. 7000. This, which is an ancient town, is, after Toula, the most important in the government. The inhab. carry on a considerable commerce.

BIELEFELD, a thriving town of Prussian Westphalia, cap. circ., 38 m. E. Munster. Pop. 5800. It has excellent bleaching grounds and extensive manufactures of thread and linen. It is defended by a rampart and ditch; and, besides Catholic and Protestant churches, has a synagogue, and an orphan asylum. It is celebrated for its tobacco pipes made of carbonated magnesia, and known in commerce by the name of *écume de mer*, or *meerschaum*.

BIELGOROD, a town of European Russia, gov. Koursk, cap. district, on the Donitz, 80 m. S. Koursk. Pop. nearly 8000. It consists of an old and new town and three suburbs. Houses mostly of wood. Its name *White town* is derived from a chalk-hill in the neighbourhood. (*Schnitzler, La Russie, &c.*, p. 360.)

BIELITZ, a town of the Austrian States, in Moravia, on the Riala, 16 m. E.N.E. Teschen. Pop. 6000. It is well built, and is the seat of a Protestant consistory, which has under its jurisdiction Moravia and Austrian Silesia.

BIELLA, a town of the Sardinian States, div. Turin, cap. prov. and mand., on the Cervo, partly on the summit and partly on the declivity of a mountain, 12 m. N.E. Ivrea. Pop. 7700. It is the seat of a bishopric; has four parish churches, two hospitals, and a college; and produces linens, silks, and paper.

BIELO OZERO, or WHITE LAKE, a lake of Russia in Europe, gov. Novgorod, about 240 m. E. Petersburg. It is of an elliptical shape, its greatest length being nearly 30, and its greatest breadth 20 m. Its bottom consists of a whitish clay, which, during tempestuous weather, communicates its colour to the water, whence, doubtless, its name is derived. It receives numerous small rivers; its surplus waters are carried off by the Chexna, an affluent of the Wolga. It is deep, and generally limpid, and is well stocked with fish.

BIELOZERSK, a town of Russia in Europe, gov. Novgorod, S. side of the above lake. It is fortified, and has some trade.

BIELSK, a town of European Russia, prov. Bialystok, 70 m. S.S.W. Grodno. Pop. 9000. It is well built, paved, has a handsome custom-house, and gave its name to the palatine of Bielsk, of which it was the cap. till 1795. This is one of the towns from which Jews are excluded.

BIENNE, or BIEL, a town of Switzerland, cant. Berne, in a fertile little plain at the E. foot of the Jura, near the lake of Bienne, and on the road from Basil to Berne, 16 m. W. of the latter. The Suze flows through the town. Pop. 2150; houses, 304. It has a good gymnasium, with six professors. The public library, which was plundered in the revolution, contains at present only 2500 volumes. Bienne is very ancient: previously to 1798, it was a free and independent city; but in that year it was united to France, and, in 1815, to the cant. of Berne.

The lake of Bienne extends along the Jura chain; being about 10 m. in length by 3 in breadth. It is not pre-eminent for beauty of scenery, and owes its celebrity principally to its having within it the *Isle de St. Pierre*, the retreat of Rousseau.

BIG BEAVER, t., Beaver co., Pa., bounded E. by Beaver river. It contains three stores, two grist-mills, five saw-mills, nine schools, 295 scholars. Pop. 1339.

BIG BLACK, r., Miss., rises in Choctaw co., and pursuing a S.W. course 160 miles, it enters the Mississippi a little above Grand Gulf.

BIG CREEK, t., Van Buren county, Mo. It has three schools, 82 scholars. Pop. 1106.

BIG FLATS, p. t., Chemung co., N. Y., 5 m. W. Elmira, 204 m. S.W. Albany, 284 W. Watered by Chemung river and its branches. It is on the line of the New-York and Erie rail-road, and a navigable feeder of the Chemung canal passes through it. It contains three stores, eight saw-mills, one distillery, one brewery, seven schools, 385 scholars. Pop. 1375. The village contains two churches, one Presbyterian and one Episcopal; two stores, thirty dwellings, and about 200 inhabitants.

BIGGAR, a burgh of barony, Scotland, co. Lanark, 27 m. S.W. Edinburgh. Pop., in 1835, 1454. The barony of Biggar has for centuries been the property of the Flemings, formerly Earls of Wigton, to which family the greater part of it still belongs. It consists chiefly of one wide and spacious street. The chief employment of the inhabitants is cotton-weaving for the Glasgow market. This species of business afforded work, in 1835, to 210 persons. The burgh also contains twenty-eight shoemakers, twenty-six masons, twenty tailors, twenty carters, sixteen spirit-dealers, of whom five are innkeepers; four surgeons, &c. The quantity of excisable articles sold in 1835 was 2608 gallons of British spirits, 80 gallons of brandy, 136 gallons of ginger wine, 88 doz. of foreign wine, 2528 lbs. of tea, and 1876 lbs. of tobacco and snuff. The parish church is a venerable Gothic edifice, built in 1560. There are also two dissenting chapels, a savings' bank, and three public subscription libraries.

BIGGLESWADE, a parish and town of England, county Bedford, hund. Biggleswade, 41 m. N.N.W. London. Area of parish, 4220 acres; population of do., in 1821, 2778; 1831, 3336. The town is situated on the great North road, by the Ivel, over which there is a stone bridge. Houses chiefly brick, and have a neat, modern appearance. The church is a Gothic building, founded in 1230, and extensively repaired in 1832. There are two free schools, one for twelve, the other for eight boys: a charity, producing £300 a year, supports them, and is applied also in various other specified modes. The river is navigable to the town, by which means it is supplied with coals, timber, corn, &c. The weekly market, on Wednesday, is one of the largest in England for corn. There are five annual fairs; February 14, Saturday in Easter week, Whit-Monday, August 2, and Nov. 8. There is a small manufacture of thread lace, employing some females, and a steam flour-mill; but the chief support of the place are its markets and fairs, and the travellers who resort to it. A petty sessions for the three neighbouring hundreds is held in the town. It has several good inns.

BIG HATCHY, r., Tenn., rises in M'Nairy co., and after a N.W. and W. course of 100 miles, it enters the Mississippi at Randolph, in Tipton county.

BIG ISLAND, p. t., Marion co., O., 5 m. W. Marion, 47 m. W. by N. Columbus, 421 W. Watered by Scioto river and its branches. It contains one grist-mill, three saw-mills, one distillery, three schools, 120 scholars. Pop. 554. The village contains several stores and twenty-five or thirty dwellings.

BIG LICK, t., Hancock co., O. It has two schools, 74 scholars. Pop. 430.

BIG PRAIRIE, t., New Madrid co., Mo. It contains one academy, 25 students. Pop. 684.

BIG RIVER, t., Jefferson co., Mo. It has one school, 18 scholars. Pop. 965.

BIG SANDY, river, rises in the Alleghany mountains in Va., and forms by its E. Fork, the boundary between Va. and Ky. for nearly 200 miles. It enters the Ohio at Catlettsburg, Ky.

BIG SPRINGS, t., Seneca county, O. It contains three stores, three schools, 101 scholars. Pop. 925.

BIJANAGUR (*Vijayanagara*, the city of triumph), ANAGOONDY (Canarese), or ALPATNA, an ancient and celebrated city of Hindostan, prov. Bejapoor, occupying both banks of the Toombuddra; that part of it on the S.E. bank

only being properly called Bijanagur, and belonging to the British dom. presid. Madras; 117 m. S.S.E. Bejapoor, 27 m. N. W. Bellary; lat. 15° 14′ N., long. 76° 37′ E. It was formerly the metropolis of a kingdom, which, in 1515, comprised the two Carnatics, above and below the Ghauts, and is said to have then been 24 m. in circ.: this portion of the conjoined cities is now about 8 m. in circ., nearly uninhabited, and in ruins; these, however, are all of granite, and far excel in extent and grandeur those of any other Hindoo city. Bijanagur has a most remarkable site. "It is built," says Hamilton, "in a plain, enclosed by and encumbered with stupendous masses of granite, which, in some places, swell up from the surface to the form and magnitude of hills, and in others present detached blocks of various forms, piled over one another in all sorts of fantastical combinations; occasionally surrounding little isolated valleys, and elsewhere obstructing all passage except through the narrow winding defiles which separate the fragments. The communications from street to street, and in some cases the streets also, follow the mazes of these chasms, and in one quarter the principal thoroughfare is under a naturally covered passage formed by the rocks; the ancient battlements, turrets, and gateways are still in a high state of preservation: the main streets, paved with immense flags of granite, are intersected at intervals by aqueducts; and tanks and wells are excavated in the rock. Temples, choultries (hotels), and many other edifices, public and private, of the purest style of Hindoo architecture and great dimensions, are seen perched on the most conspicuous eminences of the naked rock, or ranged in long lines on the plain. . . . There is a continued succession of paved streets, now nearly uninhabited, for three miles, from the Toombuddra ferry to Humpa, at the W. extremity; and the appearance of the ruins about Camlapoor, on the S.W., indicate that they also were once included within the city boundaries. . . . The walls, pillars, arches, and even the flat roofs and beams of all these structures are composed of granite. . . . Some blocks are from 12 to 15 feet broad, and thick in proportion; and though of unequal bulk and various shapes, are universally well cut, fitted to each other with the greatest nicety, and display at this day an exterior lustre surpassing that of most buildings of 20 years' standing." The Toombuddra is about one third of a mile broad, but at the upper part of the city contracts greatly, and here there was once a stone bridge: its bed is clogged by detached granite rocks, which rise above its surface, and are generally surmounted by some religious edifice. It forms the N. and E. boundary of the city, which is enclosed S. and E. partly by its natural barriers, partly by strong stone walls. The edifices are—the temple of Wittoba (an incarnation of Vishnu), nearly in the centre of the city, which consists of one central and four subordinate buildings, surrounded by several smaller pagodas and numerous cells, and occupying an area of 400 feet long by 20 wide; this temple contains a chariot cut entirely out of granite, on which the image of the god is exposed on holidays: the temple of Mahadeva, at Humpa, with a pyramidical portico of ten stories, and 160 feet high, well endowed, and attended by many Brahmins, faces a fine street 90 feet wide, lined with handsome stone buildings decorated with sculptures, running nearly parallel to the Toombuddra, from which it is separated by rows of trees, and leading to another temple, where there is an image of the bull Nundy, 12 feet high, carved out of the solid rock. Between Humpa and Camlapoor the rocks are studded with pagodas, the principal of which are the great temple of Krishna, and a smaller one dedicated to Genesa, but which contains also a colossal granite image of the former, 16 feet high by 10 feet broad. The inner city near this is the residence of the rajah, and contains the remains of four different palaces. Bijanagur has a temple of Rama, with pillars of block hornblende, and among a group of temples near the ferry is a gigantic figure of Huniman, carved in bas-relief. The city was built by two brothers, between A.D. 1336 and 1343: in 1564 it was taken and completely sacked by the Mohammedans. (*Hamilton's E. I. Gaz.*, i., 230, 240.)

BIJNEE, or KHUNTAGHAUT, a territory of Hindostan, prov. Bengal, bordering on Assam, and belonging partly to Britain and partly to Bootan. It lies on both sides the Brahmaputra, extending S. as far as the Garrows mountains, and consists chiefly of a level country, well fitted for the production of rice, especially that portion S. of the Brahmaputra, which is the most valuable, and, besides wheat, produces barley, mustard, pulse, betel, sugar-cane, and mulberry-trees. The villages are generally neater than those in Bengal, and have sugar-cane and betel plantations. For a considerable period Bijnee was not known to be included in the Dewanny territories, but was considered to belong to Bootan; presents of elephants, &c., were, however, made yearly to both the Deb. rajah and the British government, and a kind of dependence on either or both of them, acknowledged by the Bijnee rajah. In 1785 the payment in elephants was commuted by the British government into a tribute of 2000 rupees: the Bootan tribute consists chiefly of dried fish. Half the rents of the rajah are paid in coarse cotton cloth woven by females. His affairs generally are very ill managed; his country plundered by needy retainers; its trade ruined by exactions and monopolies; and some years since he was so poor as to be obliged once in three years to raise loans by absolute begging. The people are divided into two sections, the Bhakat, or worshippers of Krishna, and the Gorami, who eat pork and other meats, and drink liquors. The British gov. claim the right of investiture to the zemindary.

BIJNEE, a town of Hindostan, cap. of the above rajahship, 23 m. N. Goalpara; lat. 26° 29′, long. 90° 47′ E. It contains a fort defended by a brick wall, the residence of the rajah, some small brick temples, and about 100 thatched huts. It appears at present to belong to Bootan. (*Hamilton's E. I. Gaz.*, i., 241–243.)

BILBAO, a sea-port town of Spain, the ancient cap. of Biscay, in a fine plain, on the Nervion or Ibaizabal, about 10 m. above its confluence with the sea at Portugalete; lat. 43° 15′ 47″ N., long. 2° 45′ W. Pop. 15,000. It is said to be healthy, notwithstanding the climate is remarkable for humidity. Houses lofty, uniform, and well built, with projecting roofs, that afford shelter from the sun and rain. Streets well paved and level; several of them may be washed at pleasure with water conveyed by an aqueduct from a mountain a league distant. Bowles describes it as a paragon of cleanliness; but its pre-eminence in this respect is questioned by Mr. Inglis. No wheeled carriages are allowed to pass along the streets, but all goods are carried in panniers on mules, or in sledges, which have a contrivance by which they constantly moisten their path with water. There is a fine promenade by the river's side, over which a suspension-bridge is thrown in lieu of the old wooden one that formerly existed. There is also a stone bridge of three arches, and a handsome cemetery, formed by the corporation, at an expense of £30,000. Convents and monasteries are here very conspicuous. They are immense piles, of little architectural beauty, having strong gratings to all the windows. Some of them are very rich; and a nun must take about 30,000 reals (£300) into the convent on admission. The *abattoirs*, or slaughter houses, in the Tuscan style, in the centre of the town, are well contrived, well ventilated, and copiously supplied with fresh water. The corporation is extremely rich. On the occasion of the visit of Ferdinand VII. no less than 2,000,000 of reals (£20,000) were expended in feasts, decorations, and bull-fights. Their funds arise from octrois, or tolls, upon the various necessaries imported by sea or land, and the monopoly of the supply of beef, which is farmed to the butchers. They maintain an elementary school for teaching reading, writing, and Latin, by an impost of four reals per ton on foreign vessels entering the port. The Consulado, or Tribunal of Commerce, supports schools of drawing, architecture, mathematics, and the French and English languages, for the children of the town and neighbourhood. There is a hospital calculated to accommodate 250 patients; it has a ward for the reception of strangers or persons above the lower class, who may wish for good advice at a moderate expense, without troubling their relations or friends. These pay half a dollar a day, and have the comforts of a private house, and the best hospital attendance. The manufactures consist of various descriptions of hardware, anchors, leather, paper, hats, tobacco, and earthenware. There are several docks for building merchant vessels; two large rope manufactories, &c. Bilbao is the principal port for the N. of Spain. The exports principally consist of iron and steel, wool, fish, fruits, chestnuts, &c.; and sometimes large quantities of corn from the interior; but the trade of the port has declined ever since Saxon wools began to be preferred to those of Spain in foreign markets. The clearances are not now above half their former number. Some houses have still considerable returns from the fish trade, and one or two from the exportation of iron; but this also has fallen off, from the greater cheapness of Swedish iron. The imports consist principally of cotton and woollen fabrics, colonial products, &c. Large vessels usually stop at Portugalete, near the mouth of the river, or at Olaviaga, about 4 m. below the town. Spring tides rise about 13 feet; and by taking advantage of them, vessels of considerable burden occasionally reach the town.

There are no public amusements, excepting occasional bull-fights. Two attempts to establish a theatre have failed; partly, as Mr. Inglis supposes, through the agency of the priests. One or two houses are said to realize from £2000 to £3000 a year; but Mr. Inglis thinks no one spends £300. Beef costs about 10 quartos (3*d.*) per lb.; mutton, 3½*d.*; and the best bread, 1½*d.* Labourers earn from 10*d.* to 1*s.* a day; masons, carpenters, &c., from 20*d.* to 2*s.* Good wine is 3*d.* a bottle. The markets are well supplied with vegetables and fruit, particularly the *tomata*, or love apple,

a principal ingredient in Spanish cookery. There is plenty of game, among which the small birds called *chimbos* are great dainties. The cuttle fish and a particular kind of eels are also highly esteemed. Circles of from six to ten families agree to meet together every evening during the winter, at the house of one of the party, changing the rendezvous every week. They take chocolate before leaving home, and sup on their return. Cards, dancing, and music fill up the evening's amusements. They eat together only at the end of the season, when all the money won at cards is spent upon a dinner in the country, of which the members of the circle partake.

Bilbao was founded under a charter granted by a lord of Biscay, in 1300; from whom, and succeeding sovereigns, it obtained several privileges. The Consulado of Burgos was transferred thither at the end of the 15th century; and its decisions in matters of commerce were referred to throughout Spain, and regarded as of the highest authority out of it. It has been alternately occupied by the different victorious parties in the late and present civil war. (*Diccionario Geografico Historico por la Real Academia de Madrid*, 1802, i., 178; *Miñano Diccionario Geografico*, ii., 118, and *Supplement*; *Bowles, Introduction a la Geografia de la España*, 1778; *Inglis, Spain in* 1830, i., 18–39.)

BILEDULGERID, the name given to an extensive territory of Africa, embracing the country lying between the S. declivity of Atlas and the Sahara, or Great desert; and between Fezzan on the E., and cape Non, on the Atlantic, on the W. It mostly consists of vast deserts, differing but little from the Great desert, with which it insensibly intermingles. In parts, however, where there is water, extensive plantations of the date-palm, which here flourishes in great luxuriance, are met with. It is said by some, that its real name, *Blaid-el-Jerid*, means country of the date-palm; while others, among whom is Shaw, interpret *Blaid-el-Jerid* as meaning dry or parched country. (*Shaw's Travels*, p. 4, 4to ed.)

BILLERICA, p. t., Middlesex co., Mass., 18 m. N.W. Boston, 7 m. S.S.E. Lowell, 450 W. Watered by Concord and Shawsheen rivers. The Middlesex canal and the Boston and Lowell railroad pass through it. Incorporated in 1655. It contains six stores, two fulling-mills, two woollen-factories, eight forges, three grist-mills, six saw-mills, one distillery, one academy, 35 students, ten schools, 340 scholars. Pop. 1639. The village at the centre, on elevated ground, contains three churches, one Congregational, one Unitarian, and one Baptist; the academy, a town-house, and about sixty dwellings. Concord river is at the summit level of the Middlesex canal, and is employed as a feeder to it, the canal and river being on the same level.

BILLERICAY, a chapelry and town of England, co. Essex, hund. Barnstable, par. Great Burstead, 24 m. E.N.E. London. Its pop. is returned with that of the parish, which was, in 1821, 1861; 1831, 1977: houses, 367; area, 4420 acres. The town is on an eminence overlooking a rich vale, and commanding extensive views. Silk braid and laces are the only manufactures, and these are declining. There is a weekly market, Tuesday, and fairs, Aug. 2 and Oct. 9, for cattle. The parish church is about 2 m. from Billericay, but there is an episcopal chapel in the centre of the town, and three dissenting chapels; there is also an endowed school for ten poor children. The ann. val. of prop. of the par. in 1815, was £7169; its average poor-rates, £1031. Billericay is the central town of a poor union of twenty-six pars. About 1 m. from the church are some earth-works, called Blunt's Walls, where Roman remains have been dug up.

BILLITON, a rocky sterile island of the Eastern archipelago (1st div.), between Sumatra and Borneo. It is of a circular form, about 50 m. in length and 45 in breadth. The pop. is very scanty, not being supposed to exceed 2000 or 3000. Iron ore, which in tropical countries is usually scarce, is found here in great abundance, and the metal produced from it is said to be of excellent quality. The produce of rice is not sufficient even for the consumption of the pop. The Dutch maintain a garrison in the island, and some cruisers in the surrounding seas, to check the piracy in which the natives are prone to indulge. The interior has not been explored. It is, however, believed to contain mines of tin.

BILLOM, a town of France, dep. Puy de Dôme, cap. cant., on a hill, 14 m. E.S.E. Clermont. Pop. 4467. This is one of the most ancient towns in Auvergne. The walls by which it was formerly surrounded have disappeared, and its manufactures and commerce have also declined. A university, founded here in 1455, continued to flourish till 1555, at which epoch it was made over to the Jesuits, by whom it was administered till the suppression of their order, when it also ceased to exist. At present the town has a departmental college. During the period of the League, Billom was a principal focus of the disorders that agitated Auvergne. Storms are very frequent in this district; and, in consequence of the prevalence of rainy weather, the town has sometimes been called *l'égout de la Basse Auvergne*. (*Hugo*, art. *Puy de Dôme*.)

BILSA, a town of Hindostan, prov. Malwa, belonging to Scindia, on the E. side of the Betwa, near its confluence with the Russ, 32 m. N.E. Bhopaul. It is surrounded by a stone wall, and had, in 1820, 5000 houses. The contiguous country is celebrated for the excellence of its tobacco.

BILSEN, a town of Belgium, prov. Limburg, cap. cant., on the Demer, 7 m. W. Maestricht. Pop. 2700. It produces earthenware and cutlery.

BILSTON, a market town and chapelry of England, co. Stafford, N. div., hund. Seisdon, par. Wolverhampton, 2½ m. S.E. Wolverhampton, 11 m. N.W. Birmingham, and 107 m. N.W. London. Pop. (1831) 14,492; houses, 2988. It stands on rising ground, and is very irregularly built. The principal streets contain some substantial and handsome houses, and, within the last few years, its appearance has been much improved; though, from the number of forges, collieries, and such like works, it has a sombre aspect. The principal buildings are—the episcopal chapel, a neat edifice, rebuilt in 1825; St. Mary's chapel, a fine structure, built in the Gothic style of architecture, in 1830; and the Rom. Cath. chapel, a handsome structure in the same style, erected in 1833. The gov. of the town is vested in two constables, appointed annually at the court leet held by the lord of the manor. Under the Reform Act, Bilston forms part of the borough of Wolverhampton, with which it is intimately connected; but for all parochial purposes, it is independent. Petty sessions are held on Tuesday in each week; and a court of requests, for the recovery of debts not exceeding £5, is held every second month, alternately with Willenhall. The living is a curacy, within the jurisdiction of the dean of Wolverhampton; the patronage is in the inhab. at large; every householder, whether male or female, being entitled to vote at the election of the minister. There are places of worship for Independents, Baptists, Primitive and Wesleyan Methodists, and Roman Catholics. There is a blue-coat school, founded and endowed by Humphrey Perry, Esq., of Stafford, for clothing and educating six boys; since extended to the admission of two or three more, by additional small bequests; two schools under the British or national system; and an "Orphan Cholera School," erected and endowed in 1833, for the instruction of 450 orphans left destitute by the cholera which prevailed in the previous year. This disease raged here with such desolating effect, as nearly to clear several entire streets of their inhabitants, and to oblige many large manufactories to stop working, from the number of hands that fell victims to its violence. There were, between August 4th and September 29th, as many as 3568 cases, of which 742, or about one twentieth of the population, proved fatal.

Bilston, which, down to a comparatively recent period, was but an inconsiderable place, is wholly indebted for its growth and importance to the iron trade carried on in it and its immediate vicinity. Its advantages in this respect are not surpassed by those of any other place. Round the town are all but inexhaustible mines of coal and ironstone, the main bed of coal being 30 ft. thick, with strata of ironstone both above and below; and large supplies of the finest sand, used in the casting of metals, are also found in the vicinity. Bilston has the farther advantage of being connected, by numerous canals and river navigation, with London, Liverpool, Bristol, Hull, &c. The importance of these improved means of communication may be judged of from the fact that, previously to the opening of the first canal in 1772, there was only *one* blast furnace for smelting iron at Bilston! Their subsequent increase has been quite extraordinary; and there are now great numbers of furnaces, forges, rolling and slitting mills, &c., which, with the coal trade, furnish employment to a large population. The manufacture of japanned and enamelled goods is very extensively carried on in the town, of which it may be said to be the staple trade. In the neighbourhood is a remarkable quarry, the stones in which lie upon each other in twelve distinct layers, increasing in thickness from the surface, the lowest being about 3 ft. thick. This stone is used for various purposes, and is formed into grindstones, whetstones, millstones, and cisterns. At Bradley, a small adjoining village, (in the W. div. of Cutlestone hund.), a fire rises from a stratum of coal about 4 ft. thick and 30 ft. deep, which has been burning for above half a century, and has reduced several acres of land to a calx or cinder, used in the making of roads. This place formerly belonged to the portionists or prebendaries of Wolverhampton, and in their charter was called Bilsreton. It was a royal demesne at the time of the Conquest; and in the reign of Edward III., under the name of "Billestune," was certified to be free of toll. In 1824, an act of parliament was obtained for a market, now held on the Monday and Saturday of each week, independently of the toll-free markets, or fairs for cattle,

which are held on Whit-Monday, and the Monday next before Michaelmas-day.

BINCH, a town of Belgium, prov. Hainault, cap. cant., on the Haine, 9 m. E.S.E. Mons. Pop. 4500. It produces earthenware and cutlery, and has tanneries, glass-works, and tile-works, with a considerable trade in lace, paper, and marble and coal produced in the vicinity.

BINDRABUND, a town of Hindostan, prov. Agra, on the Jumna, 35 m. N.N.W. Agra. The place is famous in the history of Krishna, to whom many temples are dedicated. The principal pagoda is one of the most elaborate and massive works of Brahminical architecture. There are also numerous sacred pools, where pilgrims perform ablution.

BINGEN, a town of the grand duchy of Hesse Darmstadt, prov. Rhine, cap. cant., at the confluence of the Nahe with the Rhine, 14 m. W. Mentz. Pop. 4300. It has some manufactures, and a considerable trade in corn and wine. Near it is the Bingerloch, a rapid in the Rhine, which is dangerous when the water is low; and on the removal of which large sums have been at different times expended. Bingen is very ancient, having existed under the Romans.

BINGHAM, p. t., Somerset co., Me., 60 m. N. Augusta, 26 m. N. Norridgewock, 655 W. Bounded W. by Kennebec river. It contains three stores, two grist-mills, two saw-mills, ten schools, 358 scholars. Pop. 751.

BINGHAM, p. t., Potter co., Pa., 181 m. N.W. Harrisburg, 295 W. It contains three saw-mills, five schools, 98 scholars. Pop. 453.

BINGHAMTON, p. v., Chenango t., capital of Broome co., N.Y., 180 m. N.W. New-York city, 138 S.W. Albany, 296 W. Situated at the junction of Chenango and Susquehanna rivers. Incorporated in 1813. It contains a court-house, jail, county clerk's office, an academy, nine churches, two Methodist, one Presbyterian, one Episcopal, one Congregational, one Baptist, one Roman Catholic, and two African; forty-five stores, four warehouses, two flouring-mills, four saw-mills, two plaster-mills, one furnace, one stave-factory, two tanneries, one cloth-dressing works, one plough-factory, one gun and rifle factory, two printing-offices, and various other mechanic shops, 450 dwellings, and 2800 inhabitants. It is on the line of the New-York and Erie rail-road, and the Chenango canal connects it with the Erie canal, at Utica. It has an extensive trade, particularly in lumber, and exports much to Hudson river and its towns, and to Philadelphia and Baltimore by the Susquehanna river. A bridge here crosses the Susquehanna river, and another the Chenango river. It promises to become a large inland town, and was named from the late William Bingham, Esq., of Philadelphia.

BINGLEY, a market-town of England, W.R. co. York, 178 m. N.W. by N. London, 32 m. W. by S. York, near the Aire. Pop. in 1821, 6176; 1831, 8037. It consists chiefly of one long street, tolerably built, and well supplied with water. All Saints Church is a neat edifice, in the later English style: the Baptists, Independents, and Methodists, have places of worship. A free grammar school was endowed by Henry VIII.; there is also a national school and some almshouses. The worsted, cotton, and paper manufactures are carried on, and there is some trade in malt, which is conveyed to other parts, chiefly by the Leeds and Liverpool canal, that passes by the town. Public meetings are held in a new court-house; petty sessions weekly; markets on Tuesday; fairs on Jan. 25, and Aug. 25, 26, 27. A branch of the Yorkshire District Banking Company is established here. (*Allen and Bigland's Histories of Yorkshire.*)

BINTANG, an isl. of the E. Archipelago, lying off the S. E. extremity of Malacca; lat. 1° N., long. 104° 30' E.; length 35 m.; breadth about half as much; chief town Rhio, formerly a place of considerable trade.

BIORNEBORG, a sea-port town of Russia in Europe, prov. Finland, gov. Abo-Biörneborg, near the mouth of the Koumo, on the gulf of Bothnia, 72 m. N. Abo; lat. 61° 30' N., long. 21° 40' E. Pop. 4567. It was founded in 1558, and is pretty well built. None but small vessels can come up to the town, those of larger burden anchoring at a considerable distance down the river. It has some trade in ship-building, and exports timber, pitch and tar, fish, &c. (*Schnitzler, La Russie, &c.*, p. 622; *Dict. Géographique, &c.*)

BIR, or BEER (an. *Birtha*), a town of Asiatic Turkey, on the declivity of a steep hill, on the E. bank of the Euphrates, 75 m. N.E. Aleppo, and 38 m. W.S.W. Orfa; lat. 36° 39' N., long. 38° 7' 15" E. Pop. 4000.? It is surrounded on the land side by a well-built wall. Within the town, on a steep rock, is the citadel or castle, now in a state of dilapidation. It has several mosques, a public bath, and a caravansera. The rocks on which the town is built consist of chalk; and the houses being also formed of this material, its whiteness, during sun-shine, powerfully affects the eyes, which are also injured by the dust that is blown about. Bir is the point at which travellers and caravans between Aleppo, on the one side, and Orfa, Diarbekr, &c. on the other, usually cross the Euphrates, which they do in boats of a peculiar description. It is also the nearest point on the Euphrates to Iskenderoun, and has latterly acquired considerable celebrity from its being the point at which Colonel Chesney has proposed to begin and terminate the navigation of the Euphrates by steam. (*See* EUPHRATES.)

BIRDSALL, p. t., Alleghany co., N.Y., 225 m. W. by S. Albany, 8 m. N.E. Angelica, 336 W. Drained by Angelica creek, a branch of Genesee river. It contains one saw-mill, three schools, 105 scholars. Pop. 328.

BIRIOUTCH, a town of European Russia, gov. Voronège, cap. distr., on the Sosna; lat. 50° 40' N., long. 38° 31' 15" E. Pop. 5500. It is surrounded by a rampart and ditch; has seven churches, and four fairs each year.

BIRMAH, or THE BIRMAN EMPIRE, an extensive country of India beyond the Ganges, formerly the most powerful state of that peninsula, and considerably larger than at present; extending between the lat. of 9° and 27° N., upwards of 1000 m. in length, and nearly 600 m. in breadth. At present it comprises the territory between lat. 15° 45' and 27° 22' 30" N., and long. 92° 43' and 99° E.; having W. the British prov. of Aracan, Chittagong, and Cassay; N. Upper Assam and Tibet; E. the Chinese prov. of Yun-nan, Laos, the country of the indep. Shans, and that part of the prov. of Martaban belonging to the British (which, together with those of Tavoy, Mergui, Aracan, Assam, &c., was taken from the Birmese in the war of 1824–5), and S. the Indian ocean: length, N. to. S., 710 m. (Engl.), greatest breadth, E. to W., 370 m. Area, about 200,000 sq. m. Pop. perhaps about 4,000,000.*

	Sq. m.	Chief Towns.	Inhabitants.
The provinces under the actual dominion of the king of Ava are—			
1. Ava (Mianma Pyee) . .	63,488	Ava . . Amarapura . Se-kaing . Monchobo . Yandabo .	354,000
2. Pegu (Pa-kain Pyee) Bassein, Sarawadi, &c. . . .	29,640	Pegu . . Rangoon . Prome (Pri) . Bassein .	40,000 6,000 8,000
Mreiap Shan and Kathee Shan	69,250	Bhamo . .	
4. Cassay (Kathee, part of) .	16,240	Tummoo .	
5. Yo-pyee	6,800	Yo . .	
6. Martaban (part of) . .	4,240	Martaban (Montumma) .	1,500
7. Kingdom of Pong, Singphos, Borkhamti tribes, &c.	30,150	Mongmaeoung	
8. Khyens, Kookies, &c., tribes nominally subject to the king of Ava	9,100		

Mountains.—Birmah is enclosed E. and W. by two principal offsets from the Himalaya chain: in the N. and central parts of the country there are also many subordinate mountain ranges, running mostly parallel to the former, and like them decreasing gradually in height towards the S. From lat. 16° (cape Negrais) to 23° N., the Anopectomoo, or Yoomedong mountains constitute the W. boundary. At the latter point of lat. this range is 200 m. in breadth, and from 2000 to 5000 ft. in height: in lat. 21° the elevation is considerably greater, but thenceforward it rapidly declines, and the breadth becomes so much less that, in 17° lat., it scarcely exceeds 20 m.; this chain terminates in a rocky promontory, bounding S.E. the bay of Bengal. On the E. border a succession of ranges, inhabited by wild and half-subjected tribes, but little known to Europeans, stretch from the gulf of Martaban to the Chinese frontier. *Zingyet-Thoung*, the highest point of the southernmost of these ranges is no more than 3000 ft. above the level of the sea, but between lat. 18° and 22° N. they rise much higher, and in the N. attain a very considerable elevation, the Phungan mountain, in about 27° 15' N., and 97° 15' E., being 12,474 ft. high, and covered with perpetual snow. W. of the vale of Kubo, the Muring range now bounds the Birmese and Munnepoor territories; and E. of these, four hill-ranges extend, in parallel lines, for a long distance S., enclosing three extensive valleys of the Khyendwen, Moo, and Irrawadi rivers. Ranges running E. and W. are unfrequent, but there is one in 20° N. lat., about 50 m. S.E. of Ava; and a small range, the Galladzet hills, in about 18° 20' N., bounding N. the great plain of Pegu.

Plains, &c.—That of Pegu is the principal, and consists chiefly of the delta of the Irrawadi. It is a perfect flat, of most fertile alluvial soil, annually overflowed by its rivers, producing an abundance of rice, and constituting the granary of the empire. The valley of Hukong, in the N., is an extensive plain, 50 m. long, and varying from 15 to 45 m. in breadth; bounded on all sides by hills, and which probably, like that of Munnepoor, at one period formed the bed of an alpine lake. (*Asiat. Journ.*) Excepting these, there

* Some estimates differ widely from this; but this is of the highest authority, being that of Mr. Crawfurd.

are few plains of any size; but numerous valleys, of the highest fertility and beauty, as Khubo, Bhamo, and those of the larger rivers: these are chiefly in the S. and central parts of the country; in the N. they are mostly rocky defiles, or narrow steppes.

Rivers.—The principal are the Irrawadi (*Erivato*), with its affluents, the Ningthee, Moo, and Lung-tchuen; and the Than-lweng, and Si-tang. The Irrawadi, an Asiatic river of the first class, rises in Tibet, and runs generally S. through the whole length of the Birman empire, falling, after a course of 600 m., into the sea, by a great number of mouths in the kingdom of Pegu. (*See* IRRAWADI.) The Than-lweng, or Sauluen, is also a river of the first class, and rises in Tibet, beyond the sources of the Irrawadi: it descends in a nearly uniform S. direction in almost all its course, bounding the Birman empire E., and falls into the sea between Martaban and Moulmein.

The Si-tang rises from the lake of Guanngrue, in lat. 20° 20′ N., runs S., and disgorges itself, after a course of about 200 m., by a large mouth, but nearly useless as a harbour or for navigation, because blocked up by an island and many dangerous shoals, with no more than a fathom water during the efflux of the tides, and not available for any vessels drawing six feet water. This river communicates by cross branches with both the Irrawadi and Than-lweng. The Ningthee rises in the Patkoi chain, on the borders of Assam; and, running in a S.W. direction, constitutes for some distance the boundary between Birmah and the Munneepoor territory, and falls into the Irrawadi, opposite Yandabo, in 21° 40′ N. lat., under the name of the Khyen-dwen. It is navigable for the largest class of boats as far as Kingnao, in 23° 45′ N. lat.: almost all the streams which fall into it on the E. side are auriferous. The Aracan river, for the greatest part of its course, flows through the country of the half-subjected Khyens; and the Kuladyne, its chief tributary, is considered one of the boundaries between the Birmese territory and the British prov. of Chittagong.

Lakes are very numerous in the prov. of Pegu: in the distr. of Bassein as many as 127 have been enumerated. The largest lake, however, is that of Kandangyee, or the Great Royal lake, 25 m. N. Ava, which is 30 m. long, 8 or 9 m. broad, and traversed by the Moo river, a tributary of the Irrawadi. There are other smaller lakes in its neighbourhood, but none of any importance.

Coast and Harbours.—There are 240 m. of sea-coast from the mouth of the Than-lweng to cape Negrais, with three good harbours: viz., those of Bassein, Rangoon, and Martaban: that of Rangoon is the best, but is infested by a worm, which destroys all wood except ebony and tamarind.

Minerals.—The N. provinces are the richest in valuable minerals. Besides fine marble, which might be advantageously imported into England as dead weight, serpentine, and nephrite, and amber mines are worked by the Chinese. Amber is found in immense quantities in the valley of Hukong; gold to the value of £100,000, and silver to that of £120,000 per annum; all the varieties of the sapphire, with spinelle rubies, are found in great abundance at about five days' journey E.S.E. from the capital, and are an important article of export; topazes, a few emeralds and diamonds, though of an inferior quality; iron, copper, tin, lead, antimony, arsenic, vitriol, sulphur, nitre, &c., are found. Petroleum is obtained in large quantities on the Irrawadi above Prome. The wells, about 2 m. from the river, produce each a daily average of 150 gallons, which sells on the spot for about 1*s.* 8*d.* per cwt. The gross annual produce is about 80,000,000 lbs., and might be greatly increased. It is used for lights, paying boats, &c.; and is said to have the valuable property of securing wood from the attacks of insects. Coal is said to have been met with in various spots. A monopoly exists of gold, silver, and precious stones. (*Crawfurd's Journ.*, p. 441, 442; *Pemberton*, p. 13, 133–142; *Malcolm's Travels*, i., 169.)

The Climate is generally healthy, especially in the hilly tracts; but even in the plain of Rangoon, &c., it is infinitely more so than in Aracan or the valley of the Brahmaputra, a fact proved by the Peguans being among the most active, healthy, and vigorous inhabitants of the empire. The extremes of heat and cold are seldom experienced, except before the periodical rains. In Pegu, as high as Prome, there are but two seasons in the year, the rainy and the dry; the former lasting from the end of April to the end of Oct.; and the cold season immediately succeeding, the rains are heavier in this than in any other part of India. In Birmah Proper, or from Prome to lat. 26° or 27° N., there are three seasons; a cold, lasting from Nov. to Feb.; a hot, from March to June; and rain falling during the remaining months. Heavy mists occur in Nov. and Dec., but no snow falls; and only a little hail in April or the beginning of May. Earthquakes are not unfrequent, and, in Pegu, violent rains, with thunder and lightning, &c., often usher in and conclude the wet season. The transitions of the seasons are extremely sudden; the greatest heats are in March and April: the trees shed their leaves in May, but only to be immediately clothed with new ones. In June, July, and August, the inundations from the mountains raise the river at Ava to 32 ft. above its lowest level (Feb.); but all the waters are drained off again by Oct. (*Sangermano's Descr.*, p. 164, 165; *Pemberton's* (*Capt.*) *Report*, *&c.*, p. 154, 155; *Dictionnaire Géog. Univer.*, ii., 197.)

Vegetable Products.—Sixteen thousand different species of plants, natives of the Birmese dominions, were collected by Dr. Wallich when he visited the empire in 1826: among them were the teak, saul, seven kinds of oak, two kinds of walnut, three species of willow, a rose; the almost unique *Amherstia nobilis*, near Martaban, a magnificent species of *Leguminosæ*, 20 ft. high, handfuls of whose fine, deep scarlet flowers are offered by the natives before the images of Boodh; the *Hibiscus Lindlei*; many new genera of Orchideæ, Scitamineæ, Liliaceæ, &c., &c. (See *Wallich's Plantæ, Rariores, &c., &c.*) The teak-tree abounds in forests along the hills skirting the Irrawadi, and in the N. provinces, both on hills and in valleys; in lat. 23° 30′ it approaches closely to the banks of the river, though it does not grow in Pegu within the influence of the tide. The most convenient and accessible forest in the country is that of Sarawadi, which furnishes nearly the whole of what is exported to foreign countries. The teak of Ava is said to be less durable than that of the coast of Malabar, but it has been so certained by experiment to be stronger than the last, and therefore fitted for machinery, gun-carriages, &c. In the vale of Kubo the saul and varnish-tree are most plentiful; bamboo grows to the circumference of 24 inches in the jungles, which contain whatever other underwoods are prevalent in India. The *mimosa catechu*, sugar-cane, indigo, and cotton-plant, are common; and the tea-plant, of a genuine character, besides inferior sorts, flourishes on the heights of the N. and central provinces. Every month produces some fresh fruit; the banana, cocoa, palm, pine-apple, guava jambo, mango, &c., are abundant, but citrons, pomegranates, and oranges, are the only fruit shared in common with Europe. Pulse of all kinds, wheat, maize, millet, rice, &c., and many pot-herbs, are usual articles of culture. Firs, &c., are rare, but junipers, rhododendron, and other European plants, grow on the upper region of Mount Phuyen and other considerable heights in the N.

Animals.—Elephants of three different varieties, the single-horned rhinoceros, wild boar, tiger, leopard, &c., inhabit the jungles; buffaloes, porcupines, civet and wild cats, and great numbers of apes, deer, and antelopes, are found. Occasionally a white elephant is met with, which is much prized, and one is always kept as part of the royal establishment at Ava, where he is treated with great care and attention. There are no jackals, or foxes, but dogs are numerous. There are no asses, except a few at the capital, obtained from the Chinese caravan; and, consequently, there are no mules. Game is not so abundant as in Hindostan: there is a small species of hare, but very inferior, and found only in the high lands. Snipes, quails, pigeons, our common fowl in the wild state, three species of peafowl, with one species of pheasant, are found; parrots, and other birds of rich plumage, are plentiful: the gavial, in the Irrawadi, chameleon, many lizards and formidable serpents, as the *cobra-de-capello*, *cobra ceras*, *&c.*; tortoises, the mango fish, sable, and many others; scorpions, spiders, and centipedes, leeches, which abound in dangerous numbers in the marshes, moschetoes, and a very voracious ant, destructive to house furniture, are among the animals. (*Crawfurd*, p. 454–457.)

People.—Several distinct tribes inhabit the Birman territories; viz., 1. The *Mranma* (Birmans), between 19° and 24° N. lat.; 2. *Talain* (Peguans), between the Than-lweng river and the Galladzet and Anopectomoo hills; 3. *Shans*, with more affinity to the Siamese than other races, and spreading over the E. and N. provinces; 4. *Cassayers*, chiefly in the capital; 5. *Khyens*, a rude people scattered among the other population, but living in the mildest parts of the country; 6. The *Yô*, probably a Chinese tribe who have adopted Birmese customs, residing between the latter and the Irrawadi; 7. *Karyens*, inhabiting an extensive hilly tract between the Than-lweng and Si-tang, good cultivators, but unsubjected, and bearing great enmity to the Birmese: the *Zabaings*, Taong-su, &c.; the Khamti, Singphos, and other Tibetan or Tartar tribes in the N. Mr. Crawfurd estimates the Karaens and Khyens in Bassein prov. at 46,600, and the whole of the wild tribes at 830,000. Most of these nations, though differing in language, manners, &c., are of the physical type common to all those situated between India and China. They differ from the natives of both these regions in certain particulars, and are said by Crawfurd to resemble more the Malays. The Birmese are short and stout, but well proportioned; with coarse, lank, black hair, and an olive complexion: the women are fairer than the men, who have more beard

generally than the Siamese; the physiognomy of both sexes is open, cheerful, and not unpleasing, and very few of them are in any way deformed. They are robust, active, inquisitive, not deficient in courage, and form a total contrast to their neighbours of Bengal in habits and disposition. They are said to be lively and impatient; much addicted to theft and lying, deceitful, servile, and proud; but, at the same time, courteous, benevolent, and religious—though it be difficult to imagine religion linked with thieving and lying. The foreigners settled here consist of about 16,000 Siamese slaves; 1000 Anamese, descendants of some who were formerly in a state of slavery; about 3000 Chinese, chiefly from Yunnan, settled in the towns or working the mines; many Hindoos from Bengal; Mohammedans, and a few Europeans. Though fond of repose, when an inducement to exertion offers, the Birmese exhibit not only great strength, but courage and perseverance, and often accomplish what we should think scarcely possible. But the mildness of the climate, the fertility of the soil, and the badness of the government, render these valuable qualities of little avail. In countries like Birmah, the customary standard of competence is easily attained. The poorest classes obtain the necessaries which they require with comparatively little labour; and those who should go farther, and attempt to make a display, or to improve their lands and houses, would expose themselves to extortion, and perhaps to personal danger. Sloth is, in consequence, the solace of the poor, and the principal enjoyment of the rich. (*Crawfurd*, p. 371, 372, 465–470, &c.; *Malcolm*, i., 230, &c.)

Occupations.—Agriculture.—Excepting near the towns, most of the land is waste and unappropriated, unless occasionally by wandering tribes, who raise crops with little labour on the virgin soil. The cultivated lands are assigned, with their inhabitants, by the sovereign, in large districts, to his various favourites, who are not unaptly entitled their "eaters," and who grind down the cultivators by the most oppressive exactions. The farms generally consist of only a few acres each; and agriculture, except, perhaps, among the Karyens, is in its rudest and most imperfect state. Rice is the chief article of produce, and forms the main food of the people: it is mostly grown in the S., where, although the plough is seldom used, and the soil only trodden by cattle, a single crop is said to yield 50 or 60 fold. In the N. provinces a plough, similar to that of India, is used, and the soil is afterward pulverized by means of a wooden cylinder, and a rough harrow dragged over it: two or three crops a year are here obtained, but they are not so productive as the single crop of the lower provinces. Pulse of various kinds, Indian millet, and maize, are grown in the N. prov., the latter yielding (but such statements are almost always exaggerated) 100 fold. Good wheat is grown in the neighbourhood of the capital, but it is little used for bread; and we have been assured by Mr. Crawfurd, that all the wheat produced in the empire would not feed fifty families! *Sesamum* is universally cultivated for its oil and oil-cake, which is given to the cattle. Cotton (*gossypium herbaceum*, Wallich) of a firm and silky texture, but of short staple, is grown in every part of the empire and of its dependancies, but principally in the upper provinces. Indigo is also generally grown, and is naturally of good quality, but the culture and manufacture of the plant are both so very rude, as to render the produce wholly unfit for exportation. The potato and pot-herbs of Europe are quite unknown; but yams, and a species of sweet potato, are, as well as tobacco, very general articles of culture in the N. There are no melons, cucumbers, or egg-plants; but the banana, tamarind, &c., are extensively grown; and in some tracts the number of fruit-trees forms the basis of taxation. The sugar-cane is cultivated, and the stalk eaten when ripe, the manufacture of sugar, except a very coarse sort, being unknown. An inferior kind of tea, with a large leaf, is grown on the hills, and eaten by the natives with garlic and onions, which are also produced there. Capsicum, next to salt, forms the chief condiment; from the highest to the lowest, all season their rice with this plant, and its consumption is "incredibly great;" betel-nut is raised for home consumption; and the piper betel is cultivated largely, and of excellent quality. In addition to rice, pumpkins and pulse, *gnapee** and oil, compose the main food of the peasantry. Animal food being prohibited by the Buddhistical religion, is not generally eaten, excepting poultry or fish which have died a natural death, lizards, serpents, iguanas, &c., by the lower classes; or game, &c., by some individuals privately. Many of the hill tribes do not, however, regard the injunction, and kill bullocks and other cattle for food, or to sacrifice to their deities: many others also, by one means or other, evade the law of not spilling the blood of animals, or openly break it. The common beverage of the people is water; but spirits, though prohibited, are imported or distilled from rice, and toddy is made from the juice of the palmyra, date, or cocoa-tree.

Cows, buffaloes, goats, and a very few sheep, are kept, but neither for their flesh or milk. Oxen are used only for draught, and prevail chiefly in the upper country, the buffalo being more common in the lower. The Birman horse is not more than 13 hands high, but strong, active, esteemed in the country, and used only for the saddle. The elephant is domesticated and used for carriage; the camel is altogether unknown. Hogs are plentiful, but commonly used only as scavengers.

Arts and Manufactures are in the most backward state. Ploughing, cleaning cotton, spinning, weaving, and dyeing, are operations mostly performed by women or captive Cassays: the loom used is like that of Bengal. Silk and cotton goods are woven; the former chiefly in the capital and the large towns in its vicinity, but are very inferior to those of India and China. The Khyens, however, though considerably less civilized than the Birmese, surpass them greatly in the manufacture of silk, and produce some superior crimson scarfs, embroidered with gold, and narrow shawls. The Khyen looms can only make fabrics one cubit, while those of the Birmese produce some two cubits in width. Printing on cotton, &c., is unknown; but dyeing with indigo, turmeric, &c., is practised; and the colours of the Birmese fabrics are much admired for their brilliancy: alum is the only mordaunt used. No fine linen is manufactured; and British goods of all qualities are commonly imported, and sold cheaper than any produced by the natives. Some coarse earthenware is made; the large Pegu jars are well known, and somewhat celebrated, but seem no longer to be manufactured: all the porcelain used is imported from China. The Birmese cast bells, and execute filagree, &c., in gold and silver respectably; but otherwise they do not work well in metals. Some rude cutlery and matchlocks are made at Ava, &c.; but their swords are chiefly bought from the Shans, and old muskets from the English: the latter fetch from 37*s.* to 50*s.* each, while new Birmese muskets are only considered worth 25*s.* Lacquered ware for trays, betel boxes, &c., is among their best manufactures. Their gunpowder is very bad. Their paper is of three sorts, one of which is made of bamboo fibres, covered over with a mixture of charcoal and rice-water, and written on with a piece of steatite, as we do on a slate. Nearly all their manufactures are domestic. Excepting carpenters, smiths, masons, carvers, and gilders, who work for the palace, temples, and priests, there are but few public artisans, and these reside only in the larger cities. The Birmese war-boats are very well built, and adapted for their purpose: they consist of the trunk of a long teak-tree, expanded by heat so as to admit two rowers abreast; the gunwale is raised a foot above the side, and elaborately carved and gilded, as well as the prow, which is much raised: each boat holds from 20 to 100 men, and in velocity they very far transcend our swiftest men-of-war boats. The common trading boats are mere canoes, decked with split bamboo, and partly covered in with mats, with one bamboo for a mast and another for a yard.

Houses, Temples, &c.—The ordinary houses consist wholly of bamboos and matting, badly thatched with leaves or grass, very soon built or removed, and in the lower situations raised 3 or 4 ft. from the ground on wooden posts; those of the priests are of a superior kind, and somewhat similar to those of the Chinese, or those of the Shans in the N. provinces, having a long roof rounded at the ends, matting walls, and being divided into several compartments. The ordinary beds of the people consist of merely a small mat laid on the ground. The temples are of different styles in different provinces; at Pugan, in Birmah Proper, they are heavy, broad, and surmounted by a small spire; in Pegu, pyramidal, and adorned with many figures of griffins, sphinxes, crocodiles, &c. They are all much gilt and decorated, and often contain very solid masonry: many are, however, in ruins, since most of them are built and endowed by wealthy individuals, and it is deemed more meritorious to build a new, than to repair an old one.

Commerce, &c.—In the lower provinces the traffic is almost wholly by water conveyance; in other parts goods and passengers travel by carts or wagons drawn by oxen, or on the backs of these animals: the upper districts send to the lower petroleum, nitre, paper, lacquered wares, silks and cotton, cutlery and metal ware, palm-sugar, onions, tamarinds, &c., and receive from Rangoon, Tongho, and Bassein, which are the chief trading places, rice, salt, pickled and dried fish, and foreign commodities. The Shans export cottons, silks, ivory, bees' wax, stick-lac, varnish, lacquered wares, swords, and metals, to Ava; and take back salt, dried fish, &c. The red Karyens traffic in slaves with the Siamese, which may, it is said, be put an end to by the British authorities, our possessions in Martaban in-

* Gnapee is made of prawns, shrimps, or any cheap fish, pounded into a consistent mass, and frequently allowed to become partially putrid. It is known in commerce by the name of *Balachong*. (*Malcolm*, i., 203.)

tervening between the two territories. The principal foreign trade is with China, and its chief seat the town of Bhamo, whither the Chinese caravans come and meet the Birmese and Mohammedan merchants; and from Dec. to April this town "presents a most animated scene of active industry, and a greater variety of tribes than is, perhaps, found at any other fair in Asia." The principal articles of import from China are silk (to the amount of about 27,000 bundles, worth £81,000 a year), copper, carpets, fur jackets, orpiment, quicksilver, vermilion, verdigris, drugs, tea, fresh and dried fruits, dogs, birds, &c. The tea, of a coarse quality, is sold at about 6½d. per lb. The exports to China are chiefly raw cotton, averaging (14,000,000 lbs., and worth £228,000 a year); feathers, ivory, wax, edible birds' nests from the Mergui archipelago, rhinoceros' and deer's horns, sapphires, and some British manufactures, chiefly broad cloths and carpets. The total value of the trade with China is variously estimated at from £400,000, to £700,000, of which, as already seen, silk and cotton amount, in ordinary years, to about £309,000. The principal foreign trade of the Birmese by sea is carried on from Rangoon, with Calcutta, Chittagong, Dacca, &c. By far the most important article of export in this way is teak timber, of which about 7500 full-grown trees used to be annually shipped, principally for Calcutta. Among the secondary articles of export are cotton, of a superior quality, formerly used in the manufacture of the fine muslins of Dacca; with gold and silver, catechu, stick-lac, ivory, glue, &c. The imports by sea are British cotton goods, which have nearly superseded those of India, areca and cocoa-nuts, tobacco, iron (wrought and unwrought), copper, lead, quicksilver, borax, nitre, gunpowder, fire-arms, opium, sugar, arrack, rum, English glass and earthenware, steel, &c. (For farther information as to the trade of the Birmese, see *Crawfurd's Journal*, ii., 189–190; *Malcolm*, i., 265; and the art. RANGOON, in this work.)

Measures, Weights, &c.—The chief measure of *capacity* for rice is the basket = 58⅓ lbs. avoird.; *of length*, the finger-breadth, hand-breadth, span, cubit (2 spans, or 19·1 Eng. inches), bamboo = 28 cubits (14⅔ yds.), taing = 7000 cubits (2 m. 1 furl., nearly); = the chief *weights*, the tical (nearly ½ oz. avoird.), viss = 100 ticals, or 3 catties (3 lb. 2 oz.)

Money.—There is no coined money, excepting some of very base quality, and of lead, struck at Amarapûra and Rangoon; gold and silver ingots, of a tical weight, and various degrees of purity, form the rest of the currency. Gold is valued at about 17 times the worth of silver, a tical of which latter, nearly pure, is worth 2*s*. 8 1-12*d*. (*Trant.*)

Revenue and Taxation.—One tenth part of the products of the cultivator, which is often taken in kind, and 10 per cent. on all imports, &c. (12½ per cent. is exacted at Rangoon, 2½ per cent. of which go to the underlings of the government), 5 per cent. on exports and on the petroleum collected; the monopoly of marble, amber, the precious metals, and gems above a certain size, of wrecks, and the property of certain foreigners dying in the country, all belong to the king. The fiscal system is "replete with uncertainty, rapacity, and violence;" there is no direct land-tax, but parties are assessed in proportion to their supposed means, or rather inversely as to their ability to pay, since it is often according to the number of persons in a family; in other places, it is as the number of fruit-trees; or a house-tax is resorted to. The revenue derived from the Karyens, by a personal or poll-tax is 3000 rupees a year. These, together with imposts on salt, fisheries, &c., and duties from the Chinese workers of the mines, are the chief sources of the royal wealth. Most of the provinces are considered the property of the royal family or principal court favourites; the king, as he grasps at more money, assesses each of his viceroys in a certain sum; these assess their subordinate district governors for a larger sum, and these again force still more out of the unhappy peasantry, who, generally, are made to pay double the sum originally demanded by the king. The gold and silver that thus reaches the royal treasury is never, except on urgent occasions, disbursed again; the only channels of its expenditure are in presents to favourites, gilding temples (for which most of the gold in the country is used), and making ornaments. The obligation to make presents to obtain favour or justice prevails universally, and from the top to the bottom of the social scale, there is one uniform system of extortion and rapacity, which has so completely crushed the spirit of the people, that, although few are in beggary, all fear to be rich, lest they should be marked out and impoverished by the harpies of the state. (*Crawfurd's Journ.*, p. 415–432.)

The Government is an hereditary and absolute despotism, the sovereign being "lord of life and limb" over his subjects, who style him "golden;" speak of informing the "golden ear," throwing themselves at the "golden feet," &c. They approach him with their hands joined above their heads, and even make obeisance to the palace walls, before which all must dismount and take off their shoes. The sovereign is assisted by four woongees, or chief public ministers; four atween-woons, or private counsellors; four woon-docks, ministers of the interior; four state secretaries; four reporters; four officers to regulate ceremonies; nine to read petitions, &c. Their several ranks are determined by their dresses, coronets, and number of gold chains; the monarch himself only being privileged to wear twenty-four. The whole nation is divided into the royal family, nobles, and commonalty, and none dare assume the dress of a superior grade. The Birmese have no farther distinctions of *caste*, as in India, nor any hereditary distinctions; although, in other respects, a kind of feudal system prevails; and the king can command the appearance of his nobles in the field, with their quota of vassals. (*Hamilton's Gaz.*, p. 48–59; *Sangermano*, p. 58; *Wilson's Docum.*, Append., p. 38; *Crawfurd*, p. 491; *Trant*, p. 247–268.

Armed Force.—The Birmese are not, as a nation, a military people, but would make good soldiers under able officers. There is no regular system of conscription; every man is liable to serve, but no large force is ever disposable; and it is believed that the whole levies raised to oppose the English in the last war (when the government was in such alarm that 150 ticals, nearly £20, bounty was given to each man) did not amount to more than 50,000 men. (*Captain Low's Hist., &c.*) Excepting a small body of Cassay horse, and one of artillery, all are infantry, and armed with long spears, two-handed swords, old muskets, and the jinjal, a kind of carbine, carrying large balls, which, as they are good marksmen, is a formidable weapon, except in close combat. They are adepts at raising stockades, which they do wherever they take up a position; but these are not generally defended with much vigour. The war-boats, which have each a nine-pounder, or small piece of ordnance at the prow, constitute the best portion of the armed force.

Jurisprudence.—Each large city has its judicial tribunal and townships (*myo*) have each a governor, called *myo-sugi*, who is assisted by inferior police officers, placed over the several wards: from the decisions of the *myo-sugi* there is appeal to the provincial governors, and from the latter to a higher law officer in the capital. The code of laws (which may be found at length in Sangermano's "Description of the Birman Empire") is derived from the "Institutes of Menú," and contains many salutary regulations; but through a most corrupt administration, the sinns of justice are frequently perverted, and the greatest tyranny is exercised. The slavery of a debtor, or his children, in discharge of a debt, is common; and females, in such a case, may be used as concubines. Trial by ordeal often takes place, and in criminal cases the punishments are marked by the greatest cruelty. The Birmese seem to have taxed their ingenuity to invent terrific and revolting modes of death. These they bear with an intrepidity or indifference common to all Asiatics; but owing to the extreme corruption of the Birmese officers, there are very few offences that may not be expiated, or their punishment materially alleviated, by a pecuniary sacrifice. (*Crawfurd*, p. 413, 491, &c.; *Sangermano*, p. 65–70; *Wilson's Docum.*, Appendix, p. 44.)

Religion is Buddhism, believed to have been introduced by Gaudma, the chief deity himself, in the 6th century B.C. This faith is universal here, except among foreigners; individuals who have been converted to Christianity; a few Zodi, believed by Sangermano to be Jews; and some hill tribes, as the Khyens, Karyens, and Cassays, in the lowest stage of idolatry. Those who are curious in religious creeds may find that of Boodh at full length in the translation of Sangermano. The priests, called Rhahaans, are much respected; they are bred up like monks to their calling from an early age, and observe celibacy; but may at any time renounce their vows and marry. They are voluntarily maintained by the population, and not suffered to engage in manual labour; their chief occupation being the instruction of youth. All foreigners are allowed the fullest exercise of their religion, and may build places of worship anywhere, and have their public festivals and processions without molestation. But, though thus tolerant to strangers, they are most intolerant to their own people. No Birman dare join any of these religions, under the severest penalties; and the most rigorous measures are adopted for suppressing all religious innovations. It is a curious fact, that the inhab. of the conquered Birmese provinces in our possession seem to be now more attached to their religion than ever. A notion that it was in danger seems to have awakened new zeal in its favour. (*Malcom*, i., 320.)

Education is so far diffused that almost every male Birman can read and write; and this is the case with many of the females. The Khyens have no knowledge of books or reading, &c., and hold medicine in contempt: the Birmans themselves are grossly ignorant of physic; blood-

letting is unknown, and whether for fever or rheumatism, they shampoo the patient, treading him till he is in a profuse perspiration: any one may practise this profession. Diseases of the digestive organs, and of the skin, cholera, leprosy, &c., are the most frequent: inflammations are not generally acute, and wounds of a very severe character are said to heal with singular rapidity.

The Birmese are possessed of some knowledge of the heavenly bodies, and the signs of their zodiac are the same as ours: their year consists of 354 days, the errors in which computation they partially rectify every third year. They have twelve months, of twenty-nine and thirty days alternately, and seven days in the week, named from the planets, in the same order as ours. There are seventy hours between sunrise and sunset, calculated at the capital by the successive filling of cups by dropping water; but as the length of the days changes, these cups must, of course, be also continually changed. Their common epoch begins from the year A.D. 638, making our year 1839 the Birmese year 1201. (*Sangermano*, p. 102; *Trant*, p. 267; *Hamilton's E. I. Gaz.*, p. 51.)

Language.—There are two languages spoken by the bulk of the people; viz., the *Birmese* by the *Birmans*, and the *Peguan* or *Mon* by the *Peguans*; exclusive of many rude dialects. Besides these, there is the *Pali*, or sacred language, which has a distinct written character. In the common *Birmese*, the letters are formed of circles and segments of circles, probably derived from the *Pali* alphabet, but differing wholly from the *Devanagari*. The structure of the language is exceedingly simple. There is no inflection of any part of speech. Relation, number, mode, and time are all indicated by prefixing or affixing certain articles. The words follow each other in their natural order, an arrangement indispensably necessary to a dialect so inartificial. (*Crawfurd's Journ.*, p. 287.)

Dress.—That of the men is a covering from the loins reaching half way down the leg; over this a frock with wide sleeves, tied all the way to the knee; on the head, a square handkerchief of English or Madras manufacture, or a turban of English book muslin. The women wear a somewhat similar dress, but shorter than that of the men; and the petticoat being open in front, permits the thigh to be seen at every step: they wear no head-dress. The hair of both sexes is worn long, and tied in a knot on the top of the head: the men pluck out their beard; but the practice of blackening the teeth is not followed as it was formerly, and still is, by some neighbouring nations: sandals, but neither boots, shoes, nor stockings are worn. The dress of the peasantry, Khyen tribes, &c., is mostly black; yellow is a sacred colour, and only used by the priests and upper classes; a quilted jacket is sometimes worn; and in the N.E. the Chinese costume is adopted. The court dress of the nobility is handsome, consisting of a long robe of flowered satin or velvet, reaching to the ancles, with an open collar and loose sleeves; velvet caps with gold circles, many ornaments, &c.

Habits, Customs, &c.—Chewing betel is common, and smoking universal, even with children. The Birmese eat twice a day; viz., early in the morning, and in the evening: their food is served up on trays, in red lacquered plates, and small cups: spoons are used, but not so much as fingers: knives and forks are unknown. The people are very superstitious, consult the stars, believe in fortunate or evil times, wear talismans, practise alchemy, &c. If any member of their small communities of four or five houses chance to die, the Khyens believe the evil spirit has taken possession of the place, break up their settlement, and remove to another spot; and, when an earthquake happens, shout and beat their houses, to expel the fiend.

Slavery, and especially the selling of women, is general; polygamy is allowed; marriage, although a mere civil contract, is universally respected; and the sovereign himself has no right to seize for his harem a married woman. Divorces are exceedingly common. Females are allowed as much liberty, usually, as males; they are engaged in all sorts of drudgery and continual occupation, yet infidelity among those who are married is rare, though chastity among the others is a virtue little practised or appreciated. To avoid, it is pretended, the seizure of their females, who have naturally some beauty, the Khyens have long adopted the custom of tattooing their countenances; a tattooing of their bodies in all kinds of figures also prevails among the Birmese. Corpses are either burned or buried; persons of rank are publicly laid out in state, and among all classes visits of condolence and presents are received by the survivers of deceased persons, and musicians attend to play before the body till the funeral, which is conducted with as much magnificence as the friends can afford. The funerals of priests are public festivals, and many accidents are caused by timber and other heavy bodies, that are fired up in the air on those occasions, falling on the crowd that has collected: the Khyens also treat deaths as matters of public rejoicing. Many *bizarre* customs prevail among the Birmese; such as the privilege that every one has to throw water over any others, of whatever rank, during the last three days of the year, which produces much sport; the privilege that *friends* of new married people have to come into the house on the wedding night and break everything they can find, for which reason weddings are often kept secret, &c.

Amusements, Taste, &c.—Boxing, cock-fighting, foot-ball, throwing a quoit of bamboo, a few games of chance, chess, and dancing, are among the chief recreations. The Birmese are good mimics, and very fond of acting; their drama is by far the best among the Indo-Chinese nations. Their music (several specimens of which are given in Mr. Trant's *Two Years in Ava*) possesses decided melody; they are much attached to it, and usually sing at their work. Their principal instruments are, a drum of bamboo or cane, covered with skin, a kind of hurdygurdy, oboe, lute, &c.: in their dances they exhibit many contortions of the body. They have several epic and religious poems, besides some other literary productions.

History.—The earliest records go back to the year B.C. 543. The first kings are said to have come from Bahar, and fixed the seat of government at Promie, where it continued for 336 years. In A.D. 107 it was removed to Pugan (Pagahm Mew) where it remained for twelve centuries, and where are still to be seen extensive ruins, including many temples, and some relics of Hindoo worship. In 1322, the court was removed to Sa-kaing; in 1364, to Ava; in 1752, Alompra transferred it to his native place, Monchobo; one of his sons carried it back to Ava; another to Amarapura: from 1822 to 1837, Ava again became the capital, when the revolution that placed the prince of Sarawadi on the throne restored that honour to Monchobo.

In the 18th century the Birmese became the most powerful nation of the E. peninsula of Asia. Ava had been governed by the king of Pegu for some time previous to 1753, when Alompra, the founder of the present dynasty, expelled the Peguans from Ava and Promie, and in 1756 effected the conquest of Pegu. The Shan country was conquered by his son in 1768; Cassay in 1774; Aracan in 1783; in 1790, the Tenasserim provinces taken from the Siamese; and Assam conquered in 1822. Emboldened by these successes, the court of Ava entertained designs on the neighbouring British territories; our frontiers were subject to continual irruptions, and our ambassadors to all kinds of contempt and insolence; until, after a hostile invasion of Cachar, a state with which we were allied, and renewed outrages on our possessions in Chittagong, Sir A. Campbell was sent with an army up the Irrawadi. After a variety of engagements, in which the British were always successful, a treaty was concluded Feb. 24, 1826, at Yandabo, 50 m. from the capital, by which the provinces of Aracan, Yé, Tavoy, Mergui, and part of Martaban, were ceded to the British, together with 5,000,000 rupees to defray the expenses of the war; and the king of Ava ceased to have dominion over Assam, Jyntea, Cachar, and Cassay. In April, 1837, the prince of Sarawadi, brother to the former king, seized the throne; put to death or otherwise disposed of the courtiers who had been opposed to him; and removed the seat of government from Ava to Monchobo.

It is worthy of remark that, in our late invasion, the country people displayed no vigorous opposition or enmity towards the British troops; indeed, so far from it, when they found that their property was respected, and themselves treated with humanity and kindness, they flocked back to their habitations; freely supplied the soldiers with provisions; expressed their wishes for the success of our arms, and our permanent occupation of the country; and, in some instances, openly declared in our favour.

The contrast between the present and former state of the Birmese provinces occupied by the British is most creditable to our government. An unexceptionable witness, Mr. Malcom, the American missionary, says that "coin is being introduced, instead of masses of lead and silver; manufactures are improving; implements of improved construction are used; justice is better administered; life is secure; property is sacred; religion is free; taxes, though heavy, are more equitably imposed; and courts of justice are pure, generally. Formerly men were deterred from gathering round them comforts superior to their neighbours, or building better houses, for fear of exactions: now, being secure in their earnings, the newly-built houses are much improved in size, materials, and workmanship. Everywhere in British Birmah, people praise British justice." (i., 74.) It is to be hoped that this striking change may lead the Birmese to reflect on the gross defects of their institutions, and thus pave the way for their improvement. (*Crawfurd's Embassy to Ava*, the best work by far that has hitherto appeared on the country; *Malcom's Travels*; *Pemberton's Report on the E. Frontier*; *Sangermano's Desc. of the Birman Empire*; *Wilson's* (*H. H.*) *Documents, &c.*;

Trent, Symes, Foley, Hanway, Richardson, &c., in *Calc. Asiat. Journal, Asiat. Researches, &c. &c.*)

BIRMINGHAM, the principal hardware manufacturing town in England, co. Warwick, at the W. extremity of the co., and nearly in the centre of the kingdom, 18 m. N.W. Coventry; 56 m. N.W. Oxford; 69 m. S.W. Manchester; 102 m. N.W. London; lat. 52° 30′ N., long. 1° 18′ W. Including the immediately contiguous townships of Aston and Edgbaston, it extends over an area of 18,780 acres, and had in 1801 a pop. of 73,670, and in 1831 of 146,986; viz., 71,756 males, and 75,230 females. At present (1839) the pop. is probably not under 190,000. Birmingham stands on the side of a hill by the river Rea. The principal thoroughfare of the older portion, in a low and damp situation, exhibits some curious specimens of ancient domestic architecture. The more modern part, placed on higher ground, contains some magnificent and costly buildings, a great number of spacious and well-laid-out streets, with houses, principally of brick, though many of the more recently erected have stone fronts. Among the public buildings may be specified the theatre, reckoned one of the most commodious and superb for its size in the kingd.; the Society of Arts; the market-hall, 365 ft. long by 108 wide, lately erected; the town-hall, a noble building, modelled on the temple of Jupiter Stator at Rome, built of brick, faced with Anglesea marble, 166 ft. long, 104 ft. broad, and 83 ft. in height, having a grand saloon, capable of accommodating 9000 persons, and containing one of the finest extant organs. The churches and chapels are particularly handsome; that of St. Philip, on the summit of the highest eminence in the town, is justly admired for its architectural beauty: the new church of St. George, endowed and mostly built at the cost of Lord Calthorpe, is also especially worthy of notice. The barracks, erected in 1793, at the N.E. extremity of the town, cost £13,000. The free school, erected from the design of Sir Edward Barry at a cost of £40,000, on the site of the ancient building, is one of the most perfect structures of its kind in Europe, and a principal ornament of the town. The Blue-coat school, founded in 1794, and enlarged in 1794; the News-room, on Barnet's hill; the buildings connected with the railway station, covering and enclosing ten acres of ground; with some very superior hotels and assembly-rooms, may also be specified. A bronze statue of Nelson, by Westmacott, stands nearly opposite the market-hall; and a handsome bridge has been erected across the Rea, at Deritend. It was only very recently that Birmingham became an incorporation, or possessed any chartered privileges: in fact, in 1676 it was not even a market-town. Its ancient government was by two constables, a headborough, a high and low bailiff, with other inferior officers chosen annually at the court leet of the lord of the manor. The duty of the high bailiff was to inspect weights and measures, and the markets; that of the low bailiff, to summon juries, and to choose all the other officers. It should, however, be observed, that the terms high and low had no reference to the duties performed by these functionaries. The duties of the two high tasters were, to examine the quality of the beer, and its admeasurement; and of the two low tasters or meat conners, to inspect the meat exposed for sale, and to cause that to be destroyed which was unfit for use. Under its recent charter of incorporation, Birmingham is divided into sixteen wards, and is governed by a mayor, a recorder, sixteen aldermen, and forty-eight common-councilmen. It has, also, since the passing of the Reform Act, sent two members to the H. of C., a privilege which it did not previously enjoy; and had, in 1837–38, a parl. constit., of householders of £10 and upwards, of 5555. The boundaries of the parl. bor. include the parishes of Birmingham and Edgbaston, and the hamlets of Deritend and Bordesley and Duddestone cum Nechills. The pop. of the parl. bor. in 1831 was 142,251. The charter constitutes the corporate body a court of record for the borough, to be held on Wednesday for the recovery of debts under £20. There is a board of officers, under a local act, for the administration of relief to the poor. A well-organized body of police is about to be established. With the exception of those just built, the streets are all paved, thoroughly drained, and lighted with gas, and a company has been formed for supplying the town with water. Prior to 1715, Birmingham formed only one parish, and for all civil purposes is still so considered. In that year, however, a portion of the parish of St. Martin was formed into that of St. Philip; and in 1829 two other parishes were formed; viz., St. George and St. Thomas. There are four district, and other churches; several chapels of ease, and places of worship for Protestant dissenters, Roman Catholics, Swedenborgians, Scotch Presbyters, and Jews. The living of St. Martin's parish is a rectory, charged in K.B. £19 8*s.* 6½*d.*; that of St. Philip is a rectory, not in charge; to which is joined the prebend of Lawley, including the dignities of canon residentiary and treasurer in the cathedral of Lichfield, and is in the gift of the bishop; that of St. George is a rectory, in the gift of a private individual. The remainder are curacies, either in the gift of the bishop of Lichfield or of peculiar trustees. There are numerous charitable institutions, both medical and educational. The General Hospital and General Dispensary are supported by voluntary contributions, legacies, and other donations. The former is supposed to receive more extensive patronage than any institution of a like nature in Britain, and annually alleviates the affliction of a vast number of patients. The cost of erecting the General Hospital—one of the finest buildings in the town—was upwards of £10,000. It was begun in 1776, and completed in 1778; but in 1791 it was enlarged by the addition of wings. The General Dispensary, instituted for the medical assistance of poor, sick, and midwifery patients, at their own houses, was established in 1794. Besides these benevolent establishments, there is an institution for the relief of bodily deformity, an infirmary for diseases of the eye, a Magdalen asylum, several sets of almshouses, founded by W. Leach in the reign of Henry VIII.; and gratuitous musical festivals are held at Christmas in the town-hall, for the benefit of distressed housekeepers. A history of the schools of Birmingham would fill a volume. The 20th report of the charity commissioners contains 114 closely printed folio pages, solely upon the charities of this town. The free grammar school was founded in 1552, "for the education, institution, and instruction of boys and youths in grammar," and endowed with the revenues of the ancient guild of the Holy Cross. Many inferior schools in the town derive their funds from this establishment. Since 1676, a sum, more or less, has been set apart from it to furnish exhibitions at Oxford or Cambridge; and since 1796, the number has been ten, at £35 each. It is reckoned, that by the year 1840 its revenues will amount to £9000 a year. In the Blue-coat school (founded in the early part of last century, and supported by voluntary contributions, rents of lands, premises, and funded stock), nearly 200 children are taught writing, reading, sewing, and other useful arts. The other principal schools are, the Protestant Dissenters' Girls Charity school, the Royal Lancastrian, the Female Lancastrian, and Madras school, on the principles of Dr. Bell's *system*. There are also national, infant, and Sunday schools; a school for deaf and dumb; a royal medical school; a school of medicine and surgery; a college for the education of young men, established by the Independents; a philosophical institution; an athenæum, for the diffusion of literature and science; a society of arts, and a mechanics' institute. According to a return made to the select committee on education, in 1838, there appears to be in Birmingham 634 schools, and 29,149 scholars; of which 97 schools and 2166 scholars are stated to be of a superior description. There are two public libraries. The Old Library, a neat structure, has about 600 subscribers; and the collection of books, amounting to upwards of 20,000 vols., is as good as any of the kind in the kingdom. The New Library is a smaller building, containing about 5000 volumes.

Manufactures.—As a place of manufacture Birmingham has long held an important position, and has never been surpassed in the production of articles of ingenuity and utility: most articles in gold, silver, iron, copper, brass, steel, mixed metals, and glass, are produced here, from the most trifling trinket to the most ponderous and powerful machine. Of the early history of its manufactures we know nothing certain. It is supposed, and with great probability, to have been the place where the arms with which the early inhabitants defended their shores from the invaders under Julius Cæsar were manufactured: a supposition favoured by the fact of moulds for spear, arrow, and axe heads having been found either in the neighbourhood, or at no great distance from it, added to the proof afforded by the enormous mountain of calx, or cinder which borders on the parish of Aston, and with regard to which Hutton (*Hist. Birmingham*) remarks, "From an attentive survey the observer would suppose so prodigious a heap could not accumulate in a hundred generations; however, it shows no perceptible addition in the age of man." So far back as the 12th century it was noted for the tanning of leather; but this branch of trade gradually subsided, until at length it became all but extinct under the advance of other and more extensive enterprises, so that in 1795 there was but one person who followed that ancient occupation. Leland, in his *Itinerary* (1540), describes the town as a place inhabited by "smithes that use to make knives and all manners of cutting tooles, lorimers that make bittes, and a great many nailours." Previously to the revolution (1668) the articles chiefly manufactured were heavy iron goods, whereas the principal existing manufacture of Birmingham is hardware. The great growth of this trade may be dated from about 1740, at which epoch the quantity of pig iron made in England and Wales amounted to only about 17,000 tons, whereas it has since increased to at least 800,000 tons. The growth of Birmingham to its present pitch of opulence

celebrity, and magnitude, is principally ascribable to the invaluable resources of iron, stone, and coal, with which the district abounds, aided by the improvements which have progressively been effected in the means of transit, and in some degree also by its freedom from corporation restraints. The manufacture of the larger description of articles is carried on with increasing vigour and efficiency. Most sorts of cast-iron articles are made; and the largest manufactory for steam engines in the world is established at Soho, in the immediate vicinity of the town, though in the county of Stafford, by Boulton, the partner of James Watt, the great improver of the steam engine. These works consist of four squares, with connecting links of shops. They are not, however, restricted to the manufacture of those gigantic "steam labourers," but also produce immense quantities of vases, candelabras, and other descriptions of goods in bronze and or-molu, of exquisite workmanship, with articles of plate and Birmingham ware generally. At these works, too, the principal part of the copper coinage of the country was wont to be executed. The coining-mill works eight machines, capable of throwing off about 4000 pieces of money per hour. There are many iron and brass founderies in the neighbourhood, and there are metallic hot house manufactories; in one of which a hot-house was not long since made for the Duke of Northumberland, at an expence of £50,000. Casting, modelling, die-sinking, engraving, staining and cutting glass, and many other branches of manufacture, have been brought to great perfection. There are upwards of 200 distinct occupations pursued in this town (*Committee on Artisans and Machinery*), the principal of which are specified in the *Statistics of the British Empire*, vol. i., p. 694. There are no means of stating the total value of the articles produced, inasmuch as "the manufacture of plated goods, which is carried on in Sheffield and Birmingham, is one of those branches of industry the progress of which we have no means of ascertaining." (*Porter's Progress of the Nation.*) It appears, however, that the exports of hardware from England, principally from these two towns, have risen from 4288 tons in 1805 to 16,275 in 1834. The value of the articles produced here is, undoubtedly, very great, and probably (including gold and silver plate) does not fall short of £3,000,000, if it do not exceed that sum. In 1824 it was stated, before a parliamentory committee, to be estimated at about £2,000,000. The value of the material, it is to be observed, in most of the Birmingham goods, bears a very small proportion to that of the labour expended upon them; as, for example, in the article of watch springs, where the value of the raw material is not a 200,000th part of the value of the finished article. It is from the extreme subdivision of employment that the superior skill of the workmen and the excellence of the manufacture is mainly deducible. Of the present manufactures, that of muskets is the most ancient, having been introduced in the reign of William III.: since that epoch this branch has been gradually, but greatly, augmenting; and of late years the manufacture of fowling-pieces has been added to it. Until the close of last war the government contract for muskets alone extended, upon an average, to 30,000 per month. On the cessation of hostilities, this department seriously declined; but it is still of great value and importance. The total number delivered into the government stores, and supplied to the private trade from 1813 to 1828, was about 3,000,000. In 1813 an act of parliament was passed, requiring the gun-makers to raise a proof-house; in which, under a heavy penalty, all fire-arms, after being subjected to a severe test, are stamped by the masters and wardens, under whose inspection the business is conducted. Swords also are a principal article of manufacture; but of course the demand for them is not now so great as during war. The metal button and buckle trades were introduced into Birmingham shortly after the revolution, and continued to flourish for nearly a century. But these trades have been greatly impaired; partly in consequence of the emigration of artisans to the Continent, who have carried with them a knowledge of the art (*vide Report on Artisans and Machinery*), and partly, and principally, from a change of fashion. The button manufacture is still, however, most extensive; in proof of which may be adduced the fact, that a single manufacturer had in his workshop, in 1834, no fewer than 10,000 double sets of cut-steel dies, for livery buttons only. (*Treatise on Manufactures in Metal, Lardner's Cyclopædia*, vol. iii., p. 393.) The manufacture of florentine buttons has also been introduced, and now employs hundreds of persons. The decline of the buckle manufacture may be dated from 1781, at which period shoe-ties began generally to be worn; and, notwithstanding the efforts of his late majesty George IV., when prince of Wales, to stem the tide of fashion, it proved too strong for him, and the manufacture was gradually, but completely, destroyed. The file trade, which at one time flourished in Birmingham, has nearly all gone to Sheffield, in consequence of the superior advantages possessed by the latter for that manufacture; while, on the other hand, and from a similar cause, much of the plated trade of Sheffield has migrated to Birmingham. The making of silver pencil-cases, too, is carried on to a great extent, and the number produced is increasing every year. The manufacture of goods in brass, introduced about 1748, has been greatly extended and improved within the present century, and comprises a large number of articles both useful and ornamental; including, among others, lamps, chandeliers, candlesticks, vases, fenders, fire-screens, handles for locks, doors, knockers, and many other articles. The lamp trade, however, is of very recent origin, having sprung up entirely within the last 30 or 40 years. Of lamps and chandeliers Birmingham has almost the exclusive manufacture. (*Report on Artisans, &c.*) In 1772, in consequence of the great amount of her plated manufactures, an act of parliament was passed, appointing wardens and an assay master. It has been reckoned that the consumption of silver in one of the various departments of the Birmingham manufacture, that is, in the plating of spoons, knives, forks, plates, dishes, sugar-basins, bread-baskets, buttons, chains, thimbles, and a variety of other articles, cannot be less than about 15,000 ounces a year, while a much greater weight is used in the manufacture of an infinite variety of trinkets. One manufacturer of trinkets, in 1836, melted upwards of 34,000 ounces of silver for his own consumption; and of this weight at least one third would be sent out in a manufactured state. As there are 50 silversmiths in the town, the annual weight of silver consumed must be very great. The quantity of silver plate made is comparatively small. In the same year (1836) 121,361 oz. of manufactured silver were assayed and marked at the assay office. Latterly, the plating business has experienced a check by the substitution of articles made of albata metal, which are not only very cheap, but often very beautiful. The production of gold plate is limited, amounting, in 1836, to 1792 oz., and, in 1838, to above 2000 oz.; but, like silver, gold is extensively used in gilding the various articles before enumerated. Indeed, to such a pitch had the art of gilding been carried in 1818, that, according to Hutton, three pennyworth of gold was sufficient to cover a gross of buttons. There is a considerable trade, too, in the manufacture of pins. The factory of Mr. Phipson has machinery of great power and complexity, capable of cutting and pointing 12,000 pins an hour. His works give employment to 200 persons on the premises, and about 50 out of them, besides many persons in Stafford, Shrewsbury, and Hereford county jails. The Britannia nail-works have machinery capable of making some thousand nails per minute. The art of making nails by hand, however, still keeps its ground; those so made being considered superior to those made by steam-power. The wages paid for this work are very low, and the employment slavish. It is supposed to occupy at present in all from 20,000 to 30,000 hands, many of whom are females. Steel pens, also, are largely made. In the year 1838, one of the manufacturers advertised that he had made upwards of 247,000 grosses that year; and there are several other large establishments for the manufacture of steel pens. The price within ten years has been reduced from 24*s.* to 6*d.* per gross. Japanned articles, of great beauty and variety, are extensively manufactured. The best trays, baskets, and other articles of a similar description, are made of *papier mâché*, the making of which is very largely carried on at the works of Messrs. Jennens and Bettridge, where may be seen every article in this department of manufacture. The glass trade is also very extensive. Messrs. Chance and Hartley have the largest manufactory of crown glass in the empire; and there are other factories on a smaller scale.

Mr. Burke said that Birmingham was the "toy-shop of Europe," and the statement seems to be perfectly well founded. An immense quantity of very beautiful articles, as seals, brooches, clasps, and other trinkets, are made of gold, silver, gilt and plated metal, and polished steel. The impressions on the seals, especially those made on glass in imitation of engraving on stone, are very well executed. The expense of engraving them on real stones would not be less than 30*s.*, but they are thus produced for the trifling sum of 1½*d.*; and their production affords employment to great numbers of hands. This trade, which has not existed more than 50 or 60 years, has greatly increased within the last 30 years. The toy and trinket trade is astonishingly great; and the transactions are often immense, in articles of comparative insignificance. This is evinced by the fact of one manufacturer having received an order for the *eyes of dolls* to the extent of no less than £500.

The manufacturing district, of which Birmingham is the centre, includes a considerable tract to the N.W. of the town, embracing the southern part of Staffordshire, with the extreme northern border of Worcestershire and a detached part of Salop. Within this district are the populous towns of Dudley, Wolverhampton, Bilston, Walsall, Wednesbury, and Stourbridge. Independently of the production

of the crude material in which most of these towns are extensively engaged, different branches of the hardware manufacture are carried on in them, as the nail and japan ware trade, bridles, and stirrup plating, coach and harness ornament making, and saddler's ironmongery. The japan ware is mostly confined to Bilston and Wolverhampton, as is the lock trade to the latter, and the saddler's ironmongery to Walsall, Wolverhampton, and Wednesbury. But all these departments are carried on in Birmingham, though not to so great an extent as in these separate places. The mode of conducting business in Birmingham has undergone a considerable change from what it formerly was. There are now but few large capitalists. With the exception of the Soho works, and a few other large manufactories, the business is conducted on a small scale in innumerable divisions. The greater number of the manufactures have only very limited capitals; and many of them are merely agents, or middle men, possessing a capital of not more than £500 or £600. The system generally acted upon is as follows: The workmen, each in their particular line, undertake to execute the orders received by the merchants and agents settled in the town, which they accomplish by the following means: A building, containing a great number of rooms of different sizes, is furnished with a steam-engine, these rooms or shops being all supplied with shafts, lathes, benches, and such other necessary conveniences as are requisite for the work to be done; and when an order is given to one of these workmen to execute, he hires such one or more of these rooms as the occasion requires, and stipulates for a certain amount of steam-power, and continues the occupant of this apartment till the order be finished. (*Porter on the Progress of the Nation.*) In 1786 there was only one steam-engine at work, which was of 25 horse-power, and was used for grinding flour. In 1803 there were ten engines, producing 379 horse-power, of which 260 horse-power was used in manufactures. In 1823, the number of engines was 66, the horse-power 1292, of which 1000 horse-power was used in manufactures. In 1835 the number of engines was 169, and the horse-power 2700; of which 275 was used in grinding flour, 1770 in working metals, 279 in pumping water, 87 in glass grinding, 97 in working wood, 44 in paper-making, 37 in grinding clay, 61 in grinding colours, and 50 in sundry other occupations. (From a return compiled by Mr. W. Hawkes, *Phil. Inst. Report*, 1836.) Women are extensively employed in polishing the goods in the glass toy branch, and in all parts of the manufactures of the town. Boys are principally engaged by the out-workmen and undertakers, as apprentices, and receive a progressive amount of wages, varying from 3*s*. to 10*s*. per week, according to their ages and occupations; they get their food at home, and in some instances work in the houses of their parents. Some of the small manufacturers have accumulated large fortunes. The condition of the work-people is, on the whole, decidedly favourable. It is impossible to give an average of the wages paid in different trades, they are so very various: for instance, in the making of buttons, a great number of hands are employed, as the piercer, the cutter, the stamper, the gilder, and the burnisher, who all receive different wages; and so also in the other departments. For work, which 20 or 30 years ago from 24*s*. to 30*s*. a week wages were paid, not more than 12*s*. to 14*s*. are now received; but as the workman executes more work, and as provisions are now much lower than during the war, he is probably better off. In 1833, wages, owing to the stagnation of trade, were as low as they have been known to be. Formerly, the average rate of wages, in common trades, was 30*s*.: at present (1839) they may amount to 23*s*. a week. An average of 76 individuals employed in 32 different occupations gives 23*s*. 6*d*. per week. In 1833, the trade of Birmingham was, perhaps, at its lowest ebb; and in 1824–25 at its greatest height of prosperity. During the latter, a manufacturer stated his profits, upon a capital of £10,000, to have been £3000 per annum; while, in 1833, the capital used did not for some time return the expenses of its employ; but since then it has very materially increased. The number of families chiefly employed in agriculture, including the *gardeners* employed in cultivating the numerous plots of ground laid out in the neighbourhood, was, in 1821, 607; 1831, 1032. Families chiefly employed in trade, manufacture, and handicraft, 1821, 22,761; 1831, 25,064. Like all manufacturing towns, Birmingham has suffered more or less at different times from pauperism, according to the fluctuations of trade. The amounts that have been paid in poor-rates were, in 1776, £5895. Medium average for 1783–4–5, £11,385; 1803, £18,680; 1831, £55,835; 1834, £50,512; 1837, £30,658. Friendly societies have existed for some time in this town. In the years ending 1813–14–15, the total number of members was 13,833; at present there are upward of 400 societies, and 40,000 members. In 1827, a savings' bank was opened, and in 1839 it had deposits with 2499 depositors, and the sum invested £43,881. For the year ending 1833, the number of depositors in the Warwickshire savings' banks was 6888, of whom 3545 had deposits in that of Birmingham. In 1838, the number of depositors in the Birmingham savings' bank had increased to 7446, and the sum invested to £134,898. The following analysis shows the proportionate increase of the population: In 1700, there were 194 baptisms and 159 burials; 1760, b. 849, bu. 1140, marriages 230; 1800, b. 1978, bu., 1951, ma. 567; 1821, b. 2908, bu. 1775, ma. 1193; 1830, b. 4479, bu. 2138, ma. 1571. In 1821, the number of males was 51,098; 1831, 71,756; females, 1821, 55,604; 1831, 75,220. The number of persons who died above the age of 95, between 1820 and 1830, was 48; of whom eleven were 98, six 100, four 101, two 102, four 103, two 104, one 109, and one 114. This town is of great antiquity: it is known, indeed, to have been of importance before the invasion of the Romans. In *Domesday-book*, in which occurs the first authentic notice of the place, it is spelt Bermengeham. Its history, previously to the Norman conquest, is extremely obscure. Indeed, until the time of Charles I., little is recorded of it, and that little of scarcely any interest. In the reign of that monarch it took the side of the parliament, and warmly defended the cause it espoused. In 1665 or 1666, the plague committed frightful ravages. In 1791, high church and tory politics seem to have been very prevalent; and a riot having arisen out of a festival in commemoration of the French revolution, much property was destroyed, including the houses and libraries of the celebrated, but then obnoxious, Dr. Priestley, and of Mr. Hutton, the historian. The loss on this occasion amounting to £60,000, was made good to the sufferers by act of parliament. The sentiments of its inhabitants have, however, undergone a great revolution in the interval, and from one extreme they appear to have gone to the other. Of late years, they have stood prominently forward as the advocates of ultra-liberal opinions, and have identified themselves as the great supporters of those dangerous and easily abused institutions, called political unions. The great increase of the town is to be dated from the time of Charles II., when building leases became common, and houses were erected to meet the demand of the increasing population. There are many lines of canal, all tending to bring prosperity to the town, and increase to its manufactures and population. The old canal communicates by the Severn with Shrewsbury and Gloucester, and by the Trent with Gainsbro', Hull, and London, and by a junction with the line running through the potteries of Staffordshire, with Manchester and Liverpool. By the new Birmingham canal, a communication has been opened by Tamworth, Atherston, Nuneaton, and Coventry, with Oxford, and hence by the Thames to London. But the grand means of conveyance is the railway from London, with a continuation to Manchester and Liverpool. By means of this railway the journey from London to Glasgow may be accomplished in about thirty-six hours, and in eight or ten hours less to Dublin. The markets are held on Mondays, Thursdays, and Saturdays, and the fairs on the Thursday in Whitsun-week, and on the Thursday next before Michaelmas-day, for cattle, sheep, horses, and hardware generally. The air of Birmingham is salubrious (notwithstanding the number of furnaces and forges which abound), owing to the dry and sandy nature of the soil. The deaths, in proportion to the number of the inhabitants, are fewer than in London, Liverpool, or Manchester. The most celebrated seats in the vicinity are Hagley, 12 miles distant; Enville, 18: and the Leasowes, 6: this latter was the creation of Shenstone, and displays eminent taste and genius. Hagley, the seat of Lord Lyttleton, has been apostrophized by Thomson, Pope, and other poets. Enville, the seat of the Earl of Stamford, is a very beautiful place. There are various other villas and retreats in the neighbourhood, belonging to wealthy manufacturers, some of which are extremely recherché. (*Hutton's Hist. Birmingham; Shaw's Hist. of Staffordshire;* and *Private Inform.*)

Birmingham, p. b., Warrior Marie t., Huntingdon co., Pa., 107 m. N.W. by W. Harrisburg, 166 W. Situated on Little Juniata river, and contains one church, six stores, forty dwellings, and 235 inhabitants. Incorporated in 1828. There are a lead mine and iron ore in the vicinity.

Birmingham, t., Delaware co., Pa., 22 m. W. Philadelphia, 11 m. N.W. Chester. Bounded W. by Brandywine river. It contains two stores, one woollen-factory, one flouring-mill, nine grist-mills, ten saw-mills, three tanneries, two distilleries, three schools, 59 scholars. Pop. 605.

Birmingham, t., Chester co., Pa., 5 m. S. Chester, 23 m. W. Philadelphia. Bounded W. by Brandywine river, and contains one church, one store, one grist-mill, one saw-mill, two schools, 137 scholars. Pop. 312. Here was fought the severe battle of Brandywine, in the Revolutionary war, relics of which are still found.

Birmingham, b., St. Clair t., Alleghany co., Pa., situated on the W. branch of the Monongahela river, 4 miles above Pittsburg. Incorporated in 1836. It has four schools, 115 scholars. Pop. 1534. See Pittsburg, of which it is a sub-

urb, and with which it is connected by a bridge, which cost $110,000.

BIRNBAUM, a town of the Prussian states, reg. Posen, cap. circle, on the Wartha, 45 m. W.N.W. Posen. Pop. 2500. It has a castle, Catholic and Lutheran churches, a synagogue, an orphan hospital, with tanneries, linen fabrics, &c. The circle is in parts very fertile, but in many places it is covered with lakes and marshes.

BIRR, a town of Ireland, now called Parson's Town, which see.

BISACCIA, a town of Naples, prov. Princip. Ultra, on a hill, 12 m. N.E. St. Angelo de' Lombardi. Pop. 5000. It has several churches and a hospital; and is supposed to occupy the site of the ancient Romulea, mentioned by Livy (lib. x., cap. 17). The bishopric, of which Bisaccia was formerly the seat, has been united to that of St. Angelo de' Lombardi.

BISCARI, a town of Sicily, prov. Syracuse, 9 m. W. Monte Rosso. Pop. 2447, having declined 253 between 1798 and 1831. It is of modern date, having been founded in the 15th century.

BISCAY, a district in the N. of Spain, comprising Biscay Proper, Guipuzcoa, and Alava, the three Basque provinces, called by the Spaniards Pais Vascongadas, being part of the Roman provs. of Vasconia and Cantabria. These provs. extend from 1° 46′ to 3° 20′ W. long., and from 42° 25′ to 43° 27′ N. lat., having E. France and Navarre; W. and S. Burgos, and other parts of Old Castile; and on the N. the bay of Biscay. Their mean length is about 60 m., and their breadth about 50 m. Area estimated at 2963 sq. m.; but their limits have varied considerably at different periods. The country may be considered as a prolongation of the declivity of the Pyrenees to the boundaries of Castile. It is broken into highly picturesque glens and valleys, interspersed with some fertile plains. The district has marble of various colours, lime and sandstone, a profusion of iron ore, and some copper and gypsum of good quality, as well as salt-mines, and saline and sulphurous cold and hot springs.

The following is an account of the area of each prov., and of its pop. in 1803, and (according to Miñano) in 1826:

Provinces.	Area.	Pop.	
		1803.	1826.
Biscay Proper	1,264 sq. m.	111,436	132,001
Guipuzcoa	620	108,600	126,780
Alava	1,079	67,523	84,189
Total	2,963	287,665	342,970

1. Biscay Proper, or the lordship of Biscay, has on the N. the ocean; on the E. Guipuzcoa; on the S. Alava and Old Castile; and on the W. also Old Castile. Under the new division of Spain, made by the Cortes in 1822, it forms part of the province of Bilbao. The city and territory of Orduña, which are insulated by Alava and Old Castile, belong to it. Bilbao is the seat of government; and there are also Durango, Guernica, Balmaseda, and a few other small towns. Some of the mountains look as if they consisted of a congeries of hills heaped on each other. Gorvega is of this description: it has on its summit a considerable extent of level land. Principal rivers, Nerva, Ansa or Ibaizabal, Cadagua, Mundaca, and Lequetio. The coast is abrupt, and deeply indented by bays formed by the mouths of the rivers, and by a number of small harbours. The iron mines, which are frequent, and produce some of the best metal in Europe, particularly that at Somorrostro, the ore of which yields above a third part of iron. According to Antillon, the annual produce of this mine used to be 800,000 quintals. Climate humid, but not insalubrious. Houses good, and conveniently built; the upper parts, which were anciently of wood, are now of stone. There are many very ancient chateaux, mostly flanked with strong towers, that belong to the heads of families. With the exception of the towns named above, and a few others, the inhab. live dispersed in *caserias* of five or six houses each, with lands attached, which are mostly cultivated by the owners, in whose families they have remained for centuries, it being reckoned discreditable to part with the paternal property. Where land is hired, the rent, which is paid in money, usually amounts to about a third part of the value of the produce. The soil is mostly a stiff clay, and would produce little but pasturage or wood, were it not for the patient industry of the inhabitants, who break it up with a curiously-shaped implement called a *laya*; but in lighter soils, where wheat only is grown, they use a strong plough. As arable land is scarce, they break up patches on the slopes of the mountains, where the ground, not being deep enough for the growth of large trees, is covered with thick shrubs. These they grub up and burn, and spreading out the ashes, get fertile crops of wheat the first three years; barley or rye the fourth; flax the fifth; and good pasturage till the ground be again overgrown by brambles. They do not, however, notwithstanding their industry, reap grain enough for their consumption, but supply the deficiency by importations from Alava. Next to agriculture, the chief employment of the peasantry is the making of charcoal for the iron foundries, from the wood cut in the forests, with which the sides of the mountains are covered. These contain plantations of excellent white oak, and in the glens and valleys are numerous groves of grafted chestnuts, which furnish a considerable article of export. The grapes are not good: there is a great profusion of apples, with pears, cherries, figs, &c. Cattle small and hardy; sheep difficult to rear, from their getting entangled in the brambles; the wild boar is occasionally seen, as are wolves and bears; though both are very rare, especially the last. Fish abundant and excellent.

The staple business of Biscay Proper, and the other two provs., is the manufacture of iron, which is made into a great variety of tools and implements; but owing to the suspension of work in the royal arsenals, the loss of the American colonies, and the introduction of foreign iron, as well as the long wars of which this country has been the theatre, this important branch of industry has greatly fallen off. The Spanish Academy of History say that, in 1802, when their account of Biscay was compiled, there were 180 iron-works, producing annually 80,000 quintals of iron, of 155 lbs. each, which, when Miñano wrote (1826), were reduced to 117 works, yielding only 45,000 quintals. Copper boilers were also made at Balmaseda, and factories for cordage and rigging, made of hemp brought from Aragon and Navarre, were established in various parts; and tanneries at Balmaseda and Bilboa; but these, also, are much fallen off. The other manufactures are those of coarse porcelain, table, and other household linen, fine and coarse hats, braziery, carpentry and joiners' and cabinet work, straw and rush chairs, tallow candles, &c. The people near the coast occupy themselves a good deal in fishing, and the exports of dried fish are sometimes very considerable. (See *Diccionario por la Real Academia*, ii., 487; *Miñano*, x., 41–44.)

2. Guipuzcoa has the seignory of Biscay on the W.; Alava on the S.; Navarre and the Bidassoa, which separates it from France, on the E.; and the bay of Biscay on the N. Since 1822 it has been called the prov. of St. Sebastian. The country is rough and mountainous. The highest mountain on the frontiers of Alava rises 1800 ft. above the sea, and contains some salt mines and saline springs. The prov. is watered by the Deva, Urola, Oria, &c., and the Bidassoa, which all run N. into the bay of Biscay. The coast is rocky, and the ports insecure, with bars at their entrances, except Pasages, which has deep water, and is spacious and well fortified. At Mondragon, on the Deva, is a celebrated iron mine; the ore yields no less than 40 per cent. of metal. At Vergara is a college, where the young nobility are educated, and other useful institutions. On the N. of this, at Placencia, is a royal manufactory of fire-arms.

Guipuzcoa yields to no part of Spain in the magnificence of its ecclesiastical and other buildings. The roads are well paved, and kept in good repair; the inns commodious and well conducted. Climate soft and temperate; but, like the other provs., it is subject to heavy rains and violent storms, both in summer and winter. The prov. produces most kinds of grain and other necessaries, but not in nearly sufficient quantities for the support of its inhab. Fruits and other natural products nearly the same as in Biscay. The fish, including salmon, are excellent; and tunny, raya, and sardines, are supplied to the neighbouring provinces. The grapes, though indifferent, furnish the light wine called *chacoli*. A good deal of cider is also produced. The growth of timber in the woods and plantations is not equal to the consumption of the iron-works. Agriculture nearly the same as in Biscay.

Iron may be had in any quantity. According to Antillon (*Géographie Physique*, p. 85), 160,000 quintals used to be annually wrought up into hinges, nails, horse-shoes, boilers, kitchen utensils, arms, anchors, working tools, &c. They make, also, fishing tackle, rigging, tanned leather, coarse cloths of goats' hair, coarse linen, and sail-cloth. Ship-building has lost its activity, but some vessels are fitted out for the cod and whale fisheries.

Guipuzcoa imports what grain it wants from Alava; wine, from Navarre and Rioja; soap, oil, flax, &c., from Castile and Andalusia; woollens, cottons, cloths, silks, jewellery, and articles of fashion, from England, Holland, and France. It exports little native produce but iron, hardware, and fruits; but wool, and sometimes corn, are brought from the interior to its ports for shipment. Formerly, it had a considerable coasting trade to the shores of the Mediterranean, and a large share of the whale fishery and the cod fishery at Newfoundland. The famous Caracas Company originated here. Its commerce has fallen off since 1809. Being a frontier prov., it admits the royal troops to garrison

its strong posts. (*Diccionario por la Academia*, i., 281; *Miñano*, iv.; *Antillon*, p. 85.)

3. Alava has the seignory of Biscay and Guipuzcoa on the N.; Navarre on the E.; and Old Castile, from which it is divided by the Ebro, on the S. and W. It now forms a principal part of the prov. of Vitoria, the name of its chief town. The other towns are Salvatierra, Lequiana, and Gamboa. It is surrounded and intersected by mountains, similar to those in the other Basque provs., and affording the same products of iron, black and red marble, gypsum, &c. They are covered with oaks, wild apple-trees, thorns, box, yews, limes, hollies, &c. The crops of grain exceed the demand of the inhab. Climate cold and damp, with long winters, frequent and heavy rains, snow, frosts, fogs, and mists; but it is healthy, and the inhab. strong and long-lived. Agriculture is the chief pursuit. In some parts they plough with oxen, as in Navarre; and in others, use the *laya*, as in Biscay and Guipuzcoa, weeding the ground repeatedly till it looks like a garden. The iron-works are greatly reduced in consequence of the destruction of the forests which supplied them with fuel, and of the weight of the duties paid on iron taken into Castile. The manufactories of hats, shoes, boxes, &c., are also in a state of decay; but a good many hands are occupied in the manufacture of table linen and coarse cloths. They also make a good deal of salt. (*Diccionario por la Academia*, i., 13; *Miñano*, i., 54; *Antillon*, p. 92; *Journal of the British Legion by a Staff Officer*, p. 155.)

The Basques have a peculiar language, which is undoubtedly of great antiquity. Lécluse, in his *Grammaire Basque*, endeavours to trace it to the Hebrew, as a dialect of the Phœnician, brought to Carthage, and thence to Spain; and attempts by its means to interpret the speech of Hanno in Plautus! From the supposed prevalence of Basque names of mountains, plains, forests, rivers, and towns in every part of Spain and Portugal, it has been concluded that the Basques once pervaded the whole peninsula. They have no alphabet of their own, but learned men write the language with Roman letters. Its chief characteristics are its similarity to the Hungarian and Turkish, in its inversion of the order of its particles, and its unparalleled variety of verbal inflections. Their only books are the New Testament, printed at Rochelle in 1571, some devotional tracts, catechisms, national poetry, dictionaries, and vocabularies. They count by twenties up to a hundred, and seem originally to have had but three days in their week, there not being ancient names for more. Few natives, except the gentry, know any language other than the Basque. It is also spoken, with some variation, in part of Navarre, as well as by the French Basques. (*Lécluse, Grammaire Basque*, p. 2, 3, 14, 26, 28, 219; *W. Humboldt, Prüfung der Untersuchungen über die Urbewohner Hispaniens*, *&c.*)

The government of these provinces has had, from the earliest times, a republican form. The people choose the members of the *ayuntamientos*, or municipal corporations, who, again, elect the deputies to the provincial assemblies, which meet every two years in Biscay, once a year in Guipuzcoa, and twice a year in Alava, to provide for the interior administration of their respective provinces, to vote the supplies, and to determine the appropriation of the money granted. Each assembly chooses a magistrate, in whose hands the executive power is placed when the *juntas* are not sitting, and who treats on equal terms with the *corregidores*, or ambassadors, appointed by the King of Spain to reside in each province, but who must not, on any account, be natives of these provinces, nor exercise any authority in them. The people choose, also, the tax-collectors, and pay their civil officers moderate salaries for their services. Their taxes are light, and levied according to a valuation, which is frequently modified. Their ancient privileges, or *fueros*, order that they shall not be taxed by the Spanish government, except in a small sum, paid by Guipuzcoa and Alava, continuing at about £540 sterling, the amount paid in the 14th century. But Biscay is free from this, and pays a larger sum every four or five years under the name of *donativo* or gift. They have no monopolies nor custom-houses, every article being imported duty free. They are also free from the conscription and impressment to which every other part of Spain is subject; but, in case of foreign invasion, they are bound to defend their frontiers without the king's troops. Another of their important privileges is that of being exempted from torture, or threat of torture, direct or indirect, on any pretence whatever, within Biscay or out of it. (*Fuero Bit. Ley*, xii.) On the other hand, they have always been prohibited from trading directly with the Spanish colonies, and are shut out from a free trade with the rest of Spain, by heavy duties and a line of custom-houses all along the Ebro; and are also obliged to resort to the court of chancery at Valladolid, for the decision of their lawsuits. Their financial system seems to have been well managed, since the price of the Alava 3 per cent. debt, before the breaking out of the present civil war, was 93; and in Biscay and Guipuzcoa, the extra taxes imposed during the French invasion were being refunded to the contributors. Foreigners, not of the Catholic religion, cannot establish themselves in any line of business in the Biscay provinces. (*Diccionario Geografico por la Real Academia de la Historia*, Madrid, 1802, ii., 488-510; *El Fuero Privilegios, &c., de Vizcaya*, Medina del Campo, 1575; *Spain, past and present, Monthly Chronicle*, Nov., 1838, p. 440.)

The Biscayans being devoted to agriculture, navigation, and commerce, and having little inequality of condition, possess those virtues that are seldom found united with ease and riches acquired without toil. They are honourable, brave, cheerful, and courteous, without being mean. They are also docile, when well treated; but, if roused by ill usage, are stubborn and inflexible. In general, they retain the dress, customs, and simplicity of manners, as well as the institutions of the 13th century; and pride themselves on their independence, and the antiquity of their lineage. The women, who are robust, assist the men in their severest labours. Not only the in-door, but the out-door, work of the house is done by female servants; and even señoras, delicately brought up, may be seen in their walks climbing the rocks with no other protection than a parasol. (*Diccionario por la Real Academia*, ii., 484; *Miñano*, i., 226.)

They are very fond of dancing, and assemble every Sunday afternoon to enjoy that amusement. Some of their dances are of a grave, majestic, and ceremonious character; others, gay and lively. They also delight in bull-fights, and play much at a game with a ball, called *pelota*, for which public sites are everywhere appropriated. At their weddings they discharge guns and pistols, on entering and quitting the church. Some villages distribute bread and cheese, wine and walnuts, at their funerals; some beg money for masses for the soul of the deceased. They are sober, but are fond of good living. They dress with a blue cap, red sash, and *alpargatas*, or hempen sandals, tied on with blue or red ribands; and in wet weather, *espadillas*, or brogues of hide. The women dress as in Castile; the married wear a thin muslin handkerchief, tied on the head, like the Irish; the girls wear their hair braided down their backs. There are theatres at Bilbao and Vittoria, where plays and operas are performed; and the upper classes follow the fashions of France and the rest of Europe. (*Diccionario por la Real Academia de la Historia*, i., 226; *Bowles*, p. 206; *Henningsen's Campaign in Navarre and the Basque Provinces*, p. 72.)

Little is known of the early history of the Basques before the time of the Romans, or during the ascendancy of the Goths and Saracens; by all of whom the country was partially overrun. The Spanish Academy of History says, there is no reason to suppose that any family ever had that absolute sovereignty over it that has been supposed, but that its rulers were subject to the Spanish kings of Asturias, Navarre, and Castile, like the rest of the principal señors of the kingdom, with the exception of that difference which arose from the great power of the family of Haro, who held the lordship for many years. In 1333, the deputies of the three provinces offered the dignity to Alphonso XI., king of Castile, who accepted the lordship; but before the grant was executed, the most formal reserves were made of their franchises and privileges, and the king was obliged to sign a treaty, one of the articles of which was, that the Castilian monarch should never possess any village, fortress, or house, on the Basque territory. Their country has been the scene of frequent and long-continued wars with foreign nations, and is now the principal theatre of a destructive civil conflict. Though republican in all their institutions, they are much attached to the Spanish dominion. (*Diccionario por la Academia*, ii., 488-506; *Monthly Chronicle*, art. *Spain past and present*, November, 1838.)

BISCEGLIA, a sea-port town of Naples, prov. Terra di Bari, on a rocky promontory, on the Adriatic, 12 m. E.S.E. Barletta; lat. 41° 14′ 34″ N., long. 16° 21′ E. Pop. 10,000. It is surrounded by lofty stone walls, and is ill built: it is the seat of a bishopric, has a cathedral, two collegiate and some other churches, convents for both sexes, a public school, a hospital, a *mont-de-piété*, and a fine theatre. Its port admits only small vessels, and it has little trade. It has numerous reservoirs and cisterns cut in the solid rock, and arched over, for the collection and preservation of the rain water, the place being entirely destitute of springs. It is supposed by some to be the *Natiolum* of the Peutingerian tables, but other critics contend that its ancient name was *Vigilia*. Swinburne says that it is destitute of any remains of antiquity. (*Swinburne's Two Sicilies*, i., 183, 4to ed.; *Craven's Naples*, p. 93; *Dict. Géographique, &c.*)

BISCHOFSBURG, a village of the Prussian States, prov. E. Prussia, on the Dimmer, 15 m. S.S.W. Rossel. Pop. 2000.

BISCHOFSTEIN, or BISCHSTEIN, a town of the Prussian States, prov. E. Prussia, reg. Königsberg, on a marshy

lake, 47 m. S. by R. Königsberg. Pop. 2900. It has two Catholic churches, a high school, fabrics of cloth and stockings, with distilleries, breweries, &c.

BISCHWEILLER, a town of France, dep. Bas Rhin, cap. cant., on the Moder, 15 m. N. Strasburg. Pop. 5854. It was once fortified; but the works were destroyed by the Imperialists in 1706. It manufactures coarse woollen and linen cloths, woollen gloves, pottery, tiles, and bricks, and has woollen-mills, madder-mills, tanneries, &c.

BISENTO, a town of Naples, prov. Abruzzo Ultra I., cap. cant., in a valley, 10 m. N.W. Civita-di-Penne. Pop. 2000. It has several churches, a dyework for cloth, and fairs on May 16 and 17.

BISHOPS-AUCKLAND, a market-town and township of England, co. Durham, N.W. div. Darlington ward, par. St. Andrew Auckland, 10 m. S.W. Durham. Area of township, 2570 acres. Pop. 2859, of which the town may have about 2000. The latter, which is well built, stands on an eminence, having the Wear on the N., and the Gaunless on the S.E. The par. church is about 1 m. distant; but there is a chapel of ease in the town, and the Methodists, Independents, Quakers, &c. have also chapels. There is here a grammar school founded by James I., and farther endowed by several prelates; a school on the Madras system for 200 boys, and a school for girls, both founded by Bishop Barrington, &c. The town owes its importance, and, perhaps, existence, to its having at its N.E. end the magnificent castle or Episcopal palace of the Bishop of Durham. The building is of great extent, has a fine chapel built by Bishop Cosins, and some good pictures. The park includes about 800 acres.

BISHOP'S CASTLE, a par., bor., and town of England, co. Salop, hund. Parslow, 144 m. N.W. by W. London. Area, 6000 acres. Pop. of par., 1821, 1870; 1831, 2007; of which the town had 1729. It stands on the slope of a hill, near a small branch of the Clare. There are some good houses, in detached situations; but the greater part of the town is irregularly, and meanly built, of unhewn stone. The church (originally a fine structure of the Norman period) was partly destroyed in the last civil war, and subsequently restored. There are several dissenting places of worship, and a free school, educating 50 boys and girls. The town-hall, built in 1750, contains prisons for criminals and debtors: both this and the market-house are good brick buildings. A weekly market is held on Friday, and annual fairs, February 13, Friday before Good Friday, Friday after May 1, July 5, September 9, and November 13. That in May is a pleasure, and that in July a wool fair; the rest are for cattle. Both the fairs and markets are much resorted to by the Welsh, who are the chief supporters of the town. The annual value of the real property, in 1815, was £8248. A charter of the 26th of Elizabeth conferred on the corporation the privilege of returning two mem. to the H. of C., which it exercised till the passing of the Reform Act, when it was disfranchised. Its local limits were extensive, having a circ. of 15 m. Its name is derived from an ancient castle of the bishops of Hereford, which has been long demolished: the site of it, however, may still be traced.

BISHOP'S STORTFORD, a par. and town of England, co. of Hertford, hund. Braughin, on the Stort, 26 m. N.N.E. London. Area, 3080 acres. Pop. of par., 1821, 3358; 1831, 3958. The greater part of the town stands on the slope of a hill, on the W. side of the river, and consists of two lines of streets, intersecting each other at right angles, and forming a cross. It is on the whole well built, and has several good inns. The church stands on an eminence, and has a fine tower. There is a national school for 300 children, and a public library. It has an excellent market-house (built at the intersection of the streets, in 1828, with an Ionic front), which contains a large hall, used as a corn-exchange, over which are assembly and magistrates' rooms. The weekly market is on Thursday, and three annual fairs are held on Holy Thursday; Thursday after Trinity Sunday, and 10th October. The malting and corn trades constitute the chief business of the town, for which there are convenient wharfs along the river and the canal (both of which are contiguous to it); and being in the centre of a good corn district, the trade is considerable. There is also a silk-mill, which employs many hands. The annual value of real property in 1815 was £8930. Under the Poor Law Amendment Act it is the union town for 20 parishes: its own rates average £1231 1s. Petty sessions are held every fortnight by the county magistrates: it is also a polling town for Herts.

BISHOP'S WALTHAM, a par. and town of England, co. Southampton, div. Portsdown, hund. of Bishop's Waltham, 62 m. S.W. by W. London. Pop., in 1821, 2126; 1831, 2181: houses at the latter date, 438. It is situated by the Hambie (a small stream rising 1 m. from the town) in the vicinity of Waltham Forest. It has a good church, an endowed charity school for 36 boys, and a national school for 160 boys and girls. It has a weekly market on Friday, and annual fairs, on 2d Friday in May, July 3, and Friday following Old Michaelmas-day. Leather-dressing is the chief trade of the town, which is mostly disposed of at its own fairs, and those of the neighbourhood. There is also some malting business carried on. It is a polling town for the northern division of the county. The annual value of real property, in 1815, was £4809. The ivy covered ruins to a fine old castle are in the immediate vicinity. It originated in the reign of Stephen, but owed its subsequent magnificence to William of Wykeham. It was demolished by the parliamentary army in the last civil war.

BISHOP-WEARMOUTH. (*See* SUNDERLAND.)

BISIGNANO (an. *Besidia*), a town of Naples, prov. Calabria Citra, cap. cant., 15 m. N. Cosenza. Pop. 10,000. It is defended by a castle situated on the highest of the seven hills by which it is surrounded; is the seat of a bishopric; has a fine cathedral, numerous churches, a nunnery, several convents, two hospitals, and a house of refuge. Large quantities of silk-worms are reared in the vicinity.

BISSAGOS, a group of small volcanic islands, on the W. coast of Africa, opposite the embouchure of the Rio Grande, between 10° and 12° N. lat., and 15½° and 16½° W. long. The largest is about 15 m. in length, and some of them are uninhabited. The inhabitants, who are described as brave and treacherous, raise some maize, but are principally dependant on their cattle, goats, and fishery.

BISTINEAUX, lake, Claiborne par., La. It is 35 m. long and 3 wide, and receives Dacheet river from the N., and its outlet enters Red river, the waters of which it receives as a reservoir in the wet season, and discharges them in the dry, thus moderating the floods in the river.

BISZTRITZ, a free royal town of Transylvania, cap. district, in a fine valley, on the Bisztritz; lat. 47° 5′ 46″ N., long. 24° 32′ 18″ E. Pop. 6500. It is fortified, has a gymnasium, two schools, and two hospitals, with a considerable trade in cattle.

BITCHE, a town and fortress of France, dep. Moselle, cap. cant., at the foot of the Vosges, 15 m. E.S.E. Sarguemines. Pop. 3077. The fortress or citadel stands on an almost inaccessible rock rising from the middle of the town. The interior of the rock is vaulted and casemated; the fort mounts 80 pieces of cannon, may be garrisoned by 1000 men, is well supplied with water, and is looked upon as next to impregnable. The town, formerly called Kaltenhausen, is built at the foot of the rock, surmounted by the citadel, near a large shallow lake or mere, where the Horne has its source. It produces different sorts of fine pottery. The glass-works of Munsthal, in the vicinity, furnish flint glass of the value of 600,000 fr. a year. (*Hugo*, art. *Moselle*.)

BITETTO, a town of Naples, prov. Terra di Bari, in a very fertile plain on the Adriatic, 10 m. S.W. Bari. Pop. 5000. It is the seat of a bishopric; has a cathedral, remarkable for its pictures and marbles, and several convents.

BITONTO (an. *Butuntum*), a town of Naples, prov. Terra di Bari, cap. cant., in a fine plain, 10 m. W.S.W. Bari; lat. 41° 13′ N., long. 16° 42′ E. Pop. 12,000. Swinburne says that it is a fine town, and that the inhabitants are much easier in their fortunes, and more polished and improved in their manners, than those that dwell in the cities along the coast. It is the seat of a bishopric; has a fine cathedral, twelve parish churches, convents for both sexes, a hospital and a nunnery. The environs produce a wine called *sagarillo*, said to be excellent, and in which the town trades extensively. In 1734, the Spaniards, under the Count de Mortemar, gained, in the vicinity of this town, an important victory over the Austrians. (*Swinburne's Two Sicilies*, i., 397; *Rampoldi*, *&c.*)

BITRITTO, a town of Naples, prov. Terra di Bari, 7 m. S. Bari. Pop. 2500. It has a fine collegiate church, and its territory is celebrated for its wines and almonds.

BITTBURG, a town of the Prussian States, prov. Lower Rhine, cap. circle, 18 m. N.N.W. Treves. Pop. 2000. It has a castle, two Catholic churches, and some trade in corn and cattle.

BITTERFELD, a town of the Prussian States, prov. Saxony, reg. Merseburg, cap. circle, 16 m. S. Dessau. Pop. 3400. It was founded by a colony of Flemings, whose descendants are said to hold their property in common, and to be governed by peculiar laws. It has fabrics of cloth and earthenware.

BIZERTA, or BENZART (an. *Hippo Diarrhytus*, or *Zaritus*) a sea-port town of Tunis, at the bottom of a deep gulf or bay (*Sinus Hipponensis*), on a channel uniting the gulf with an internal lake or lagoon, 40 m. N.W. Tunis; lat. 37° 17′ 20″ N., long. 9° 50′ 35″ E. Pop. variously estimated at from 8000 to 14,000. It is about 1 m. in circ., and is defended by walls, and two castles; but as the latter are commanded by a height within a short distance, it could oppose no effectual resistance to an army attacking it by land. Though it has a good appearance at a distance, it is, like most other Turkish towns, really mean and filthy. Its

port, which now only admits small vessels, was formerly one of the best in the Mediterranean, and might easily be restored, in this respect, to its ancient pre-eminence. The channel on which the town is built has in parts five and six fathoms water, and it might, with no great labour, be everywhere deepened to that extent. The lake, or inner harbour, is of great extent, with a depth of water varying from ten to fifty fathoms, and is capable of accommodating the largest navies. The country round is also exceedingly fertile; so much so that, notwithstanding its neglected state, large quantities of corn are occasionally exported from Bizerta. There cannot, therefore, be a doubt that were this town and the adjacent country in the possession of any European power, it would speedily become one of the greatest emporiums and most flourishing districts on the Mediterranean. But no improvement need be looked for so long as it is permitted to remain in the power of its present barbarous masters. (*Shaw's Travels*, p. 75; *Modern Traveller*, xx., 265, &c.)

BLACK, t., Posey co., Ia. It contains ten stores, two flouring-mills, three grist-mills, one saw-mill, two tanneries, one printing-office, one weekly-newspaper, ten schools, 300 scholars. Pop. 2596.

BLACK BROOK, p. t., Clinton co., N.Y., 20 m. S.W. Plattsburg, 158 m. N. Albany, 533 W. Watered by Saranac and Ausable rivers. It abounds with iron ore, and contains six stores, four forges, nine saw-mills, two schools, 69 scholars. Pop. 1064.

BLACKBURN, a market-town and parl. bor. of England, co. Lancaster, hund. and par. of Blackburn, on an affluent of the Ribble; 183 m. N.W. by N. London, 31 m. N.E. Liverpool, 21 m. N.W. by N. Manchester, 11 m. N. by W. Bolton, and 9 m. E. by S. Preston. The progress of pop. has been as follows:

	1770.	1801.	1811.	1821.	1831.
Town .	5,000	11,960	15,063	21,940	27,391
Parish .		33,631	39,899	53,250	59,791

The town, situated on a rivulet, called in Domesday Book "Blackburne," was, with the surrounding district, a manor during the reign of William the Conqueror, who granted it to Ibbert de Lacy. A castle, of which no trace exists at present, is said by Whitaker to have been a station of the Romans, and of the Saxons. Camden and Blome both notice it as a thriving market-town in their days. The eminences in the vicinity are naked, and in winter the place has a dreary aspect. It is irregularly built, owing partly to its antiquity, and partly to the intermixture of glebe and other lands, the tenures of which interfered with a better arrangement of the avenues. It is well paved and lighted, under the provisions of a late act; but is badly supplied with water. The parish church of St. Mary, originally built before the Conquest, was rebuilt on a new site in 1819, at an expense of £26,000; it is in the Gothic style, contains 2000 sittings, of which 700 are free; and in boldness, symmetry, and correctness of design, is said to be surpassed by but few ecclesiastical structures. It sustained some injury, which was soon after repaired, from a fire in 1831. There are three other episcopal churches, viz., St. John's, built by subscription; St. Peter's, by a parl. grant; and St. Paul's, originally a dissenting chapel of Lady Huntingdon's Connexion. The Methodists, Baptists, Independents, and Roman Catholics, have each two places of worship; the Swedenborgians and Society of Friends, one each. A free grammar-school, founded in the time of Elizabeth, and endowed with lands now producing about £120 annually, educates 30 pupils; Leyland's charity school, 90 girls; and in the national school 600 children of both sexes are instructed. Altogether, upwards of 5000 children receive the rudiments of education in public seminaries of various descriptions. The Independents' theological academy educates candidates for the ministry of that religious persuasion. The public buildings, with the exception of those applied to theological purposes, are few in number, and consist principally of a small neat theatre, and a cloth-hall. It has a dispensary and a lying-in institution, a horticultural society, and two weekly papers.

The Reform Act conferred on Blackburn the privilege of returning two mem. to the H. of C. The bor., which is identical with the township, comprises 3610 acres; and had, in 1831, 4802 houses, of which 623 were worth £10 a year and upwards. Registered electors in 1837-38, 842.

The manufacture of a kind of cloth made of linen warp and cotton woof, each partly of dyed thread, giving the web a chequered appearance, and thence called Blackburn cheque, was carried on here in 1650. It was afterward superseded by that of Blackburn grays, consisting also of linen and cotton, so called from their being printed in an unbleached state. James Hargreaves, a working carpenter, the inventor of the spinning-jenny, the first great step in that wonderful career of invention and discovery that has raised the cotton manufacture to its present unexampled state of prosperity, was a native of Blackburn. In 1767 he produced the jenny; but instead of meeting with the countenance and support due to his singular descrts, he was driven out of the town, and eventually out of the country; and it was not till about 1810 or 1812 that the people of Blackburn began largely to embark in the cotton trade, and to avail themselves of the discoveries that had originated in their town. Now, however, spinning of the coarser kind of calicoes, and their weaving by the power-loom, constitute the staple trade of the place: coarse muslins continue to be wrought by the hand-loom. In 1831, the number of spinners and weavers in the town was estimated at 15,000, and the value of the goods produced at about £2,000,000. Since then the manufacture has increased at least *a third*, so that the value of the goods will be little short of £3,000,000. The abundance of coal raised from the coalfield a few m. to the S. has largely contributed to the progress of manufactures. They have also been much facilitated by the Liverpool and Leeds canal, which passes close to the town. Markets are held on Wednesdays and Saturdays, in an inconvenient place: fairs for cloth, in the cloth-hall, on Easter-Monday, 11th, 12th May, and 17th Oct.; and for cattle, on the alternate Wednesdays from the beginning of February to Michaelmas. The banking establishments are, branches of the Commercial Bank of England, and of the Manchester and Liverpool District Bank; a private banking-house, and a savings' bank.

"In the early stages of the cotton manufacture," says Mr. Baines, "the inhabitants, in general, were indigent, and scantily provided (and this is still the case so far as the hand-loom weavers are concerned), but decisive proofs of wealth now appear in this place on every hand; handsome new erections are continually rising up; public institutions for the improvement of the mind, and the extension of human happiness, are rapidly increasing; and this place, at one time proverbial for its rudeness and want of civilization, may now fairly rank, in point of opulence and intelligence, with many of the principal towns in the kingdom."

The parish of Blackburn extends over 45,620 acres; it includes twenty-three townships and chapelries; and had, in 1831, 59,791 inhab. (See *Baines's Hist. Lancashire*; *Whitaker's Hist. of Whalley*; *Parl. Reports and Returns*; *Holt's Gen. View of Lancashire*.)

BLACK CREEK, t., Mercer co., O. Pop. 339.

BLACKFORD, county, Ia. Situated N.E. of the centre of the state, and contains 182 sq. m. Organized in 1838. Watered by Salamanic river, a branch of Wabash river. It contained, in 1840, 1015 neat cattle, 240 sheep, 2902 swine; and produced 3259 bushels of wheat, 22,753 of Indian corn, 1579 of oats, 3377 of potatoes. It had two grist-mills, one saw-mill. Pop. 1296. Capital, Blackford C.H.

BLACKFORD C.H., p. v., Hartford t., capital of Blackford co., Indiana, 81 m. N.E. Indianopolis, 522 W.

BLACKHEATH, an elevated moory tract in the vicinity of the British metropolis, which gives name to the hund. in which it is situated, in the lath of Sutton-at-Holme, county Kent. The greater portion is in the parish of Greenwich, but it also extends into those of Charlton, Lewisham, and Lee, and is 1½ m. in an E. and W. direction, and about half that N. and S.; from St. Paul's to the nearest part is about 5 m. S.E. It commands many fine prospects, and has numerous elegant villas. There are two episcopal chapels, one in the parish of Lewisham and one in the liberty of Kidbrook, also two preparatory and several private schools. On the E. side is Morden College, a quadrangular structure, founded in 1708, for decayed merchants; its revenue is about £5000 a year, in the hands of seven trustees, who nominate the pensioners, and appoint the treasurer and chaplain: there are about 40 supported, each of whom receives £5 a month, and has a separate apartment; but they eat at a common table: none are admissible under fifty years of age. A Roman road (Watling-street), from London to Dover, traverses the heath, nearly in the direction of the modern line: there are some large ancient tumuli on it. In the 11th century the Danes (whose fleet lay off Greenwich) were encamped on the heath some months, whence they made many excursions; in one of which Canterbury was sacked, and the archbishop carried off, and afterward killed. Wat Tyler, and subsequently Jack Cade, took up positions with their followers on it; as did the Cornish rebels, under Lord Audley, defeated with great slaughter by Henry VII. Thither also, in former times, the lord mayor and corporation, and, occasionally, the king and his court, were wont to go, when illustrious personages were to be welcomed to the capital. (*Halsted's Kent, &c.*)

BLACK RIVER, N.Y., is the third in size which flows wholly within the state. It rises in Herkimer co., and after a course of 120 m. N.W., it enters Black-river bay, at the foot of lake Ontario. From the High falls at Leyden, 40 m. to the Long falls at Carthage, it is navigable for boats requiring 4 ft. of water. From the foot of the High falls, Black river canal extends 34 m. to the Erie canal, at Rome.

The estimated cost of this canal is $3,987,374, and it is in a state of forwardness. The main canal requires 108 locks, to overcome an ascent and descent of 1083 ft.

BLACK RIVER, p. t., Lorain co., O., 130 m. N.N.E. Columbus, 387 W. Watered by Black river, at the mouth of which, on lake Erie, is a village, with a good harbour and considerable trade. It has one foreign commission house, four stores, two lumber-yards, three schools, 67 scholars. Pop. of the t. 668.

BLACK ROCK, p. v., Black Rock t., Erie co., N.Y., 290 m. W. by N. Albany, 363 W. Situated on the E. side of Niagara river, at the foot of lake Erie, 2½ m. N. of Buffalo, with which it is connected by a rail-road. Incorporated in 1837, and contains one church, ten stores and groceries, five warehouses, four flouring-mills with twenty-five run of stones, two saw-mills, two oil-mills, two distilleries, one iron foundry, one plaster-mill, one machine-shop, one stove-factory, one rope-walk, one clothiers'-works, and various other mechanical establishments; 300 dwellings, and about 1800 inhabitants. The harbour is formed by an immense stone pier or mole in Niagara river, over a mile in length, 50 ft. wide at its base, and 20 ft. at the top, erected by the state of New-York, at an expense of $300,000, for the double purpose of forming a safe and convenient harbour for vessels on the lake and the canal-boats which enter the lake through it, and for supplying the Erie canal with water from the lake, as far E. as Montezuma, nearly half of its entire length. A dam, 165 yards long, connects the shore with Squaw island, which raises the water in the harbour 4½ ft., to a level with the lake, creating an immense water-power, but partially improved. A lock admits vessels from the harbour into the river. The average depth of the water in the harbour is 15 ft. The Erie canal enters the harbour opposite to Bird's island, which is immediately above, and connected by a mole with Squaw island, which latter contains 131 acres. In the year 1840, 519,984 bushels of wheat were received, and 244,700 barrels of flour were manufactured at this place. A ferry crosses to Waterloo, in Canada. The township extends on three sides of the city of Buffalo, from which it is centrally distant 3 m. It has ten schools, 396 scholars. Pop. 3693.

BLACK SEA (the Euxine, or Πόντος Εὔξεινος of the Greeks and Romans), a large internal sea lying between the S.W. provinces of Russia in Europe and Asia Minor, extending from 40° 50′ to 46° 45′ N. lat., and from 27° 25′ to 40° 48′ E. long. It is bounded on the N. and N.W. by the Russian provinces of Taurida, Kherson, and Bessarabia; on the N.E. and E. by the Caucasian countries Circassia, Mingrelia, and Imeritia; on the S.E. and S. by Armenia and Asia Minor; and on the W. by the Turkish governments of Rumelia and Bulgaria. Its extreme length from E. to W. is upwards of 700 m.; its greatest width, on the 31st meridian, 400 m.; E. from this it narrows by the projection of the Crimea, and the advance of the opposite shore of Asia Minor, to 154 m.; again it widens to 265 m. between the strait of Yenikalé and the gulf of Samsun, but from the last point it constantly and rapidly diminishes, till its E. coast (running due N. and S.) does not exceed 60 m. in width. Its surface is estimated at about 160,000 sq. m., and its coast line, including its sinuosities, considerably exceeds 2000 m. (*Chevalier, Voy. de la Propon. et du Pont Eux.*, p. 239; *Jones's Travels*, ii., 383; *Russell's Comp. Geog. of W. Asia*, ii., 277; *Arrowsmith's Atlas.*)

The Black sea is connected with the sea of Azoph by the strait of Yenikalé (an. *Bosphorus Cimmerius*), and with the sea of Marmara by the channel of Constantinople (an. *Bosphorus Thracius*). With these exceptions, it is wholly isolated. It is also much more compact in form than most other large bodies of water; giving off no great limbs, like the Baltic, Mediterranean, &c., and having very few even moderately-sized gulfs. The most important, that of Kirkinit, (the *Carcinitus Sinus* of the ancients) lies between the N.W. shore of the Crimea and the opposite shore of S. Russia, extending as far E. as the isthmus of Perekop. The coast of the sea is, however, by no means iron-bound; small bays and harbours innumerable occur at short distances, through all its circuit, but none of them is in the least comparable, as to size, with the gulf of Kirkinit, unless, indeed, the sea of Azoph and the sea of Marmara be reckoned as gulfs of the Black sea. The straits of the Black sea are very remarkable; they scarcely break the continuity of the land, for at their narrowest part, that of Yenikalé, is not more than 2 m. across, and that of Constantinople less than 1½ m. (*Pallas's Travels in S. Russia*, ii., 298; *Chevalier*, p. 44.) The former, indeed, spreads out in low and swampy grounds into a kind of marshy bay, the greatest width of which, measured transversely, is about 34 m. (*Pallas*, ii., 300); but the Thracian Bosphorus flows through its whole length of about 17 m., like a magnificent river, between mountainous banks, and in no part attains a width of more than 2 m. or 2½ m. (*Jones*, ii., 448.)

The depth of water in this sea is variable, but the variations appear to be extremely regular, depending generally upon the proximity of the land; so much so, indeed, that in many places (off the mouths of the Danube in particular) the distance of the shore may be known within ½ m. from the soundings only. (*Eton, Commerce of the Black Sea*, p. 6.) In the strait of Yenikalé, the depth, in its shallowest part, does not exceed 11 ft., nor in its deepest is it more than 29 ft.; but, passing this, the sea itself is found, in the neighbourhood of the strait, to have a general depth of 4 fathoms, deepening rapidly to 20 fathoms or more; while, in the S. parts, 48 fathoms are found at the entrance of the Thracian Bosphorus; an equal or greater depth along the W. shore, at a little distance from the land, as far as the mouths of the Danube; and in the main sea, between the Bosphorus and Sebastopol, in the Crimea, no bottom is found at 100, 120, 140, and 160 fathoms. The sea upon the S. coast, from Constantinople to Sinope (long. 35°), is tolerably deep; thence to the E. coast it is known only that vessels of any draught may navigate its waters; and the N.E. shore, between the rivers Phasis and Kuban, may be regarded as yet unknown to Europeans. (*Voyage of the Blonde*, 1829; *Geog. Journal*, i., 106; *Eton*, p. 7–15; *Admiralty Charts*, sect. iv., pl. 73.)

The Euxine is enclosed on the N.E., E., S., and S.W. by high mountains, which run down close to its margin; even on the W., the Carpathians approach its shores to within 170 m.; but towards the N.W. and N., it opens on the great European plain, which includes Russia, Poland, Prussia, N. Germany, the Netherlands, and Denmark. Not a mountain, not a hill, rises near its bed, in these directions, except the small range in the S. of the Crimea. It might be reasonably imagined that, in consequence of such a formation, its basin would consist exclusively of the countries stretching from its N.W. and W. shores. This is, however, far from being the case. It is true that its N.E. coast, bound closely in by the Caucasus, receives only the torrents that run their short courses from the W. slopes of that mountain system, but from the S.E. and S., the supply yielded by Asia Minor is by no means niggardly, several very considerable rivers having their embouchure in its waters.

The basin of the Euxine expands in this direction, from about 40 m. to nearly or quite 260 m. in width; but immediately N. of the Caucasian mountains, it suddenly stretches E. 300 m., the sea receiving, through the Kuban, nearly all the water that flows from the N.E. face of the Caucasus, and by various other channels, considerably the larger part of all the drainage from the low and swampy lands W. of the Caspian. (*See* CASPIAN SEA.) On its N. coast, the Black sea receives the waters of some of the first class European rivers from a distance of 700 m. from its shores. (*See* DON, DNIESTR, DNIEPR.) The Don, indeed, falls into the sea of Azoph; but this is, physically considered, only a part of the larger body with which it is connected. But by far the most remarkable part of the basin of the Euxine is that towards the W. It has been already stated that the Carpathians approach, in this direction, to within a comparatively short distance of its shores; but, notwithstanding this, the Danube, after breaking through the mountains at Orsova, reaches the Euxine charged with all the surplus waters of the E. and N.E. declivities of the Alps, the S. and part of the N.E. declivities of the Carpathians, the S. declivities of the Sudetes, and the N. declivities of the Balkhan; in other words, the whole water of N. Turkey, of the Austrian empire, with the exception of Bohemia and Lombardy; together with a great part of that of Bavaria and Wirtemberg. (*See* DANUBE.) These countries extend above 1000 m. W. from the Black sea; their surface is equal to more than 1-11th part of the whole of Europe, and their running water to almost 1-8th part. (*Lichtenstein, Cosmog.*, i., 398, *et seq.*) When to this is added the supply from the N.E. and S., it will be evident that the basin of the Euxine is of very great extent. The much larger portion belongs to Europe, of which it drains almost 1-3d part; and the amount of water received by the sea is equal to that given from the same division of the world to the Mediterranean (*direct*) and Baltic together. It is, indeed, by far the largest of the European basins, nor is there anywhere a similar tract of country so abundantly irrigated.

There are, of course, no tides in this close sea, but, from the vast quantity of water received, the currents are very marked, powerful, and regular; a little variation is caused by winds, and some trifling complexity near the mouths of rivers, but in general the direction is from all points towards the channel of Constantinople, through which a very constant flow is kept up to the sea of Marmara. Within this strait, however, the currents become rather more variable, being thrown from side to side by the inequalities of the coasts, and the narrowness of the channel. (*Chevalier*, p. 45; *Jones*, ii., 394, 447; *Pallas*, ii., 288; *Geog. Journal*, i., 107, &c.) The water of the Black sea appears to contain more salt than could have been expected, under existing circumstances. It has been observed of the constant action

of the St. Lawrence on the N. American lakes, that it has been continued long enough to make them sweet and clear, even had they originally been filled with ink! But an operation, not less powerful, has been at work fully as long upon these waters; and though the sea of Azoph has become potable, except when a S.W. wind prevails, the Black sea itself is said to be only about 1-7th part less salt than the Atlantic, and fully 1-10th salter than the Baltic. (*Chardin*, p. 155; *Jones*, ii., 143, &c.) This, if correct, is, in all probability, attributable to the saline nature of the sea-bed. The N. coast is almost one continued plain of salt, and the numerous lakes, with which these steppes abound, are, by the action of the summer sun, covered with a thick, white crust of the same mineral, perfectly crystallized, and having the appearance, and almost the consistency, of ice. (*Pallas*, ii., 466–477; *Mrs. Guthrie's Tour through the Taurida*, p. 55–59, &c.) It is very improbable that this peculiarity of soil should be continued to the very edge of the sea, and then suddenly cease; and, on the other hand, if it be farther continued to any distance, it will necessarily countervail in a great degree the influence of the immense supply of fresh water. The fact is, however, that but very little is known, with anything like certainty, of the chemical composition of the Black sea. The Russian observations are limited to the N. shores; the few French and English travellers who have traversed its surface, have done so only partially and hurriedly; among trading navigators there has been no Jonas Hanway; and the statements of the Turks exhibit nothing but ignorance, prejudice, and misrepresentation. A scientific survey of this sea has yet to be performed, and Russia is the only power to which Europe can look for this service. Her government has already distinguished itself by similar investigations, and as she has so great an interest in the correct delineation and description of this sea, it is to be hoped that she may shortly undertake the task. Meanwhile, however, many old prejudices with respect to it are fast vanishing; and the Euxine is no longer regarded as a dark and desolate region of storms, danger, and shipwreck. That such an opinion should have ever prevailed, is not a little remarkable; but it did prevail in ancient, and in modern times till a comparatively late period. Tournefort was the first who attempted to dispel the prejudices and misrepresentations referred to; and who ventured to represent facts as he found them, and not as they had been disguised by the poets of antiquity, and by blind and ignorant Turkish navigators. *Quoiqu'en aient dit les anciens*, says this learned and excellent traveller, *la Mer Noire n'a rien de noir, pour ainsi dire, que le nom: les vents n'y souflent pas avec plus de furie, et les orages n'y sont guères plus fréquens que sur les autres mers. Il faut pardonner ces exaggérations aux poëtes anciens, et surtout au chagrin d'Ovide; en effet le sable de la Mer Noire est de même couleur que celui de la Mer Blanche, et ses eaux en sont aussi claires; en un mot, si les côtes de cette mer, qui passent pour si dangereuses, paroissent sombre de loin, ce sont les bois qui les couvrent, ou le grand éloignement qui les font paroître comme noirâtres. Le ciel y fut si beau et si sérène pendant tout notre voyage, que nous ne pûmes nous empêcher de donner une espèce de démenti à Valerius Flaccus, fameux poëte Latin, qui assure que le ciel de la Mer Noire est toujours embrouillé, et qu'on n'y voit jamais de temps bien formé.* (ii., 164.)

The prevailing wind in the Euxine is from the N.E., and, as it blows over a great extent of flat and swampy country, it is laden with moisture; and, being confined by the high land on the E., S., and S.W., heavy fogs are occasionally produced. It may even be conceded to Dr. Clarke, that "in winter these fogs, and the falling snow, cause sometimes a darkness so great, that mariners are unable to discern objects at the distance of a cable's length from their vessels." (*Travels*, i., 641.) But this inconvenience involves scarcely any hazard, for the depth of water is always sufficient to allow of lying to without danger of drifting upon sand or rock; and, with the least break in the weather, landmarks of the very best kind come into view, which may be seen at 20, and often at 60 m. distance. (*Eton*, p. 8, 9.)

From the confined extent of the water, a short and troublesome sea is caused by anything like a gale; but it is not dangerous; and storms, to which the Black sea is not more subject than other seas, are rarely of long duration. (*Eton*, p. 6.) While they last, the close, pent-up water being greatly agitated, accidents, of course, sometimes occur; but it would, perhaps, be rather difficult to point out any sea of limited dimensions where, under such circumstances, they do *not* occur. The N.W. shore is low and sandy; a sandbank, 3 m. in extent, lies near the entrance of the channel of Constantinople; and on the coast of Crimea two rocks lie close in shore.

Lastly, there is an opening, called *Yalan Bokur* (false mouth), a little to the N. of the Channel of Constantinople, and very considerably resembling it, though easily enough distinguished when the landmarks are visible. Ignorant, half-bred pilots frequently conduct their ships into this mouth; and as it runs upon a low and dangerous shore, the consequences are mostly fatal. These are the only known *real* dangers of this sea. Can it be affirmed that any piece of water of like extent has so few? (*Eton*, p. 4–9; *Jones*, ii., 387–397.) On the other hand, the Euxine is deep, and singularly free from rocks and shoals: there are but two islands in its whole area; the Isle of Serpents, off the mouth of the Danube, and Kerpe, or Carpal, on the shores of Asia Minor. The navigation is, therefore, of the openest kind, and even in the worst of storms there is no want of sea room. The largest ships may sail close to its high shores: the anchorage grounds are good, and hold well; and many of its ports are excellent. In fine, the Euxine may be described as a clear, open sea, whose navigation is as easy as possible to skilful mariners, the bad character which it has so long undeservedly borne being wholly ascribable to the bad build of the vessels, their want of charts and compasses, and the utter incapacity of the sailors by whom, till recently, it has been navigated. From the 15th to the latter part of the 18th century, the Turks excluded every other nation from its waters. At length the Russians fought their way to its shores, and in 1799 it was partially opened to British and other European traders. Conventions to the same effect were made with the Turkish government by Queen Elizabeth, James I., and Charles I., &c. (*Treaty of Adrianople, Sept.*, 1673), but they seem to have been without any effect; and it is only, therefore, since the latter date, or from the beginning of the present century, that the Black sea has become known to, and been justly appreciated by, navigators.

The climate of the Black sea and its neighbouring countries is subject to great extremes, but at an average is lower than would be supposed from its latitude. This would seem to be ascribable principally to its want of shelter on the N.; the winds from the polar regions reaching its coast, and blowing over its surface, unmitigated except by the temperature of the plain land over which they pass. Winds from the S. are less frequent than those from the N., and, having to climb the snowy heights of the Taurus, before they reach the coast, they arrive there materially chilled. Even on its S. shores, the N. wind sometimes prevents travelling even in the month of May. (*Tournefort*, iii., 37.) Its N. gulfs and bays are in certain seasons frozen hard enough to open a passage for troops; and it is recorded by Strabo (lib. vii.), that the soldiers of Mithridates engaged those of the Tauric Chersonesus (Crimea) in the winter, on a part of the Bosphorus where, in the preceding summer, a naval action had been fought. In 1065, the width of the strait was measured on the ice (*Pallas*, ii., 300; an equal degree of cold has been experienced in several winters within the present century; and, though such extreme inclemency be not very common, navigation is always suspended with every return of winter in the sea of Azoph, and most commonly along the whole N. shore of the Euxine. On the other hand, the summers are usually hot, the thermometer in the shade frequently standing at 98°, 100°, and even 102° Fahr. It often, however, varies in the same day from 22° to 27°, both in winter and summer, and in the former the barometer partakes of the irregularity, but is subject to fewer changes in the latter. Thunder-storms are rare, but tremendous when they do occur, being frequently accompanied by destructive hailstones and water-spouts. The climate is accounted healthy, except in the autumn, when bilious fevers are prevalent. The scourge of Mohammedan countries, the plague, is more or less common all round the coast, but this is a consequence of the filth of the inhabitants, and not of the climate. (*Pallas*, ii., 376–380; *Mrs. Guthrie*, p. 33, 55, &c.; *Tournefort*, iii., 16, &c.)

The Euxine teems with seals, porpoises, sturgeons, dolphins, mackerel, mullet, bream, and other fish, mostly of the same kind as those caught in the Caspian and sea of Aral (*see* CASPIAN SEA): there are, however, few fisheries established along its shores, though, where they do exist, they are extremely productive. (*Pallas*, ii., 51, 122, 289, 461–463; *Olivier, Voyage dans l'Empire Othoman*, i., 135, &c.)

There are many conflicting opinions as to whether the Euxine be or be not of permanent magnitude. It was a commonly received opinion among the ancients that it was formerly separated from the Mediterranean, and that the Thracian Bosphorus was burst through by a convulsion of nature, or by the deluge of Deucalion; and Aristotle even believes that this event did not long precede the time of Homer. (*Josephus, Antiq.*, i., 3; *Diod. Sic.*, v., 3; *Aristotle de Met.*, xiv.; *Pliny*, vi., 1, &c.) Without supposing any great degree of physical knowledge on the part of the Greeks, it may be supposed that the inhabitants of the countries bordering on the Euxine would have a vivid recollection of such a catastrophe, had it occurred, and that, con-

sequently, it would scarcely have been an invention or hypothesis of the writers. Add to this, that geological appearances strongly confirm the supposition; and the fact, though sneered at by some, will appear not a little probable. (*Pallas*, i., 80, 83; *Tournefort*, ii., 346–390; *Olivier*, i., 122; *Dureau de la Malle, Géo. Phys. de la Mer Noire*, p. 196–225.) It will be observed, that among the ancients only historians and naturalists have been cited, but it may be added that the same revolution is dwelt upon by their poets and fabulists. (See in particular *Lucan*, vi., 5.) It was, in a word, the universal belief of all ranks and orders. But if this sea were ever thus confined, its surface must have been considerably higher than at present; and this also appears to be the fact, from the accumulation of salt-lakes and marshes in the plain country on its N. borders. It is evident, indeed, that a rise of a few hundred feet in its surface would be quite sufficient to flood the greater part of southern Russia, the whole of which, except the mountains of the Crimea, bear evident marks of having been laid bare at a comparatively recent period (*Pallas, passim*); and the whole appearance of its N. shores is that of a diminished bed. Polybius supposed the Euxine to be gradually decreasing; and he has offered reasons, in support of this opinion, formed on more solid premises than ancient writers often depend upon (iv., 5). In this, however, he appears to have been mistaken. The change in extent, if any ever did take place, seems to have have occurred at once with the subsidence of the waters, by the opening of the Thracian Bosphorus. Since the age of Polybius no change seems to have taken place in the size of the sea; but that it has become clearer, is evident from two facts; first, that a bank, called by Polybius *Stethe* (Στηθη), formed at the mouths of the Danube, and more than 100 m. in length, has wholly disappeared; and that the Cyanean isles, at the mouth of the Bosphorus, so celebrated in the voyage of the Argonauts, are now reduced to low and insignificant prolongations of the two opposite shores. (*Geo. Journ.*, i., 105; *Jones*, ii., 444; *Olivier*, i., 122.) It is not, perhaps, likely that any farther change should take place, except by some new convulsion. The surface is still a little, though probably but a little, higher than that of the Mediterranean, as is evident by the constant set of the current through the channel of Constantinople—a consequence of the narrowness of the latter, and of the rivers bringing down more water than is taken off by evaporation.

Notwithstanding the horror entertained by the Greeks, or, rather, the Greek poets, of this sea, its shores are famous in their true and fabulous history. Colchis, the Temple of the Sun, and scene of the Argonautic expedition, were on its E. coast; the Cimmerian land of everlasting darkness was originally fixed upon its N. shore; and, in more historical times, the Lydian, Persian, and Byzantine powers, and the exploits of Mithridates, illustrated its S. and S.W. borders. At an early period, many Greek colonies were planted on its shores. Its commerce was also reckoned of first-rate importance. Athens drew from it her principal supplies of corn and naval stores; and it furnished the favourite slaves to the markets of Greece and Rome. Ovid died in exile somewhere on its borders, but whether on the Danube or Dniestr is disputed. From the time of Constantine till the 15th century, it formed the centre of the Roman world, and, during this period, a part, at least, of the Indian trade was carried on through it: the Venetians and Genoese were the conductors of this traffic. Soon after the fall of Constantinople in 1453, all but Turkish vessels were excluded from the Euxine; and it was not till after the treaty of Kainardji, in 1774, that the Russian eagle was displayed on its waters.

The name of this sea, *Euxine*, is only a modernized form of the original Greek word *αξινος* (inhospitable), bestowed upon it for the imaginary reasons previously alluded to. It appears, however, that, subsequently, the Greeks imbibed a somewhat better opinion of it, and changed its designation to Ευξινος (hospitable): it was sometimes also called simply Πονος (the sea). The Turkish name is Caca Denisi, and the Russian, Czorno More, both being literally translated in the term Black sea.

BLACKSTONE, river, rises in Paxton and Holden townships, Worcester co., Mass., and flows S.E. into the state of R. I., where it assumes the name of Pawtucket r., until it enters Providence river. It affords extensive water-power. The Blackstone canal, which connects Worcester with Providence, passes along the valley of this river. This canal is 45 m. long, 34 feet wide at top and 18 at the bottom, and is 4 feet deep, and was completed in 1829 at a cost of about $700,000.

BLACKWALL, a hamlet of England, co. Middlesex, par. Stepney, at the confluence of the Lee with the Thames, 5 m. E. St. Paul's, being in fact a suburb of London. Here are the E. and W. India Docks, &c., for an account of which see LONDON.

BLACK WARRIOR, river, Ala., is formed by the junction of Mulberry river and Locust Fork, which unite in the S.W. part of Jefferson co. It then flows S.W. by Tuscaloosa, and thence S. by W. to its junction with Tombigbee r., at the S. point of Greene co. Its whole length is about 160 miles. It is navigable, at certain seasons, for steamboats to Tuscaloosa, and for boats much farther.

BLACKWELL'S ISLAND, N. Y., situated in the East river, belongs to the city, and contains the city penitentiary, a fine stone building, and a lunatic asylum. It is a mile and three quarters long.

BLADEN, county, N. C., situated in the S. part of the state, and contains 1200 sq. m. Drained by Cape Fear river. It contained in 1840, 9789 neat cattle, 5855 sheep, 21,668 swine; and produced 1549 bushels of wheat, 180,705 of Indian corn, 4954 of oats, 55,141 of potatoes, 74,487 pounds of rice, 58,193 of cotton, 14,281 barrels of pitch, tar, and turpentine. It had eleven stores, eighty-three grist-mills, twenty-one saw-mills, eighteen distilleries, one academy, 11 students, 23 schools, 348 scholars. Pop.: whites, 4317; slaves, 3413; free-coloured, 292; total, 8022.

BLADENSBURG, p. v., Prince George co., Md., 6 m. N.E. Washington city, 34 W. Annapolis. Situated on the S.E. side of the rail-road from Baltimore to Washington. It contains three churches, one Episcopal, one Methodist, and one Presbyterian; an academy, eight stores, one flouring-mill, one grist-mill, sixty dwellings, and 400 inhabitants. There is a mineral spring in the village. Commodore Barney, with a few marines, here made a brave resistance to the British, in their advance to the conflagration of Washington in 1814, but was overpowered by greatly superior numbers.

BLAIN, a town of France, dep. Loire Inférieure, cap. cant, near the right bank of the Isac, 22 m. N.N W. Nantes. Pop. 4553. Its castle, of which only a small part now remains, was formerly one of the strongest in Bretagne. It was partly demolished in 1629. Calvinism was early introduced into this town, a synod having been held here in 1565, at which there were reckoned above 1200 Protestants. (*Hugo*, art. *Loire Inférieure*.)

BLAIRSVILLE, p. v., Black Lick t., Indiana co., Pa., 171 m. W. by N. Harrisburg, 199 W. Incorporated in 1825. Situated at the junction of Black Lick creek with the Conewaugh river. The Pennsylvania canal passes through it. A bridge here crosses the Conewaugh r. It contains five churches, one Presbyterian, one Methodist, one German Lutheran, and one Roman Catholic; fourteen stores, one fulling-mill, one woollen-factory, one flouring-mill, three grist-mills, three tanneries, one printing-office, one weekly newspaper, 1 school, 255 scholars, and 150 dwellings. Pop. 990.

BLAIRSVILLE, p. v., capital of Union co., Ga., 118 m. N.N.W. Milledgeville, 617 W.

BLAKELY, p. t., Luzerne co., Pa., 150 m. N.E. Harrisburg, 254 W. Drained by Lackawannock river and its tributaries, which afford water-power. Anthracite coal is abundant. It contains two stores, two flouring-mills, eight saw-mills, four schools, 160 scholars. Pop. 570.

BLAKELY, p. v., capital of Early co., Ga., 203 m. S.W. Milledgeville, 850 W. It contains a court-house, jail, an academy, and eight or ten dwellings.

BLAKELY, p. v., port of entry, and capital of Baldwin co., Ala. Situated on the E. side of Tensaw river, one of the outlets of Mobile river, opposite to Mobile. The harbour admits vessels requiring 11 feet of water. The situation is healthy and pleasant, and the village is well supplied with good water. A greater depth of water, and a more ready access to the ocean, it was supposed, would render it a formidable rival of Mobile, but the expectations of its founders in this respect, have not been fully answered. It contains a court-house, ten stores, and many neat dwellings.

BLAMONT, a town of France, dep. de la Meurthe, cap. cant., on the Vezouse. Pop. 2638. It was burned down in 1527 and 1636. It produces yarn for hosiery, and has considerable tanneries.

BLANCHARD, p. t., Piscataquis co., Me., 73 m. N. by E. Augusta, 668 W. It contains 2 schools, 80 scholars. Pop. 270.

BLANCHARD, p. t., Hancock co., O., 80 m. N. by W. Columbus, 451 W. It contains 4 schools, 215 scholars. Pop. 629. The post-office is called Blanchard's bridge, and the village contains 71 inhabitants.

BLANCHARD, t., Putnam co., O. Pop. 688.

BLANC (LE), a town of France, dep. Indre, cap. arrond., on the Creuse, in a pleasant situation, 33 m. W.S.W. Chateauroux. Pop. (town *ex* cant.) 3847. It is divided by the river into two parts, called the high and low towns: both are ill-built, particularly the former, the streets of which, besides being narrow and crooked, are also precipitous. It is the seat of a tribunal of original jurisdiction. There now remain but few traces of its ancient fortifica-

tions, which, however, were once strong enough to resist several sieges. This is a very ancient place, and was often frequented by the Roman legions. The road from La Blanc to St. Savin is still called the *Levée de Cæsar*. (*Hugo*, art. *Indre*; *Dict. Géographique*.)

BLANCO (CAPE), a celebrated cape on the W. coast of Africa; lat. 26° 46′ 26″ N., long. 17° 4′ 16″ W. This cape, which was discovered by the Portuguese in 1441, forms the extremity of a rocky ridge, called the Geb-el-reid, or White mountain, projecting into the sea in a S. direction. Inside the cape is a spacious bay, which has on its S.E. side the bank and town of Arguin.

BLANDFORD FORUM, a par., bor., and town of England, co. Dorset, hund. Coomb's Ditch, Blandford (or N.) div., 98 m. S.W. London. Pop., 1821, 2643; 1831, 3109: houses 528. This neat little town is situated on a bend of the Stour, amid one of the finest tracts of sheep pasture in the kingdom; a six-arched bridge crosses the stream, and there are two others to facilitate the communications of the town during occasional floods. The houses are uniform brick structures, arranged in regularly-formed, and well-paved and lighted streets. The church is a modern building in the Grecian style, with a tower and spire. There are also an Independent chapel, a free grammar school, and a blue-coat school, each with small endowments; alms houses, supporting ten old people; a charity producing £120 a year, for apprenticing poor boys; and another, now producing £300 a year, originally left for the purpose of educating four poor children. There is a handsome town-hall, and a neat theatre; and on a fine down, near the town, annual races are held in Aug. The weekly market is held on Saturday, and 3 annual fairs on March 7, July 10, Nov. 8: they are for horses, cattle, and cheese. A manufacture of shirt buttons employs many women and children of the town and neighbourhood, but it is much less extensive than formerly; lace of a very fine description (some of it selling for £30 a yard) used also to be made; but the chief business of the place originates in its market and fairs, and in its being the resort of the neighbouring gentry and others at the races, &c., which makes it a thriving and increasing town. It was incorporated by charter of 3d of James I., which also granted the manor. Under the Municipal Reform Act there are four aldermen and twelve councillors, and the limits of the borough are restricted to the town, where 99 of every 100 of the pop. of the parish reside. The revenue of the corporation is derived from tolls of the market and fairs, lands, and quit-rents, and averages about £125 a year; they hold a court leet annually. A court of record was granted by the first charter, which has long been disused. Petty sessions for the Blandford div., are held in the town by the co. magistrates; and monthly courts of the bishop and archdeacons of the diocess. It is also a polling town for the county, and the central town of a union of 33 parishes, under the Poor Law Act; it has three guardians; its rates amount to £777. Archbishop Wake was a native of the town; and it gives the title of marquis to the Marlborough family.

BLANFORD, p. t., Hampden co., Mass., 110 m. W. by S. Boston, 370 W. Bounded N.E. by Westfield river, and drained by its branches, which afford water-power. It contains three churches, one Congregational, one Methodist, and one Episcopal; two stores, one fulling-mill, one woollen-factory, one grist-mill, four saw-mills, one paper-mill, two tanneries, 7 schools, 236 scholars. Pop. 1427.

BLANKENBURG, a town of the duchy of Brunswick, cap. distr., and formerly of the principality of Blankenburg, on a rivulet of the same name, 37 m. S.S.E. Brunswick. Pop. 3300. It is surrounded by walls, has some good buildings, including a gymnasium, a school of industry, &c. On a hill immediately adjoining the town is a large, heavy-looking palace of the duke of Brunswick: it had a good collection of pictures, but the best of them have been removed. On the summit of the Regenstein, also at a short distance from the town, are the remains of a large castle, constructed by Henry the Fowler, in 919, consisting of chambers cut out of the rock. (*Murray's Handbook, &c.*)

BLANTYRE, a parish of Scotland, co. Lanark, in which manufactures have made great progress. The Blantyre mills, in the village of Blantyre, on the Clyde, 3 m. W. Hamilton, and 8 m. S.E. Glasgow were erected in 1785 for the spinning of water twist. In 1791, another mill was built for mule twist: both are moved by water-power. The total number of workmen in 1835 was 458; and the aggregate of spindles, 30,000. In 1813, a cotton weaving factory was established, which employs nearly 500 hands, the moving power being partly water and partly steam. There are in the par. 128 hand-loom weavers. The dyeing of Adrianople or Turkey red on cotton yarn has been carried on here for forty-five years. The total number of hands employed in these various works, exclusive of the hand-loom weavers, is about 1000, of whom considerably more than a half are females. There is a school connected with the mills; average attendance in the day school, in 1835, 126; in the evening school, 56. There is also a library for the use of the workmen, a funeral society, and a society for religious purposes, all established by the workmen. (*New Statistical Account of Scotland*, No. vii. § *Blantyre*.)

BLAYE, a seaport and fortified town of France, dep. Gironde, cap. arrond., on the right bank of the Gironde, 34 m. N.N.W. Bordeaux; lat. 45° 7′ N., long. 0° 40′ W. Pop. 2666. It is divided into the high and low towns; the former, however, is merely the castle or citadel, built on a rock commanding the Gironde. The river is here about 2½ m. wide; and for its defence Fort Pâté has been constructed on an island in its channel, about 1000 yards from Blaye, and Fort Medoc on the opposite side of the river. All vessels inward bound are required to anchor in the port or road of Blaye, and deliver a manifest of their cargo, and many of the outward-bound ships call here to take on board provisions, and complete their cargoes. The town has also a considerable direct trade, exporting wine, brandy, corn, oil, soap, timber, apples, &c. Many of the pilots, so indispensable to ships navigating the Gironde, reside in Blaye. It has tribunals of original jurisdiction and of commerce, an agricultural society, a theatre, &c. In the centre of the town is a fine public fountain. Blaye is very ancient. In 1568 it was taken by the Protestants, and more recently by the Leaguers. The extensive marshes by which it was formerly surrounded having been drained by Henry IV., have become very fruitful of corn and other products. In 1832 the Duchess of Berri, when confined in the castle of Blaye, was brought to bed of a daughter. (*Hugo*, art. *Gironde*; *Purdy's Sailing Directions for the Bay of Biscay*; *Dict. Géographique, &c.*)

BLEDSOE, county, Tenn. Situated towards the S.E. part of the state, and contains 500 sq. m. Drained by Sequatchie river and its branches. It contained in 1840, 7798 neat cattle, 3809 sheep, 27,709 swine; and produced 22,932 bushels of wheat, 2357 of rye, 341,014 of Indian corn, 64,739 of oats, 7622 of potatoes, 7941 pounds of tobacco, and 8098 of cotton. It had fourteen stores, fifteen grist-mills, ten saw-mills, six tanneries, fourteen distilleries, one academy, 30 students, 8 schools, 215 scholars. Pop.: whites, 5010; slaves, 538; free coloured, 128: total, 5676. Capital, Pikeville.

BLEECKER, p. t., Fulton co., N. Y., 10 m. N. Johnstown, 55 m. N.W. Albany. Drained by West Stoney and Caroga creeks. It contains six saw-mills, 4 schools, 72 scholars. Pop. 346.

BLENDON, p. t., Franklin co., O., 11 m. N. Columbus, 404 W. Incorporated in 1815 by the name of Harrison. Drained by Alum and Big Walnut creeks, which afford water-power. It contains one academy, 50 students, 2 schools, 188 scholars. Pop. 972.

BLEICHERODE, a town of the Prussian states, prov. Saxony, reg. Erfurth, between the Bode and the Wipper, 10 m. S.W. Nordhausen. Pop. 2000. It has some oil-mills and fabrics of serges and other descriptions of woollen cloth.

BLENHEIM or BLINDHEIM, a small village of Bavaria, circ. Upper Danube, on the Danube, near Höchstadt. This village is famous in modern history as being the scene of the great battle fought Aug. 13, 1704, between the English and Imperialists, under the Duke of Marlborough and Prince Eugene, and the French and Bavarians, under Marshals Tallard and Marsin and the Elector of Bavaria. Each army consisted of nearly 80,000 men. The English and their allies gained a complete and decisive victory. Their enemies left above 10,000 men killed and wounded on the field; a vast number more were drowned in the Danube, and above 13,000 were made prisoners; among the latter were Marshal Tallard (whose son was killed) and many other officers of distinction. All the artillery, baggage, &c., of the French and Bavarians fell into the hands of the conquerors. The loss of the latter, though severe, was not greater than might have been expected, having amounted to about 5000 killed and 8000 wounded.

BLENHEIM PARK, an extra-parochial district of England, co. and liberty of Oxford, 60 m. W.N.W. London. Area 2700 acres, being the demesne attached to Blenheim House, an edifice erected in the reign of Anne, as a token of the national gratitude for the public services rendered by the first Duke of Marlborough: for which purpose £500,000 was voted by parliament, and the queen added the honour of Woodstock (an ancient property of the crown) to the grant. It was called Blenheim from the great battle noticed above. The usual entrance to this splendid domain is from the Woodstock side, under a triumphal archway of the Corinthian order erected by the first duchess. Fronting the palace is a fine sheet of water, partaking of the character both of a lake and river, and winding away through a deep vale; this is spanned by a magnificent bridge, and on an eminence beyond the bridge, in the midst

of a fine lawn, is a fluted Corinthian pillar, 120 ft. high, surmounted by a statue of the duke in a Roman dress; on one side the pedestal is an inscription (written by Lord Bolingbroke) reciting his public services; on the others, the acts of parliament declaratory of his services, and abstracts of the entail of his estates and honours. The mansion occupies three sides of a parallelogram, the principal front being N., and the E. and W. sides forming wings for the domestic offices, stables, &c.; a terrace with several flights of steps gives due effect to the elevations. The north, or principal front extends 348 ft. from wing to wing; it has five compartments, and is highly enriched, especially the central one, which has a Corinthian portico and fine pediment at the height of two floors, over which is an attic story. The south or garden front is of a plainer character; but its compartments correspond with the other, and a flight of steps leads to a portico, over the entablature of which is a colossal bust of Louis XIV., taken from the gateway of Tournay. The interior is magnificently finished, and contains a fine collection of sculptures, paintings, and tapestry. A well-known satirical couplet raised a prejudice against this noble pile, which prevented, for a lengthened period, a fair estimate being formed of its merits. The details have been severely criticised, and some of them may be open to censure. But whatever may be the defects of particular parts, they are lost in the *tout ensemble*. The general effect of the building is excellent; its parts seem to be admirably combined, and it has a most magnificent appearance; it is now, indeed, admitted, by general consent, to be a noble proof of the genius of its architect, Sir J. Vanburgh, as well as an "illustrious monument of Marlborough's glory, and of Britain's gratitude." (*Brewer's Oxfordsh.*; *Gent. Mag.*, vol. lxxx.; *Neale's Views of Seats*, vol. iii.)

BLENHEIM, p. t., Schoharie co., N. Y., 56 m. W.S.W. Albany, 362 W. Bounded E. by Schoharie creek, and watered by its branches. It contains four stores, two fulling-mills, one woollen-factory, two grist-mills, eighteen saw-mills, three tanneries, one academy, 25 students, nineteen schools, 728 scholars. Pop. 2725.

BLERE', a town of France, dep. Indre et Loire, cap. cant., on the Cher, 17 m. E.S.E. Tours. Pop. 2978. The castle of Chenonceaux, once the property and residence of the celebrated Diana of Poitiers, is situated in the immediate vicinity of Bleré. Diana, having been dispossessed of the castle by her rival, Catherine de Medici, the latter surrounded it with a superb park. After many vicissitudes, it was acquired, in 1733, by M. Dupin, a gentleman distinguished by his wealth and learning, but more by the wit and beauty of his wife. Under its new masters Chenonceaux became the resort of some of the most illustrious personages of the 18th century, including, among others, Voltaire, Montesquieu, Buffon, Fontenelle, Bolingbroke, &c. Rousseau wrote several pieces for the theatre of Chenonceaux, and it was here that the *Devin de Village* first appeared. Happily, Chenonceaux escaped the revolutionary phrensy; and continues to be one of the most interesting objects in this part of France. (*Hugo, France Pittoresque*, ii., 101.)

BLETCHINGLY, a par. and town of England, co. Surrey, hund. Tandridge, 16 m. S. of London. Pop., 1831, 1187; 1841, 1203; houses, 208; area, 5250 acres. The town is situated near the end of the chalk range that traverses the co., and commands extensive views. The church is a fine specimen of the earlier Gothic style: there is an endowed school for 20 boys, eleven almshouses, and several small charitable donations. There are two annual fairs, held June 22 and November 2; the latter is for horses, pigs, and lean cattle: its ancient weekly market has been long discontinued. The inhabitants are chiefly engaged in agriculture: the upper part of the parish (in which the town is situated) is a sandy and chalky soil, the lower part clay. Bletchingly returned two mem. to the H. of C. from the 23d of Edward I. till the passing of the Reform Act, by which it was disfranchised: the right of election was in the holders of burgage tenures, amounting to 130. A castle, built soon after the Conquest, formerly stood on the brow of a hill at the W. end of the town. There are some vestiges in this parish of the residence of Earl Godwin, who retreated hither when his Kentish estates were inundated: the Croydon railway passes through it, on the N. side.

BLISSFIELD, p. t., Lewanee co., Mich., 71 m. S.W. Detroit, 489 W. Watered by Raisin river, and contains four schools, 141 scholars. Pop. 778. The village is on the N. side of Raisin river, and contains four stores, one flouring-mill, two saw-mills, and about sixty-five dwellings. The Erie and Kalamazoo rail-road passes through the place.

BLOCK ISLAND, lies in the Atlantic, S. of the state of R. I., and constitutes the township of New Shoreham, Newport co., R. I. It lies 15 m. S.S.W. of Point Judith, and 12 m. S. of the nearest point of the continent. It is 8 m. long, and from 2 to 4 broad. A chain of ponds extends from the N. end to the centre, which, with some others, cover one seventh part of the island. The surface is elevated and uneven, being diversified with abrupt hills and narrow dales. The soil is sandy and gravelly loam, and produces Indian corn, barley, and potatoes, but is no longer celebrated for its fine cattle, sheep, and dairies. The shore, being unprotected by rocks, is continually encroached on by the ocean. There are no forests, and the only fuel is peat. It has no harbour; but many of its inhabitants are engaged in the cod and mackerel fisheries. See New Shoreham.

BLOCKLEY, t., Philadelphia co., Pa., bounded N.E. and E. by Schuylkill river. Watered by Cobb's and Mill creeks. It has elegant country seats on Schuylkill river, and contains the county almshouse, two foreign commission stores, sixteen retail stores, three fulling-mills, four woollen-factories, three cotton-factories with 728 spindles; three dying and printing works, one ropewalk, one flouring-mill, two grist-mills, three saw-mills, one academy, 14 students, six schools, 370 scholars. Pop. 3318. It includes the borough of West Philadelphia.

BLOIS, a town of France, cap. dep. Loir et Cher, on the acclivity of a hill on the right bank of the Loire, 35 m. S.S.W. Orleans; lat. 47° 35′ 20″ N., long. 1° 20′ 18″ E. Pop. (*ex* cant.) 11,498. This is neither a large, a well-built, nor a handsome town; on the contrary, many of its houses are mean, and its streets narrow, crooked, and sometimes not accessible to carriages: but it is remarkable from the beauty of its situation, its antiquity, its monuments, and the historical events of which it has been the theatre. At one extremity of the town is the castle, and at the other the cathedral. The former is an immense pile, built at different epochs and in different styles of architecture. Louis XII. was born in this castle; and in it also Margaret of Anjou was married to the Duc d'Alençon, and Margaret of Valois to Henry IV. But it derives its principal interest from events of a very different character. Here, in December, 1588, the Duc de Guise and his brother the Cardinal, were basely murdered by the order, and almost in the presence, of Henry III. This, also, was the scene of the imprisonment of Mary and of the death of Catherine de Medici. The last rays of glory fell on this castle in 1814, when Marie Louise held her court in it after the capitulation of Paris. It is now occupied as a barrack. The cathedral is a handsome edifice; but the finest building in the town is the hotel of the prefecture, formerly the Episcopal palace. The view from its gardens is extensive and fine. In the church of St. Vincent are fine monuments to Gaston, Duc d'Orleans, and a daughter of that prince. A suburb on the opposite side of the river is connected with the town by a handsome bridge of eleven arches, begun in 1717. The most ancient monument in the town is a superb aqueduct, ascribed to the Romans, cut in the solid rock. It is in excellent preservation; and conveys the waters of several springs, a distance of about half a mile, to a reservoir close to the town, whence they are distributed among public fountains dispersed in different parts of the city. Blois is the seat of a bishopric, a court of original jurisdiction, a departmental college, a diocesan seminary, and a secondary ecclesiastical school; a botanical garden, founded by Henry IV.; a public library, with 19,000 volumes; a royal society of agriculture; a departmental nursery, &c. It has, also, a port well frequented by the craft navigating the Loire, a theatre, an abattoire, and a *dépôt d'étalons*. It produces serges, hosiery, and gloves, cutlery and hardware, leather, &c., and has a considerable trade in wines, spirits, vinegar, fire-wood, and staves, liquorice, and other articles. Bernier, the celebrated eastern traveller, was a native of Blois. (*Hugo*, art. *Loir et Cher*; *Inglis's Switzerland*, &c., p. 357, &c.)

BLOOM, p. t., Seneca co., O., 86 m. N. Columbus, 420 W. Watered by Honey creek, a branch of Sandusky river. It contains one store, two grist-mills, six saw-mills, eight schools, 127 scholars. Pop. 1168.

Bloom, t., Columbia county, Pa., 10 m., N.E. Danville, bounded S. by Susquehanna river. It contains ten stores, one fulling-mill, one woollen-factory, one flouring-mill, two grist-mills, one pottery, two tanneries, one distillery, two printing-offices, two weekly newspapers, one academy, 20 students, six schools, 260 scholars. Pop. 1174.

Bloom, t., Morgan co., O., watered by Muskingum river. It contains two stores, three saw-mills, seven schools, 250 scholars. Pop. 1338. It contains the village of M'Connelsville, the capital of the co., which see.

Bloom, t., Fairfield co., O. Pop. 2301.

Bloom, t., Scioto co., O. It has five schools, 96 scholars. Pop. 913.

BLOOMFIELD, p. t., Somerset co., Me., 35 m. N. Augusta, 630 W. Bounded N. and E. by Kennebec river. Incorporated in 1814, and contains one store, two grist-mills, three saw-mills, one academy, 50 students, eight schools, 442 scholars. Pop. 1093.

Bloomfield, p. t., Essex co., Vt., 90 m. N.E. Montpelier,

287 W. Bounded E. by Connecticut river. Watered by Nalhegan river and its branches. Chartered in 1763, by the name of Minehead, first settled in 1800. It contains one saw-mill, two schools, 62 scholars. Pop. 179.

BLOOMFIELD, p. t., Hartford co., Ct., 7 m. N.W. Hartford, 343 W. Incorporated in 1835; formerly the parish of Wintonbury, which name was formed by a combination from the names of Windsor, Farmington, and Simsbury, from which it was taken. Drained by Wood river, a branch of Mill river. It contains three churches, one Congregational, one Baptist, and one Methodist, two stores, one woollen-factory, one grist-mill, one saw-mill, five schools, 123 scholars. Pop. 988.

BLOOMFIELD, p. t., Essex co., N. J., 6 m. N. Newark, 54 m. N.E. Trenton, 234 W. It contains one store, one fulling-mill, one saw-mill, three paper-mills, one dyeing and printing works, which employ 20 persons; one distillery, two academies, 60 students, eight schools, 255 scholars. Pop. 2528. It contains the villages of West Bloomfield and Belleville, which see.

BLOOMFIELD, p. b., Juniata town., capital of Perry co., Pa., 34 m. W. by N. Harrisburg, 126 W. Situated on the N. side of Little Juniata creek, and contains a court-house and county offices of brick, a jail of stone, two churches, one Presbyterian and one Methodist; five stores, one printing-office, one weekly newspaper, one academy, 20 students, one school, 116 scholars, sixty dwellings, and 412 inhabitants. Incorporated in 1831.

BLOOMFIELD, t., Lagrange t., Ia. It has three saw-mills, two schools, 37 scholars. Pop. 307.

BLOOMFIELD, p. v., capital of Greene co., Ia., 74 m. S.W. Indianopolis, 641 W. Situated on the E. side of the west fork of White river. It contains a court-house, a seminary, two churches, one Methodist and one Presbyterian; six stores, and about 700 inhabitants.

BLOOMFIELD, p. v., capital of Stoddard co., Mo., 233 m. S.E. Jefferson City, 957 W.

BLOOMFIELD, t., Oakland co., Mich. Drained by the N. branch of Rouge river. It contains three stores, one fulling-mill, three flouring-mills, three grist-mills, one saw-mill, two distilleries, eight schools, 500 scholars. Pop. 1506.

BLOOMFIELD, t., Richland co., O., 15 m. S.E. Mansfield, 60 m. N.E. Columbus. Pop. 1294.

BLOOMFIELD, t., Jackson co., O., drained by a branch of Raccoon creek. It contains two saw-mills, one school, 15 scholars. Pop. 721.

BLOOMING GROVE, p. t., Orange co., N. Y., 12 m. S.S.W. Newburg, 94 m. S. by W. Albany, 285 W. Drained by Murderer's creek. The village contains one Methodist church, two stores, one grist-mill, one saw-mill, twenty-five dwellings, and about 150 inhabitants. The township has ten schools, 484 scholars. Pop. 2396.

BLOOMINGTON, p. v., capital of Monroe co., Ia., 49 m. S.W. Indianopolis, 616 W. It contains a court-house, jail, five churches, one Presbyterian, one Associate reformed, one Newschool Covenanters, one Methodist, and one Christian; a county female academy, 330 dwellings, and 1550 inhabitants. The Indiana University, located here, has convenient buildings, and was founded in 1827. It has a president and four professors or other instructers, 59 alumni, 59 students, and 1759 vols. in its libraries. The commencement is on the last Wednesday in September.

BLOOMINGTON, p. v., capital of Muscatine co., Iowa, 320 m. above St. Louis, 910 W. It is situated on the W. bank of Mississippi river, and contains a brick court-house which cost $13,000, a jail, two churches, one Methodist and one Presbyterian; five forwarding and commission houses, ten stores, and about 600 inhabitants.

BLOOMINGTON, p. v., capital of Macon co., Mo., 166 m. N. Jefferson City, 989 W. Situated 6 m. E. of Chariton river.

BLOSSBURG, p. v., Tioga co., Pa., 133 m. N.N.W. Harrisburg, 243 W. Bituminous coal is mined in the vicinity, and a rail-road connects it to Corning, N. Y., whence there is lake and canal navigation to Albany.

BLOUNT, county, Ala. Situated towards the N. part of the state, and contains 1650 square m. Drained by head branches of Black Warrior river. It contained, in 1840, 8045 neat cattle, 2040 sheep, 18,316 swine; and produced 15,014 bushels wheat, 249,681 of Indian corn, 20,213 of oats, 6824 of potatoes, 5633 pounds of tobacco, 169,949 of cotton. It had eleven stores, eight grist-mills, six saw-mills, five tanneries, eight distilleries, eight schools, 154 scholars. Pop.: whites, 5225; slaves, 344; free coloured, 1: total, 5570. Capital, Blountsville.

BLOUNT, county, Tenn. Situated in the E. part of the state, and contains 900 sq. m. Bounded N.W. by Tennessee river, and S.W. by N. C. It contained, in 1840, 11,053 neat cattle, 11,068 sheep, 32,439 swine; and produced 95,229 bushels of wheat, 540,397 of Indian corn, 131,465 of oats, 12,899, of potatoes, 10,059 pounds of tobacco, 27,239 of cotton. It had nine stores, two forges, one cotton-factory, with 204 spindles: fourteen flouring-mills, fourteen grist mills, eighteen saw-mills, thirteen tanneries, thirteen distilleries, one college, 40 students, one academy, 23 students, twelve schools, 262 scholars. Pop.: whites, 10,664; slaves, 945; free coloured, 136: total, 11,745.

BLOUNTSVILLE, p. v., capital of Blount co., Ala., 104 m. N.E. Tuscaloosa, 734 W. Situated on the W. side of Locust Fork of Black Warrior river. It contains a Methodist church, an academy, two stores, twenty-five dwellings, and about 400 inhabitants.

BLOUNTSVILLE, p. v., capital of Sullivan co., Tenn., 287 m. E. by N. Nashville, 394 W.

BLUE HILL, p. t., Hancock co., Me., 75 m. E. Augusta, 12 m. E. by N. Castine, 671 W. Bounded S.E. by Blue Hill bay. It contains ten stores, one fulling-mill, three grist mills, five saw-mills, three tanneries, one academy, 73 students, seventeen schools, 731 scholars. Pop. 1891.

BLUE RIDGE, or SOUTH MOUNTAINS, the eastern branch of the Alleghany mountains. It separates from the main range in North Carolina, crosses Va. and Pa. and terminates in the Highlands on the Hudson river. The peaks of Otter, in Bedford co., Va., have a summit elevated about 4000 feet above its base, 30 m. W. by N. Lynchburg.

BLUE RIVER, t., Hancock county, Ia. It contains one store, one grist-mill, one saw-mill, one school, 20 scholars. Pop. 731.

BLUE RIVER, t., Harrison co., Ia. It contains one flouring-mill, one grist-mill, one saw-mill. Pop. 1429.

BLUE ROCK, p. t., Muskingum co., O., 65 m. E. Columbus, 346 W. Watered by Muskingum river. It contains one steam saw-mill, ten or twelve salt-factories, seven schools, 220 scholars. Pop. 1083.

BLUE SULPHUR SPRINGS, p. o., Green Brier co., Va., 297 m. N. by W. Richmond, 264 W. A celebrated watering place, 22 m. W. of the White Sulphur springs, which are still more frequented. It contains accommodations for 400 visiters, one store, one Presbyterian church, and but three families of permanent residents.

BLYTHE (S.), or BLYTH NOOK, a sea-port town of England, co. Northumberland, on the Blyth, 12 m. N.E. by N. Newcastle-on-Tyne, and 8 m. S.E. by E. Morpeth. Pop., in 1801, 1283; in 1831, 1944. It is situate on the S. side of the river, where it discharges itself into the German ocean, and consisted till lately of a few narrow ill-laid-out streets; but modern improvements are giving it a new aspect. Its church is a chapel of ease to the parish church of Earsdon; Methodists, Presbyterians, and other dissenters have places of worship. The coal trade is carried on to a considerable extent, and iron from the Bedlington works is largely exported. The harbour is excellent for ships of small burden, affording free entrance and safe anchorage in all seasons; and the coast for some miles is peculiarly adapted for bathing. There is here a dry dock, a custom-house dependant on that of Newcastle, a light-house, and a beacon light.

BOARDMAN, p. t., Trumbull co., O., 170 m. N.E. Columbus, 287 W. It contains six schools, 320 scholars. Pop. 929.

BOAVISTA, the most easterly of the Cape de Verde islands, which see.

BOBBIO, a town of the Sardinian states, div. Genoa, cap. prov. same name, on the Trebbia, 34 m. N.E. Genoa. Pop. 4000. It is surrounded by walls, and is the seat of a bishopric, and of a tribunal of original jurisdiction. It was ceded to Sardinia, in 1743, by Austria.

BOBROV, a town of Russia in Europe, gov. Voronege, on the Bitioug, 52 m. S.E. Voronege; lat. 50° 5′ N., long. 40° 10′ E. Pop. 3000. It has two churches, and includes a large space laid out in gardens. It derives its name from the number of beavers (*bobry*) formerly found in its vicinity.

BOBRUISK, or BOBRISK, a town of Russia in Europe, gov. Minsk, on the Bobruia, where it falls into the Berezina, cap. district, 90 m. S.E. Minsk. It was fortified in 1810 and 1812, and was ineffectually attacked by the French during the last of those years. It has four churches and a gymnasium.

BOCHNIA, a town of Galicia, cap. circ., near the Raba, 25 m. E.S.E. Cracow. Pop. 4800. It has a gymnasium, and a board for the administration of mines and salt-works. For an account of the latter, which are very extensive, see WIELICZKA.

BOCHOLD, or BOCKHOLT, a town of the Prussian States, prov. Westphalia, reg. Munster, on the Ahé, 15 m. E.N.E. Cleves. Pop. 4000. There are rich iron mines in its vicinity; and it has some trade in corn, spirits, &c., with manufactures of cotton and silk.

BOCHUM, a town of the Prussian States, prov. Westphalia, reg. Arnsberg, cap. circ., 25 m. N.E. Dusseldorf. Pop. 4200. It has three churches and a college; and manufactures coffee-mills and jewellery.

BOCKING, a par. and village of England, county Essex, hund. Hinckford: area of par., 3800 acres. Pop. 3192. The village, almost contiguous to Braintree, and 36 m. E. by N.

London, consists principally of a single street, extending along the high road from London to the E. counties. There are several corn and fulling-mills on the river Brain, and the increase (342) in the pop. during the ten years previous to 1831, is ascribed to the increased manufacture of silk and crape. It has a free school, endowed by Dr. Gauden, bishop of Worcester, for the education of 30 boys; an almshouse, founded in the reign of Henry VI.; and some other charities. (*See* BRAINTREE.)

BODMIN, a bor. and town of England, co. Cornwall, hund. Trigg, 25 m. W. by N. Plymouth. It is nearly in the centre of the county, is built on a gradual acclivity, between two hills, and consists chiefly of one main street nearly a mile in length; the houses are an intermixture of low irregular ancient structures, and neatly-built modern ones. The church (rebuilt about A.D. 1472) is a spacious structure in the late Gothic style, situated in the vale at the E. end, whence the town gradually ascends. The Calvinists, Wesleyans, and Bfianites, have each chapels. There is an endowed grammar school, founded by Elizabeth, and a national girls' school. The town-hall was originally the refectory of St. Austin's Priory; each of its ends are fitted as courts of justice, and the intermediate area used as a corn-market; over the whole are grand-jury and public-assembly rooms. N. of the town is the county jail, including a sheriff's ward and a bridewell: at the W. end is the county lunatic asylum, built in 1820. It is well supplied with water, and partially paved and flagged, but not lighted. Pop., in 1821, 2902; in 1831, 3375: houses at the latter period, 596. These numbers refer, however, to the old boundaries of the borough, which included but a minor portion of the parish; whereas its present parl. boundaries comprise the entire parish, and also the adjoining parishes of Helland, Lanivet, and Lanhydrock, comprising in all an area of 16,300 acres, and a pop., in 1831, of 5228. It has returned two mem. to the H. of C. since the 23d of Edward I.; the right of election having been vested, previously to the Reform Act, in the corporation. In 1838 it had 332 registered electors. The market is held on Saturday; and it has several fairs. The chief manufacture is shoes, of which a considerable number are made, and sold at the different markets and fairs of the county. A rail-road, commencing at Wade bridge (at the head of Padstow harbour), about 6 m. in a N.W. direction, terminates at the back of the town, by which coals and other articles are brought to it, as well as lime and sea sand, to the agricultural district through which it passes. It is governed by a mayor, three aldermen, and twelve councillors. It is a stannary town, and had, at an early period, the privilege of stamping tin. The summer assizes, three of the general quarter sessions, and the election courts for the E. division of Cornwall, are held here.

BŒOTIA, a famous region of ancient, and now of indep. Greece, prov. E. Hellas, and forming the N. part of the monarchy of Attica and Bœotia, between lat. 38° 9′ and 38° 44′ N., long. 22° 53′ and 23° 49′ E.; shape triangular; having N.W. Phocis; N. the Opuntian Locris; N.E. the channels of Talanda and Egripo; and S. Attica and the Corinthian gulf; length E. to W. about 42 m.; greatest breadth 27 m.

Its mountains, the most celebrated of which is Zagora (an. *Helicon*), mostly surround or divide it into two principal basins—those of the Cephisus and Thebes. Its chief rivers are the Gayrios (*Cephisus*) and the Asopo (*Asopus*). It contains three lakes; those of Topolias (*Copais*), Sarzina (*Hylica*), and Paralimni; the first the largest in Greece. It is a high but well-watered region; and as many of the streams find their way, and the lakes a vent to the sea, only by means of subterraneous courses, marshes abound; and the atmosphere is damp, foggy, oppressive, and unhealthy in some places, as at Livadia, where intermittent fevers are prevalent. The fertility of Bœotia is, however, such, that it has always an abundant crop, though elsewhere famine should prevail. The land is well cultivated, especially with wheat, rice, madder, cotton, maize, hemp, and tobacco. Helicon is clothed in its lower parts with evergreens; above these there is a forest of pines, and its top is often capped with snow; kermes oak grows abundantly, and 6000 okes (256,000 lbs.) of gall-nuts are collected yearly. The lake Topolias still produces the reeds anciently so celebrated for rustic flutes, and Bœotian pipers are still in high repute. Most of the cottages in the neighbourhood are built of these reeds. Flocks of bustards inhabit the banks of Topolias; and its large eels, dried and salted, form a considerable article of trade. Many spots in Bœotia present striking scenery. It forms two eparchies, those of Thebes (*Thiva*) and Livadia, which are its two principal towns.

BOGENDORF, a village of Prussia, prov. Silesia, reg. Liegnitz 18 m. W.S.W. Sagan. Pop. 1400. It has in its vicinity mines of the precious metals, and of copper and lead.

BOGLIPOOR. *See* BHAGULPORE.

BOGNOR, a marit. town and chapelry of England, co. Sussex, rape Chichester, hund. Aldwick, par. S. Bersted, 56 m. S.W. by S. London. Pop. (of the whole par.), in 1821, 1851; 1831, 2190. It is situated on the coast between Selsey Bill and Worthing, amid rocks that extend in a curving direction 2 or 3 m. into the sea, and make it inaccessible except to the smaller class of coasting vessels: there is a good beach and every accommodation for bathing. Previously to 1780 it was a small fishing village, and this is still the occupation of its resident population, who send their produce to the London market. In the above year Sir R. Hotham commenced building a villa and some good lodging-houses, since which this watering-place has continued to enlarge, and forms a favourite resort for those who seek retirement, rather than gaiety, in occasional change of scene. It is sheltered on the N. by the South Down hills, a range extending from Portsdown to Dover. The Portsmouth and Arundel canal passes within 3 m. There are Episcopal, Independent, and Wesleyan chapels; a school, in which 20 girls are clothed and educated; another (founded by the late Princess Charlotte) for 50 girls; a good hotel and lodging-houses, &c., for the accommodation of visiters. The regulation of the town is placed under commissioners (by an act of parliament), who meet monthly, and levy a duty of 2*s.* a chaldron on coals, to defray the expenses of repairing roads, &c. Weekly markets are held, in a spacious modern market-place, on Thursday and Saturday, and an annual fair on the 5th and 6th of July.

BOGODOUKHOF, a town of Russia in Europe, gov. Kharkof, cap. distr., on the Merlo, 60 m. N.E. Poltava; lat. 50° 2′ N., long. 35° 50′ E. Pop. 6800. It is surrounded by a rampart and a ditch. The inhabitants are principally employed in tanning and dressing leather, and making it up into boots and shoes; they also carry on a considerable trade in cattle, hides, &c.

BOGORODITSK, a town of Russia in Europe, gov. Tula, cap. distr., at the confluence of the Lesnoi-Oupert and the Viarkova, 40 m. S.S.E. Tula. Pop. 5000. It has a royal castle and four churches. The country round is productive of corn, hemp, flax, and honey, which form the principal objects of the trade of the town.

BOGOTA (formerly *Santa Fé de Bogota*), a city of Colombia, of which it is the cap. and the seat of the government, on an elevated plateau at the foot of mount Chingasa, 8615 feet above the level of the sea; 225 m. E. the Pacific ocean, 50 m. E. the river Magdalena, 65 m. S.E. Houda, and 134 m. N.E. Neyva; lat. 4° 37′ N., long. 74° 10′ W. Pop. from 30,000 to 40,000. Owing to its elevation, the city enjoys a fine and equable temperature; the climate, however, is exceedingly humid, though not unhealthy. The first appearance of the town from the N.W. is very imposing: being built on rising ground, it forms a sort of amphitheatre, and the white towers of the cathedral and the monasteries of Montserrat and Guadalupe are seen seated on lofty peaks behind it. Streets generally narrow, but regular, intersecting each other at right angles, and some having a stream of water constantly flowing down the middle: all of them are paved, and the principal ones have footpaths. The chief street, or *Calle Real*, has at its extremity the *plaça mayor*, or principal square, where the market is held; it is formed by the cathedral, the palace of the president, custom-house, &c. Bogota being subject to frequent earthquakes, the houses are low, with thick walls; elegance being commonly sacrificed to solidity. Nearly half the area of the city is occupied by religious structures; there are twenty-six churches besides the cathedral, nine monasteries, and three nunneries; and four sixths of the houses in Bogota are said to belong to them. The cathedral, built in 1814, and distinguished by the simplicity of its interior, was destroyed by an earthquake in 1827. Most of the other churches are more remarkable for gorgeousness and gilding than for taste; gems are lavished in profusion upon the statues. The palace of the former viceroys and New Granada, now occupied by the president of the republic, can boast no architectural beauty. The "palace of the deputies" is a large house at the corner of a street, the under story of which is, or at least was a few years ago, "let out in shops for the sale of brandy!" The "palace of the senate" consists of one of the wings of the convent of the Dominicans. The mint is a large plain building. There are three sets of barracks, two *quartels*, and an artillery depôt, where all military equipments are made, and articles of European manufacture repaired; some of the convents have hospitals attached, but they are wretchedly conducted, and very dirty. It has a university and three colleges, the principal of which belongs to the Jesuits; a school of chemistry and mineralogy; a Lancasterian school on the most liberal principles; a national academy; a public library, &c. There is a theatre, a well-constructed building, and well attended; but the performances are bad. The private houses in Bogota are constructed of sun-dried brick, whitewashed, and tiled: latterly their style has been considerably improved. Beams are now concealed by a ceiling: glass has been introduced into,

and barricades removed from, the windows; the street doors are better painted, and light balconies have begun to supersede enormous and heavy galleries. In general, the houses are built with a court in the centre, round which runs a gallery or a covered terrace. The furniture is simple; but European carpets and other manufactures are now in general use. There are no chimneys, stoves only being used. In the principal streets, the ground floors are occupied by shops; these are, however, dirty and dark, and the only admission of daylight is by the door. Almost every inhabitant, not in the employment of government, in the church, or in the army, is a shopkeeper. "Seated upon his counter, smoking incessantly, and giving laconic answers to his customers, the Colombian merchant in many respects resembles those of Smyrna and Aleppo." Bogota cannot boast of ten merchants who can command 100,000 piastres, nor of five individuals living upon a revenue of that amount. The most common incomes are from 5000 to 10,000 piastres. The city is very badly lighted; there are no common sewers; and the filth being cast into the streams that run through the streets, renders them infectious. Owing to the scantiness of the population, and the want of carriages, some of the streets are overgrown with grass. The market is well and cheaply supplied with provisions; but European manufactures are said to be extravagantly dear. There are no carts or vehicles of any description, traffic being carried on exclusively by mules. The environs of Bogota are agreeable, but little frequented; the favourite promenades being the *alameda*, or public walk, at one of the entrances to the town; and the two principal streets, along which gentlemen may often be seen riding at full gallop on wretched horses, bedizened with gold, and glittering in military uniforms, "some with round hats ornamented with plumes of feathers, others with cocked ones, and a still greater number wearing *shakos* and helmets." The costume of the females is still more peculiar. Rich and poor dress alike out of doors: the mantilla is worn; a piece of blue cloth envelopes the head, and covers all the features excepting the eyes, reaching to the waist; and the whole is crowned by a broadbrimmed beaver hat. The women of Bogota are generally acknowledged to be handsome; their complexions are fair and clear; their physiognomy is Spanish. They are, however, accused of being great *intriguantes*, and very severe strictures have been passed upon them by travellers. Visiting, evening parties, balls, masquerades, and religious processions, are their chief amusements; as bull-fights, cock-fights, the theatre, and gambling, are those of the men.

Bogota was founded by Gonzalo Ximenes de Quesada, who built twelve huts here in 1538; in 1548 it was created a city, and made the seat of a royal *audencia;* and in 1561 advanced to the honours of a metropolitan see. It was the capital of New Granada, while a colony of Spain; a distinction which, since the war of liberation, it has changed for the greater one it at present enjoys, as the head city of a free state. (*Mod. Trav.*, xxvii., 311–327; *Balbi*, 3d edit., &c.)

BOGWANGOLA, an inl. town of Hindostan, prov. Bengal, 8 m. N.E. Moorshedabad; lat. 24° 21′ N., long. 88° 29′ E. It is built entirely of bamboo, mats, and thatch; but is a place of considerable trade, and from hence the cap. of the district is chiefly supplied with grain.

BOHAIN, a town of France, dep. Aisne, cap. canton, 16 m. N.N.E. St. Quentin. Pop. 3393. It has a fabric of German clocks *à carillon*, and produces shawls, gauzes, &c.

BOHEMIA (Germ. *Böhmen*, Boh. *Czech*), (Kingdom of), an inland country, occupying the centre of Europe, and forming an important portion of the Austrian empire, between lat. 48° 34′ and 51° 3′ N., and long. 12° 5′ and 16° 46′ E., having N.E. Prussian Silesia, N. and N.W. Saxony, S.W. Bavaria, and S. and S.E. the archduchy of Austria and Moravia. The area, pop., &c., according to the *Austrian National Encyclopædia*, are as follows:

Districts or Circles	Extent in sq. miles (Eng.).	Pop. 1831.	Chief Towns and Pop.	
Buntzlau	1,656	387,898	Jung-Buntzlau	6,000
			Reichenberg	11,600
Leitmeritz	1,468	341,725	Leitmeritz	4,290
Konigingratz	1,272	319,943	Konigingratz	7,460
Chrudim	1,270	294,528	Chrudim	5,630
Prachin	1,221	266,689	Pisek	5,460
Bidschow	946	246,640	Gitschin	3,780
Czaslau	1,270	234,265	Czaslau	3,330
			Kuttenberg	8,470
Elbogen	1,187	238,713	Elbogen	2,010
			Eger	9,470
Budweis	1,677	203,875	Budweis	7,450
Pilsen	1,452	198,430	Pilsen	8,800
Tabor	1,217	197,357	Tabor	4,050
Kaurzim	1,109	185,296	Kaurzim	1,860
Klattau	978	171,701	Klattau	6,780
Beraun	1,119	166,801	Beraun	2,170
Rakonitz	844	157,326	Schlan	3,560
Saaz	909	129,970	Saaz	4,300
	20,285	3,725,079		
City of Prague		108,670		
Totals	20,286	3,833,749		

Its shape is an irregular rhomboid: greatest length, E. and W., 200 m.; greatest length, N. to S., 170 m. But, in 1838, the pop. had increased to 4,128,661 (*ante*, p. 234); and in 1837 the pop. of Prague, *ex* the garrison, the inhabitants of the citadel, and the strangers in the town, amounted to 107,368. (*See* Prague.)

Mountains, &c.—Bohemia is a basin, surrounded on every side by mountain ranges, which in some parts rise to upwards of 5000 ft. in height. From the Fichtelgeburg (pine-mountains), near the W. extremity, the chain called the Erzgebirge (ore mountains) runs N.E., forming the boundary between Bohemia and Saxony, as far as the exit of the Elbe from the first-mentioned country. The highest point of this range is the Schwarzwald, about 4000 feet above the sea; parallel to it is the Mittelgebirge (midland mountains), which runs as far as the left bank of the Elbe. From the right bank of the Elbe, E. and S.E., forming in part the frontier against Prussia, run a series of chains, entitled successively the Lanitzer, Iser, Riesen (giant), and Sudetengebirge, the loftiest point of which, the *Snow-cap*, is from 5200 to 5400 feet in height. The S.W. border is formed by the Böhmerwald, or Bohemian forest mountains, included in the Hercynian forest of the ancients, and a branch from the Fichtelgebirge: they are wild and precipitous, and contrast remarkably with the Moravian chain in the S.E., which is of gentle ascent, varying from 2000 to 3000 ft. in height, and separating the affluents of the Elbe from those of the Danube. Within these boundaries, Bohemia presents an undulating surface, with an inclination, for the most part, towards the N.: its hills are sometimes steep, and even precipitous; but rising generally no higher than about 500 or 600 feet above the level of the sea.

Rivers.—Bohemia forms, in fact, an elevated plateau, sloping towards the N., and drained by the Elbe, which traverses two thirds of its breath, and receives the numerous brooks and streams that descend from its lofty barriers. The sources of this great river are in the Riesengebirge mountains, whence it descends, in a S. direction, to Pardubitz, and thence W. as far as Melnik, where, after receiving the Moldau, it becomes navigable. In its course to the frontier of Saxony, it is joined, besides, by the Adler, at Königingrätz, the Iser, and the Eger; the Wattawa, Sasawa, Beraunka, and Luschnitz, fall into the Moldau before its junction with the Elbe. The Moldau is navigable from Budweis, and an iron railway between that town and Linz, on the Danube, completed in 1824, forms a connecting link of a grand water communication between the German ocean and the Black sea. This spirited undertaking was, until lately, the longest rail-road in Europe; but it is only adapted to carriages drawn by horses, and having to pass over considerable heights, which occasion much difficulty and expense in transporting goods, the advantages it afforded were insufficient to divert the course of trade into this new channel, and it has proved an unprofitable speculation.

Minerals.—The mineral riches of Bohemia are of considerable importance and value. From the 12th to the 17th centuries, considerable quantities of gold and silver were obtained; the first is now, however, no longer met with, except occasionally in small quantities, in the beds of some of the streams; but above 20,000 marks of silver are still obtained annually from the lead mines. The latter produce about 60,000 cwts. a year of lead and litharge. Iron is found in most parts of the kingdom; but the product is but trifling, not exceeding from 15,000 to 20,000 tons a year. There are also tin mines (the only ones in the Austrian dominions), with mines of copper, zinc, cinnabar, arsenic, cobalt, &c. Coal is pretty abundant, particularly in the N. parts of the kingdom; and the produce, which has increased very rapidly of late years, is now probably little under 90,000 or 100,000 tons a year. There are a great variety of mineral springs; those of Töplitz, Carlsbad, Sedlitz, &c., having a European reputation. About 800,000 bottles of water from these springs are said to be annually exported. All the salt used in Bohemia is imported. The working of the mines is superintended by two mining commissions, at Joachimsthal and Przibram. Under these are twenty-three inferior mining courts and branches, the miners having their own codes of law and especial courts of justice; the whole is controlled by a department of the ministry of finance at Vienna.

Climate very healthy; but, from the elevation of the country, it is, on the whole, rather cold. In the mountainous regions, the snow, which often lies 12 ft. deep, does not disappear until April; the mildest climate is that of the valley of the Elbe. At Prague the mean temperature of the year is about 47° Fahr. The prevalent winds are westerly.

Soil, Agriculture, &c.—The soil of Bohemia consists principally of a clayey loam, but in parts sandy loams and sand predominate. In some of the mountainous circles there is a good deal of waste land; but, speaking generally, the valleys are very fertile. The finest land is in the circle of

flax. Of the total area of the kingdom, amounting to 20,285 Eng. sq. m., or 12,982,000 Eng. acres, it is estimated that 11,050,673 acres are under culture, or otherwise productive, being distributed as follows: Arable lands, 5,532,509 acres; common pasture lands, 869,662 acres; woods, 3,393,215 acres; vineyards, 6357 acres; meadows and gardens, 338,930 acres; the rest being barren mountains, water, roads, and other uncultivable lands. Here, as in all the rest of Germany, rye forms the principal crop, and next to it is oats, and then barley and wheat. The produce of each description of grain has been estimated at: Rye, 2,129,508 qrs.; oats, 1,739,753 qrs.: barley, 877,508 qrs.; wheat, 394,155 qrs. (*Becker's Handel's Lexicon*, and *ante*, p. 239); but we have no doubt that this estimate is below the mark; and, in fact, the estimate in the National Encyclopædia makes the product of rye 15,000,000 metzen, or about 3,250,000 qrs., and so with the other crops.

Potatoes are now very extensively cultivated, particularly in the mountainous districts, where they form the greater part of the food of the people. Flax and hemp are principal objects of attention, and supply the material for the staple industry of the country. Hops, which are excellent, are raised in considerable quantities, about 12,000 cwt. being annually exported to Bavaria only. The culture of beet-root, with a view to the manufacture of sugar, has of late years increased very rapidly; so much so that, in 1838, no fewer than eighty-seven fabrics of beet-root sugar were in operation. The export of fruit from the circle of Leitmeritz only has in some years amounted to 60,000 cwt. Some wine is made, but the quality is very inferior; and beer is the national beverage. The stock of horses, in 1831, was estimated at about 144,000; of horned cattle, at 974,000; and of sheep, at 1,350,000. Until recently, but little attention has been paid to stock husbandry; latterly, however, considerable efforts have been made to improve the breeds, and these have been very successful, particularly in the case of the sheep. The supply of cattle is inadequate for the consumption; and there is annually a large importation from Poland and Hungary.

On the whole, agriculture in Bohemia, though a good deal improved, is still in a very backward state. This, no doubt, is ascribable to a variety of causes; but principally, perhaps, to the depressed state of the peasantry, and the want of leases. Most of the land is parcelled out into immense estates; and these are cultivated, either by peasants employed by, and working on account of the landlord, or by petty occupiers, paying a labour rent for their land. Mr. Gleig has given some curious details in reference to this subject in his Travels in Germany, Bohemia, &c. "Of large towns," says he, "there seems to be in Bohemia very few; but every vale and strath is crowded with human dwellings; village succeeding village, and hamlet treading on hamlet, with the most remarkable fecundity. On the other hand, you may strain your eyes in vain in search of those specks of habitations which give to our English landscapes their peculiar charm. There is no such thing in all Bohemia—I question whether there be in all Germany—as a park; and as to detached farm-houses, they are totally unknown. The nobility inhabit what they term schlosses, that is to say, castles or palaces, which are invariably planted down either in the very heart of a town or large village, or, at most, a gun-shot removed from it. No sweeping meadows surround them with their tasteful swells, their umbrageous covers, and lordly avenues; no deer troop from glade to glade, or cluster in groups round the stem of some giant oak, their favourite haunt for ages. But up to the very hall door, or at least to the foundations of the wall which girdles in the court-yard, perhaps twelve or twenty feet wide, the plough regularly passes. A garden the graff generally possesses, and his taste in flowers is good; but it almost always happens that his very garden affords no privacy, and that his flowers are huddled together within some narrow space, perhaps in the very court-yard of which I have already spoken as alone dividing his mansion from the open and cultivated fields. With respect, again, to the condition of the cultivators, that is, in all respects, so different from the state of our agricultural gentlemen at home, that, even at the hazard of saying over again what has been stated a thousand times already, I must describe it at length. In the first place, then, there is no class of persons in Bohemia corresponding to our English farmer. Nobody hires land in order to make a profit out of it, at least nobody for such a purpose hires a large tract of land; but each individual cultivates his own estate, whether it be of wide or of narrow extent. Thus the graff, or prince, though he be the owner of an entire circle, is yet the only farmer within that circle. He does not let an acre of ground to a tenant; but having built what he conceives to be an adequate number of bouerin-houses, he plants in each of these a bouer-man, and pays him for tilling the ground. These bouerin-houses, again, are all clustered together into villages, so that the bouer-man is never without an abundant society adapted to his tastes; and very happily, albeit very rudely, his days and nights appear to be spent.

"The land in Bohemia does not, however, belong exclusively to any order in the community. Many bouer-men are owners of their farms, some of them to the extent of 100 acres and more; while almost every township has its territories, which, like the noble's estate, are cultivated for the benefit of the burgh. But in all cases it is the owner, and not the cultivator, to whom the proceeds of the harvest belong. These are, indeed, gathered in and housed for him by his representatives, who, in addition to some fixed money payments, for the most part enjoy the privilege of keeping a cow or two on the wastes belonging to the manor; but all the risk and trouble of converting his grain into money attaches to the proprietor of the soil" (ii., 19).

But though by far the larger portion of the land be cultivated in the way described, by hired labour, still it is certain that a good deal is let in Bohemia, as in all similarly situated countries, not for money or a quantity of produce, but for a certain amount of labour to be performed on the estate of the lord, which amount is regulated by a law called the *Roboth-patent*. Mr. Reeve, in his instructive Sketches of Bohemia, has the following statement as to the relation subsisting between the lords and those occupying their estates, under this system:

"The subjects, as they are termed, are all registered in the books of the estates; the lord collects the king's taxes, besides his own dues, and sends an annual supply of recruits to the imperial army. He has the power of expelling misdemeanants from his estate, and he exercises a certain control over his subjects; but the peasants are by no means attached to the soil; and they may always appeal to the courts of justice against their lord, with a proverbial certainty (such is the policy of the government) of gaining their cause. On the other hand, the lord represents the government to his peasants, and the peasants to the government; and while he is accountable to the justice of the country, he has it in his power to exercise a beneficent influence over the lower orders. He provides for their instruction; he introduces improvements, and encourages trade; he increases their commercial relations; he arbitrates in their disputes; and in proportion to his fulfilment or neglect of these functions, the estate is prosperous or poor. It often happens that the nobility and gentry have acquired a purely German character, in accordance with that of the Austrian government, but very much opposed to the national spirit and national wants of the Bohemian people. All the ancient seignorial rights which were not legalized and regulated by Joseph II., as the Roboth dues, &c., were abolished by that monarch. But the tradition of feudal attachment and of feudal obedience still exists among the people: thus, although the consent of the lord is not legally required to a marriage between his peasants, it is generally asked, and considered indispensable. The possessions of some of the Bohemian nobles are immense; Prince Schwartzenberg owns one eighth of the country; and the estates once held by the great Wallenstein were so vast as to have formed the appanage of six great families after his death and attainder." (*Metropolitan Mag.*, *April*, 1837.)

Hence the condition of estates, and of the population upon them, depends more, perhaps, in this than in any other country, on the conduct of the lords. Wherever the latter are liberal and intelligent, the estate has an improved appearance, and the inhab. are contented, industrious, and thriving. Unluckily, however, the bulk of the landlords, like the occupiers of their estates, are strongly attached to routine practices, and to those feudal privileges which, while they oppress and degrade the peasantry, impoverish the lords.

Here, as in most other countries, industry flourishes most where it has to contend with the greatest difficulties. The rich level lands of Bohemia, instead of being the best, are the worst cultivated. The occupiers of the mountainous and poorer districts display, speaking generally, not only the greatest industry, but the greatest skill, and the most improved methods of cultivation.

The forests, as already seen, are very extensive: they are mostly situated in the W. parts of the kingdom, and especially in the district of Prachin. They are estimated to yield annually above 2,000,000 cubic fathoms of wood.

Manufactures.—With the exception, perhaps, of Moravia, Bohemia has long been the most celebrated of all the Austrian states for its manufactures. At this moment it produces the finest linens and linen yarn of any country in Europe. Spinning is the universal and favourite employment of the women; and no fewer than 500,000 females are said to prosecute it as a subsidiary business! Machines for spinning have, however, been introduced; but it remains to be seen whether they will be able to undersell the yarn produced by the hand. About 55,000 hands are supposed to be employed in linen weaving; and the total annual value of the produce of this branch of industry, including

that of lace, may be estimated at about £1,200,000 a year. This branch of industry is said, however, to be on the decline, in consequence of the growth of the cotton manufacture. According to the National Encyclopædia, 20,000 individuals are employed in hand-spinning, exclusive of those employed in the factories, which are numerous; 18,000 hands are said to be employed in the hosiery department of the trade. There are about 500 bleaching establishments in full work, and the manufacture of potash is very considerable. The woollen manufacture is very extensive: in spinning only, 55,000 hands are said to be engaged; and in weaving, from 15,000 to 16,000; the weaving of woollen stockings employs from 2000 to 3000 hands. The hat-makers, furriers, &c., are estimated at about 1200; and the leather manufacturers at 4000. There are about 100 paper-mills; and the imperial tobacco manufactory at Sedlitz supplies the whole country with that article, through the agency of above 7000 retail shops. The manufacture of metals and minerals, and of beet-root sugar, has already been alluded to.

But of all the Bohemian manufactures none is nearly so well known in foreign countries as that of glass. Bohemian glass is not so pure as that of England or France; but the art of staining, painting, and gilding glass is much better understood there than in this country, and articles of Bohemian manufacture are unequalled in point of lightness and richness of appearance. It is probable, however, were it not for the weight of the duties laid on glass in this country, and the troublesome regulations connected with their assessment, that we should soon become formidable rivals of the Bohemians, even in those departments in which they appear at present to have the greatest superiority.

Altogether, it is said that from 1-5th to 1-4th part of the inhab. of Bohemia are engaged in manufactures. But then it is material to observe that all the hand-spinners and weavers combine with their business that of cultivators of patches of land, and other employments. We believe, too, that the cotton trade of Bohemia, like that of the rest of Austria, is entirely the creation of prohibitions and oppressive duties on foreign stuffs and yarn; and that, were these repealed or materially modified, the manufacture would be involved in the greatest difficulties.

Owing to the want of capital, many of the great landed proprietors are obliged to engage in manufactures. Thus, Prince Kinsky, and counts Harruch and Bucquoy, are the greatest glass manufacturers; Prince Auersberg manufactures sulphur, vitriol, and colours; Count Urbna and Prince Windizhgratz, tin plates; Count Thun, porcelain; Prince Lobkowitz, earthenware; Prince Wallenstein and others, beet-root sugar, &c. It is clear that manufactures carried on under such auspices must be more expensive and less improved than if they were carried on by individuals dependent upon them.

Races of People.—Of the 4,000,000 people in Bohemia, nearly 3,000,000 are Czeches, of Slavonic origin, and the rest Germans and Jews. The Germans, to the amount of 900,000, principally inhabit the capital and the circles of Elbogen, Saaz, Leitmeritz, Bidschow, and Königratz. In these circles German is the more prevalent language, though even in them Bohemian is the vernacular tongue of the lower classes, as it is that of the middle classes, and even of the higher ranks in other parts. The German pop. is more industrious, intelligent, and enterprizing than the Slavonic. The Jews have been settled in Bohemia from a very remote epoch. Here, as in other countries, they are mostly engaged in mercantile and pecuniary transactions; and they are also extensively engaged in the business of distilling and brewing.

Religion.—Notwithstanding Bohemia may be truly said to be the cradle of the Reformation, and the determined and long-continued stand her inhabitants made in defence of the doctrines promulgated by Huss and his followers, she is now become one of the principal strongholds of Catholicism. The spirit of the ancient Bohemians has been entirely subdued; and they have become among the most bigoted and superstitious adherents of a faith imposed on them by the sword of the conqueror and the rack and gibbet of the inquisitor. Nowhere, perhaps, is the miserable trumpery of relics and saints' days held in such veneration. Religion here has not been employed to enlighten the understanding or improve the morals, but to darken the one, and to pervert and debase the other. The more intelligent part of the pop., disgusted with its ceremonies, have taken refuge in skepticism; but the great bulk of the people believe what they are told, and forsake the altars of Christ to prostrate themselves before those of St. John of Nepomuck! The church hierarchy consists of an archbishop (of Prague), 3 bishops, 7 deans of chapters, with numerous canons, 11 archdeacons, 133 deacons, 1107 parish and 505 minor cures. Though the monastic institutions were much diminished by the vigorous and salutary reforms effected by Joseph II., there are still no fewer than seventy-five monasteries and seven convents, comprising about 1020 monks and 150 nuns; these are, however, obliged to do the duty of parish clergy, or to employ themselves in education, or in the care of the hospitals.

Joseph II. granted full toleration to all sorts of religions. The Lutherans and Calvinists together amount to from 60,000 to 70,000. The Jews, amounting to nearly 70,000, are under the grand rabbi at Prague.

Education.—If the goodness of education were to be inferred from the number of educational establishments, Bohemia would have little reason to fear a comparison with most European countries. The institutions for its promotion consist of a university at Prague; a polytechnic school; 26 gymnasiums; 3 philosophical seminaries; 3 theological seminaries; 1 military academy; 3 convents for female education; 1 Jewish college; 40 grammar schools; 2500 Catholic, 36 Protestant, and 20 Jewish schools; and there are also schools for music and drawing, an observatory, and numerous libraries and cabinets of natural history, arts, and sciences. The Academy of Prague, though not long established, enjoys considerable celebrity.

But there is great reason to fear that the enlightenment of the people is looked upon as a secondary and subordinate object by those who superintend education in Bohemia—that is, by the clergy. Their primary object is to maintain the existing order of things; to educate the people in the belief that the Catholic is the only true faith; and that it is the duty of every good and well-disposed person to submit implicitly to the dictates of his spiritual and civil superiors! Such an education is better fitted to narrow and enslave, than to expand and emancipate the mind. Anything like free inquiry, and examination into the reciprocal duties and obligations of princes and subjects, or any inquiry into the real sources of public wealth, would not be tolerated in the Bohemian academies. The pupils are taught to believe that whatever is ordered is right! And adding to such a system of education the influence of a rigorous censorship of the press, the wonder is not that knowledge is at a low ebb in Bohemia, but that it is so far advanced as it really is.

"The march of intellect in Bohemia, though the schoolmaster be abroad, is in very slow time, and, what is worse, it is but little aided by the national pen or the national printing-press. As a proof of this, I may mention that there are only ten printers and ten booksellers in Prague; while for the political *quid nunc*, there are merely published a couple of very small, stupid newspapers in the German tongue, with other two, no less stupid, in the dialect of Bohemia. The literary periodicals, again, are confined to a small paper, called the *Bohemia*, in German, published thrice a week; and the *Abendunterhaltungen*, in Bohemian, printed twice a week. For the lovers of science, art, manufactures, and agriculture, a journal devoted to these matters is published twice a year; while the religious world remains quite satisfied with one quarterly journal. Such is the limited extent of the demand for political, literary, and religious information throughout Bohemia."—*Strang's Germany in* 1831, ii., 206.

During the reign of Joseph II. the use of the Bohemian language was forbidden, not only in the courts of justice, but also in the colleges and higher academies. But, instead of suppressing the language of the people, this seems to have occasioned a reaction in its favour; and during the present century Bohemian literature has been a good deal attended to, and made considerable progress.

Poor.—The number of hospitals and charitable institutions in the capital and principal towns is very considerable, and in the towns the poor are carefully provided for. No regular poor-rates are, however, collected; where the foundation funds and voluntary subscriptions do not suffice, the deficiency is made up by government. But the contributions of the latter are afforded very sparingly, and begging is, after all, the great resource of the Bohemian poor, as it must be of the poor of every country where a compulsory provision is not established. It is here, in fact, universal; and all travellers are disgusted with the numbers and importunity of the mendicants.

Manners, &c.—The Bohemians are passionately fond of music and dancing, and have attained to great proficiency in both. The national airs are nearly the same with those of the Slowaks of the N.W. part of Hungary, and are generally plaintive. The waltz is the favourite dance; and two of its most fashionable varieties, the *Redowak* and the *Galoppe*, have been borrowed from the Bohemian peasants. The men are generally robust and well-proportioned; and the women are (in Germany) celebrated for their beauty. The dispositions of the people are more mercurial, and their manners more gay, frank, and open, than those of their Saxon neighbours. How much soever the objects of their veneration may be changed, they are still, as in the days of Huss and Jerome of Prague, zealous defenders of what they believe to be right and proper. There

is a nearly total want of a middle class—an intermediate rank between the lords and their vassals. With the exception of Prague, there are no great towns, none of those *foci* whence intelligence and civilization are diffused over a country. But, however ignorant and prejudiced, the character of the Bohemian peasant is most respectable. In point of morals, he is quite on a level with the peasantry of the other Germanic nations. Crimes of violence are of rare occurrence. The proportion of illegitimate to legitimate births is as 1 to 8; but in the capital it is as high as 1 to 2.

Government, &c.—The nobility of Bohemia are stated to be 2960 in number, including 14 princes, 172 counts, 80 barons, and more than 100 hereditary knights as heads of families; the total revenues of the nobility were estimated fifty years ago at 180,000,000 of florins, £18,000,000. At the meetings of the Estates, which form four divisions, viz., 1st, the prelates; 2d, the nobles (*Herrn*); 3d, the knights; and, 4th, the citizens of the principal towns, nothing but the distribution of the sums ordered by the emperor to be raised is discussed. No law, however it may affect the religious, moral, or material welfare of the state, is ever submitted to them. A small minority once made a struggle for some ameliorations of the existing system, but without success. There is, indeed, a strong feeling against the absolutism of the emperor; but the nobility are afraid lest their peculiar privileges should be affected by any change, and no efficient reform need therefore be expected at their hands. The government of the country is directed by the different sections of the ministry at Vienna; the principal of which is the imperial united chancery, under which is the *Gubernium* at Prague. The court of appeals at Prague is under the ministry of justice at Vienna; the receiver of taxes is under the finance minister at Vienna. To these central authorities the various branches in every circle are subject; the courts of justice of the circle being at the same time courts of appeal from the manor courts of the nobles, who exercise judicial authority over their estates. The city and town magistrates have their own civil and criminal courts, from which appeal lies to the court of appeals at Prague. The military have a peculiar jurisdiction, and the nobles have, as in the other provinces, a special court, called the *Landrecht*. Independent of all authorities, judicial or administrative, the police forms a branch apart, being in the towns confided to especial commissaries, and in the country to the captain of the circle, in whom the three functions, judicial, administrative, and those of police are united. The number of civil *employés* in the kingdom is stated in the *Encyclopædia* to be 8461.

Towns. — Exclusive of Prague, Bohemia contains no town of any considerable importance, or of more than 10,000 inhabs. The towns are divided into royal and aristocratic boroughs, and the former, again, into privileged and non-privileged. The towns privileged to send deputies to the diet are Prague, Pilsen, Budweis, and Kuttenberg. Both classes of royal boroughs have their own magistrates, police, &c., and their internal government in their own hands. The boroughs of the nobility are usually under the control of their lords.

History.—After innumerable mutations, Bohemia, with Hungary and Transylvania, fell, in 1526, under the dominion of Ferdinand of Austria, brother of Charles V., who had married the sister and heiress of Louis, king of Bohemia and Hungary, killed at the battle of Mohacz. Bohemia was at this epoch in the enjoyment of a comparatively free constitution, and three fourths of the population were attached to the reformed faith. The attempts of the Austrian sovereigns to undermine the free institutions of the country, and to lay restraints on the exercise of the Protestant worship, provoked a desperate contest, which continued till 1620, when the Austrian troops totally defeated the Bohemians at the battle of Weissenberg, near Prague. The persecution which followed has seldom or never been equalled for atrocity. Many of the best and noblest Bohemian citizens lost their lives on the scaffold, and thousands upon thousands were driven into exile, and had their estates and properties confiscated. The free constitution of the kingdom was entirely annihilated; the Protestant religion all but extirpated; and such was the combined influence of massacre and exile, that in 1637 the pop. did not exceed 780,000! Subsequently the government gave every encouragement to the settlement of German colonists in the country: and in the reign of Maria Theresa and Joseph II. a new æra began; and the milder and more liberal system of government which they introduced has since been followed up.

BOIS-LE-DUC, a fortified town of Holland, cap. prov. N. Brabant, in a morass, at the confluence of the Dommel and Aa, 27 m. S. by E. Utrecht. Pop. 13,500. It is about 5 m. in circ., is defended by a citadel and two forts, and in case of need the environs may be laid under water. It is a well-built handsome town, and is intersected by several canals, over which there are a great many bridges. It is the seat of a vicar-general and tribunals of original jurisdiction and commerce, and has a fine town hall, on the model of the Stadt-house at Amsterdam; six churches, of which the cathedral church, or that of St. John, built in the end of the 13th and the beginning of the 14th century, is one of the finest in Holland; a grammar school, in which Erasmus was partly educated; an academy of painting, sculpture, and architecture; two hospitals, an orphan asylum, a house of correction, &c. Its manufactures, which are considerable, consist of linen and thread, needles and pins, cutlery, &c., with distilleries, glass-works, &c. It is well situated for, and has a considerable trade.

Bois-le-Duc was founded, in 1184, by Godfrey III., duke of Brabant. In 1629 it was taken by the Dutch, after a lengthened siege. It was held by the French from 1794 to 1814, when it surrendered to the Prussians, by whom it was again made over to its old masters.

BOJADOR (CAPE), a celebrated promontory of the W. coast of Africa, desert of Sahara; lat. 26° 7′ 10″ N., long. 14° 29′ 5″ W. This headland forms the W. extremity of a rocky ridge, called Geb-el-khal, or Black mountains. It was long the limit of navigation towards the S., and was first passed by the Portuguese in 1433.

BOJANO, (an. *Rovianum*), a town of Naples, prov. Sannio, cap. cant., on the Biferno, in a deep gorge, at the foot of mount Matese, 16 m. E.S.E. Isernia. Pop. 3000. This town has suffered severely from earthquakes, the last calamity of this sort having occurred in 1805. It is the seat of a bishopric, and has, or had before the earthquake, a cathedral, with several churches and convents, and a hospital. During the early period of Roman history, Bovianum was a very important place. In the Social war it was one of the strongest holds of the confederates. It was taken by Sylla, and afterward retaken by the Marsi. Under Cæsar it became a military colony. Strabo says that in his time it was ruinous and deserted. (*Cramer's Ancient Italy*, ii., 229.)

BOJANOWA, a town of the Prussian States, prov. and reg. Posen, 9 m. N.W. Rawicz. Pop. 3000. It is divided into the Old and New towns; most part of the houses are of wood; it has a large town-house, and fabrics of coarse cloth.

BOKHARA, or UZBEKISTAN, a country of Central Asia, comprising considerable portions of the an. *Sogdiana* or *Transoxiana*, and *Bactria*, forming the most powerful state of what is named by the moderns Indep. Turkey, or Turkestan. It lies between lat. 36° and 41° N., and long. 62° and 70° E.; having N. the desert and the khanat of Kokan; E. the mountainous regions of Hissar and Koondooz; S. Caubul; and W. the khanat of Khiva or Kharasm. Area, probably about 235,000 sq. m. Pop., according to Burnes, 1,000,000. It is divided into nine provinces, viz.:

Provinces.	No. of tomuns.	Real Ld. Rev. in tillas.	Chief City or Town.
Bokhara . . .	City & 7 t.	81,000	Bokhara, 150,000 inhab.
Karakool . . .	1	15,000	Karakool.
Kermina . . .	2	27,000	
Meeankal (or valley of the Kohik) . .	7	43,000	Katta Kurgan.
Samarcand . .	5 t. and 5 other dist.	49,000	Samarcand, 10,000 inh.
Justak . . .	1	8,000	Juzzak (Dizzikh).
Kurshee . . .	5	32,000	Kurshee.
Sub-e-ab (or banks of the Oxus) . .	4	22,000	
Balkh	. .	*	Balkh, 2000 inh.
		277,000	= 184,660*l.*

Bokhara is mountainous only in the E., where its mountains are northern spurs from the Hindoo Koosh, and on its S. frontier, where they seem to belong to the Ghoor or Paropamisan range; if we except a few low-lying hills about Shuhr-Subz, Samarcand, and Bokhara. The height of the former range, in about lat. 39°, is supposed by Burnes to be at least 18,000 ft., since the mountains 150 m. E. of Kurshee were seen by him covered with snow in June. The plain region which comprises all the rest of Bokhara, is nothing but a sandy desert, with a few *oases*, stretching for a few miles on either side the banks of rivers; in which are planted the chief cities and towns; and which constitute the only cultivable lands, and are very densely peopled. The rivers are therefore of the highest importance: there are five, viz., the Jihon or Amoo (Oxus), Kohik or Zer-afchan, Kurshee or Karchi, Zourhab, and Balkh. The Oxus intersects the country S.E. to N.W., dividing it into two unequal portions, and varying in width from 300 to upwards of 800 yards. The course of the Zer-afchan (river of gold) is entirely within this country; it rises in the highlands E. of Samarcand, runs N. this city and Bokhara, and, after a course of about 450 m., chiefly E. to W., falls into the lake of Denghiz. The Kurshee rises in the same

* The land rev. of Balkh, 20,000 tillas, goes to its own chief.

highlands as the Kohik, runs N.E. to S.W., by Shuhr-Subz and Kurshee, and is lost in the desert. The Zourhat runs from N. to S., and is similarly lost. The Balkh river rises S.W. the Hindoo Koosh, and runs N. to Balkh, where its waters are distributed all over the surrounding country by means of canals. The lake Denghiz, or "*the sea*," is 60 m. S.S.W. Bokhara, surrounded on all sides by sand hills; 25 m. long, and very deep: its water is salt, and it appears neither to increase nor decrease at any season of the year. There are other lakes, but of no importance.

Aspect.—The fertility of the country is said to have been anciently much greater than at present; the valley of Sogdiana has been spoken of as a paradise by both Greek and Arabian writers: but it is mostly destitute of large trees, and the banks of the Kurshee entirely so. The desert is varied only by sand hills, 15 or 20 ft. high, raised by the wind; of a horse-shoe shape, the bow towards the N., and always resting on a base of hardened clay. Some stunted herbage, low brushwood, and the camel-thorn, are the only signs of vegetation; and a few rats, lizards, beetles, and solitary birds the only permanent inhabitants. S. of the Oxus, however, it is not quite so bare as elsewhere. Curtius has well described the present state of the region round Balkh, in his glowing description of ancient Bactriana. (See *Burnes*, ii., 211.) Many remains of former splendour, aqueducts, temples, &c., are to be met with in various spots, as between Khooloom and Mazar; the ruins of Bykund, 20 m. W.S.W., and of Khojouban, 25 m. N.W. Bokhara. &c.

Geology and Mineralogy.—N. of the Oxus, and from the base of the mountains to Bokhara, there is a succession of ranges of limestone, oolite, and gravel, alternating with vast and hardened plains of argillaceous clay or quartzose sand: the pebbles in Miankal are sharp and angular, and look very unlike having ever been subjected to the action of water. There is more gold in the sand of the Oxus than in any other river rising in the Hindoo Koosh; but other metals are not found in any quantity in this country; silver, iron, and copper, are all imported from Russia. Sal-ammoniac is native near Juzzah, and there is a bed 5 m. in circ. of dark-coloured, imperfectly crystallized salt, near Charjooee, 500 lbs. of which sell for 3*s.* in Bokhara city. The water in the wells of the desert is often found brackish and unfit to drink, especially S. of the Oxus; between that river and Bokhara the water is good, and exudes through the sand.

Climate.—The climate of the elevated E. frontier is of course very different from that of the rest of the country. In the plains it is generally dry and salubrious; in the winter sometimes so cold that the Oxus is frozen over, and the snow lies for three months at Bokhara: in the desert in summer the heat exceeds 100° Fahr. The seasons are very regular; at the beginning of March the spring opens, the heat soon increases to an oppressive degree, being seldom refreshed by showers, and for four months the bed of the Kohik is dry at Bokhara, and the country suffers from drought. The summer lasts till October, when a fortnight or three weeks' rain sets in, succeeded by frosts, and these again by rains from the middle to the end of Feb., which are often very heavy, but evaporation is rapid. Violent tornadoes sometimes arise, blowing from the N.W.; but a steady wind from the N. blows across the desert in the hot season: the atmosphere is remarkably clear and cloudless at Bokhara, and meteors are frequently seen in considerable numbers at night. At Balkh the summer heat is very oppressive, and the climate unhealthy. Rheumatism is a frequent disease there; and ophthalmia and blindness are the scourges of the desert: fevers are rare, but leprosy is common.

Vegetable Products.—There is but little large timber: willow and poplar are the principal trees in the plains, and the latter is used for house-building: tamarisks and leguminous plants are the most frequent shrubs. A bastard indigo flourishes profusely on the banks of the Oxus, but neither the true plant nor the sugar-cane grow wild. Some *Boraginea* and *Crucifera* are found universally; lilies, asphodels, and euphorbias less commonly. The *Galenia africana*, the favourite food of the camel, covers many parts of the desert: rhubarb grows in Kurshee; but the gigantic *Ferula persica* (which produces assafoetida) is the sole member of the umbelliferous family. Bokhara is celebrated for its fruit; it is believed to be the native country of the melon, which grows here to more perfection than anywhere else; and most of the fruits familiar to us grow there in great perfection.

Animals.—Wild animals are few: the lion is not now found, though Alexander killed one in Transoxiana. Diminutive tigers on the banks of the Oxus, wild hogs and asses, deer, antelopes, bears in the E., wolves, foxes, jackals, cats, martens, rats, and marmots, are the chief *Mammalia*; ostriches in the S.; eagles, hawks, owls, crows, storks, pigeons, plovers, and water-fowl, are common; but there are no singing birds, and all kinds of game are scarce. Tortoises and lizards are found in the desert; but there are neither alligators, nor many snakes. The fish in the lake Karakool are good: those of the Oxus are the same as in other Asiatic rivers; a large dog-fish is caught there often of 600 lbs. weight. There are few insects; locusts sometimes infest the neighbourhood of Balkh; the scorpion is common, but not dangerous; a kind of cochineal insect lives on the bastard-indigo, but the dye it produces is very inferior, and the proper mode of treating it is unknown. The silkworm is abundant on the banks of the Oxus, where the mulberry is planted for it in great quantity; and the Turkmans in the summer months are nearly all occupied in the production of silk. The quality of the water, or some other cause in Bokhara city, produces the *rishta* or Guinea worm, and ¼ part of the population are said to be attacked annually with a painful disease, owing to the formation or growth of these worms beneath the skin. When observed, they are extracted by means of needles; an operation in which the Bokharese are very expert.

Races of Men.—Baron Meyendorff estimates the pop. and the different races of which it is made up, as follows:

		Brought forward	2,460,000
Uzbeks	1,500,000	Kirghiz & Kara-kalpahs	6,000
Tadjiks	650,000	Jews	4,000
Turkomans	200,000	Afghans	4,000
Arabs	50,000	Leghiz	2,000
Persians	40,000	Bohemians	2,000
Kalmucks	20,000		
Carry over	2,460,000	Total	2,478,000

Burnes, however (1835), estimates the total pop. at no more than a million, half of whom he thinks are wandering tribes. The Uzbeks, the last race who conquered this country, say they originally came from the neighbourhood of Astrakhan, and are divided into a number of tribes, of which that of Mangout is the principal, and the khan always belongs to it. In their physical appearance they resemble a mixture of Tartar and Kalmuck, but those of the capital are scarcely to be recognised as belonging to either of these families, from their great intermixture with Persian blood. The Uzbeks are chiefly established in the principal towns, and in the valley of the Zer-afchan: they are all warriors, and the government offices are for the most part filled by them. Many are employed in trade, though they are avaricious, and much addicted to deceit. They are naturally proud, and have a great contempt for the other races, especially the Tadjiks; but are also said to be often well-disposed, and are simple, and easily subject to imposition.

Tadjiks.—The Tadjiks are regarded as the aborigines, and descendants of the ancient Sogdians. They are similar to European races in both features and complexion, the latter being much less brown than that of the Persians; their hair is black; they are active, laborious, and intelligent, but pusillanimous, and never take arms: they therefore differ in numerous particulars from the Uzbeks. They do not lead a wandering life, but are cultivators, artisans, and merchants; in the latter capacity, like the Uzbeks, they are greedy and avaricious. Most of them know how to read and write; and, excepting the clergy, they are the most civilized people of the country. Their physiognomy expresses mildness and tranquillity; but they are deceitful, and unfeeling towards their slaves.

Kalmucks.—A large portion of the Kalmucks are descendants of the hordes of Jenghiz-khan; the remainder are Torgout Kalmucks, who, in 1770, abandoned the banks of the Wolga, to return to their original seat. The former are to be recognised only by their physical appearance; they have almost forgotten their original tongue, and have adopted the customs of the Uzbeks, among whom they live, in villages of their own.

Turkmans.—The Turkmans, or Toorkmuns, inhabit chiefly the region S. of the Oxus (which forms part of Turkestan, or Toorkmania); they belong to the great Tartar family, and differ from the Uzbeks in being exclusively a wandering tribe, having the face larger, and the figure more squat; in these particulars resembling the Kalmucks. They cultivate rice on the banks of the Amoo, but have many herds, and live much on their milk and flesh. Their horses are excellent, and have been celebrated since the time of Alexander. The Turkmans are by profession dealers in slaves; they have chiefs of their own, named begs, but all pay tribute to the khan of Bokhara.

Arabs.—The Arabs have been established here ever since the age of the caliphs. They are immediately recognised, by their swarthy complexion. Some are wandering, and others demi-nomadic tribes; a third section live in villages, some of which are near Bokhara; others are cultivators, and possess flocks in the steppes: it is chiefly the latter who furnish the lamb-skins, in such general demand.

Persians.—The Persians are mostly slaves, who have

been captured by the Turkmans; and a proportion of eight individuals in every village of twenty houses is perhaps a fair average throughout the country.—(*Burnes.*)

Kirghiz.—The Kirghiz are a small wandering horde, found especially N. the valley of the Zer-afshan. Some of the Afghans and Kirghiz are descendants of the hostages retained by Timour: there are some Chinese who have a similar origin. The Bohemians, or Zingeunes, here called Mazané are of unknown extraction, and live in different companies in every part of the country; they tell fortunes, and have all the other occupations of gipsies.

Jews, &c.—The Jews live almost entirely in Bokhara city; where there are also 300 Hindoos, who are not allowed to build temples, have idols, walk in processions, bring their families beyond the Oxus, or purchase female slaves, and are prescribed a particular dress. They come chiefly from Sinde; are very sober and orderly, industrious and devoted to trade, in which they amass considerable wealth.

Agriculture is the principal source of the national wealth: rice, wheat, barley, jowaree, sesamum, maize, meeog, melons, and beans, are the chief objects of culture. The propensity to grow rice is strange, in a country so unfitted for it; but the fields of Shahr-Subz yield rich crops, and irrigation for the purpose is pursued to a very great extent in the Kurshee valley, and at Balkh. Meyendorff observes that the rice of the Miankal (valley of the Kohik) is not good. S. of the Oxus the wheat fields, when sown, yield crops for three successive years. When the first harvest is finished, the cattle are turned in upon the stubble fields; and next season the stalks grow up and ear; and a third but scanty crop is reaped in the same way. At Karakool, in Bokhara Proper, the return is said to be seventfold; in Balkh the wheat ripens in a month; the crops are very good, and the stalk as high as in England. Wheat is usually sown in autumn, and reaped in July; and the fields are afterwards ploughed for peas, which are gathered in the same year. Barley is sown early in March, and reaped before wheat: it comes in the place of oats, which are not used in Bokhara. Jowaree (*Holcus saccharatus*), which, with wheat and melons, occupies most of the surface, comes to maturity in nearly the same period as barley: it grows to five feet in height, and affords both grain for the poor, and, by its leaves, good forage for the cattle. It is commonly surrounded by *tanabs* of hemp and cotton, from the seeds of which oil is extracted: a considerable quantity of cotton is grown and exported, both raw and manufactured. Trefoil is cut seven or eight times a year; madder is grown, and tobacco; the best of which is from Kurshee. Beet-root, turnips, carrots, &c., abound; the potato has not yet been introduced. Kurshee is a "sheet" of gardens and orchards, but most of the stone fruit is inferior to that of Persia. There are many kinds of grapes, and the raisins prepared from those of Bokhara are unrivalled for size and flavour, and beautifully transparent. The vines are not pruned, as in Europe. The wines have little flavour, and will not keep long. The most celebrated fruit is the melon, which is of several kinds; one is oval, with a green or yellow skin, sometimes four ft. in circumference, and of a most delicious flavour. Winter melons are said to surpass all the others. Cucumbers also attain great size and excellence. The iris, rose, aster, sunflower, &c., are cultivated a great deal in the gardens, which are very large and numerous. The fields are parted into *tanabs*, each of which comprises a surface of 3600 square yards; their limits are formed by ditches for irrigation. The want of water is the great hindrance to the progress of agriculture, as, wherever there are neither rivers nor canals, the ground is uncultivated. Property in land is of five kinds: 1st, The state property, which is the most considerable. 2dly, The *kharadj*, the right to which was formerly doubtful between the government and certain proprietors, and has been ceded to the latter, on payment of a light tax. 3dly, Fiefs, bestowed for military services. 4thly, Properties of individuals. And, 5thly, Legacies for religious purposes. The state territory, as well as other property is let, government receiving as rent two fifths of its produce.

Cattle, &c.—Bokhara is rich in cattle; the sheep and goats claim the first notice, since the one yields the celebrated skins, and the other a wool, only inferior for shawls to that of Cashmere. These flocks graze on furze and dry grass, and their flesh is sweet and well-flavoured. All the sheep are of the variety with large tails, some of which yield as much as 15 lbs. tallow. The description of sheep which produces the jet black curly fleece, made into caps in Persia, and so much esteemed everywhere, is peculiar to Karakool, a small canton between Bokhara and the Oxus. The animal will thrive nowhere else, and has been transported to Persia and other countries without success: when removed it loses the peculiarity in its fleece, and becomes like other sheep. The annual export of skins amounts to about 200,000, the best of which are sent to Constantinople. The goats yield the shawl wool, and are about the common size, of a dark colour, and many belong to the wandering Kirghiz tribes. The oxen are neither large nor strong, and beef is eaten only by the poor: mutton is the food for which there is the greatest market. The horses of Toorkmania are large and bony, and more remarkable for strength and bottom than symmetry or beauty. The Usbek tribe, of Karabeer, possess the most matchless horses in the East: the breed was introduced by Tameriane, or Timour, into the country round Samareand and Shuhr-Subz. All the traffic of Bokhara, however, is carried on by means of camels: these have a sleek coat, as fine as that of a horse, and shed their hair in summer, from which a fine water-proof cloth, of close and heavy texture, is manufactured. The Bactrian camel, with two humps, and tufts of black hair on the neck and thighs, abounds S. of the Oxus, and can carry a burden of 6 cwt.; the dromedary is common in Bokhara; the asses are large, sturdy, and much used: there are no mules.

No considerable manufacture is found in Bokhara; none employing more than four or five workmen at a time. Cotton thread, silk stuffs of different colours, leather, excellent shagreen, good sabres, knives, and other steel articles, locks, hardware, gold and silver mounting for knives and sabres, rings, and other jewellery, articles of turnery, and fire-arms, are among the chief productions. Women are often employed in embroidery, and especially in divesting the cotton of its seeds, which occupies many hands. No farther use is made of hemp than to procure an intoxicating drug; sugar and confectionary are made from the manna found on the camel-thorn. The Jews and others excel in the art of dyeing, but leather is generally bad, and the cutlery, &c., inferior to that of Persia. The fine arts are still less advanced, owing to the influence of Islamism, which does not permit representations of animated objects; flowers are the principal subjects of paintings, and sculpture is confined to cutting tombstones. The modern edifices of Bokhara are destitute of merit, and the fine mosques built at Samarcand, under Timour, are looked upon as impossible to be equalled in the present day. The canals are large; which is indeed essential in a country where evaporation is so rapid; and all the villages are situated on the banks either of a river or canal, and consist generally of about a hundred houses built of earth, sometimes walled round, and intersected by public ways not so narrow as those of the towns: in their centre is commonly a public fountain, or small reservoir. There are very few towns; they are all built on rivers, and surrounded by cultivated fields: Bokhara, Samarcand, Kurshee, Karakool, and Balkh are the principal; the rest are but large villages.

Commerce.—Bokhara, though politically of such secondary importance, holds a pretty high position in the commercial world. Fruitful in the productions of the earth, where all around is desolation, it is a central mart, where the commodities of Europe, China, Persia, India, and Caubul, may be exchanged with advantage. Peter the Great of Russia wished to open a communication between the Caspian and the banks of the Oxus: he succeeded in opening roads from the S. of Asiatic Russia to the E. of the Aral sea; and for eighty years they have been annually travelled by the caravans of Bokhara, which bring back the manufactures of Russia; while those of Britain reach the banks of the Zer-afshan by way of India.

Exports.—The exports are chiefly silk, cotton, wool, coarse chintzes, cotton-thread (which is in much request), lamb-skins, and others. The following articles were, in 1819, among those imported at Orenburg from Bokhara: Cotton, 16,812 pouds (599,670 lbs.); cotton-thread, 18,988 pouds (676,000 lbs.); white cotton, 20,410 pieces of 28 yds.; skins, 74,336; silks, chalitas, torquoises, lapis lazuli, dried fruits, raisins, &c. &c. The returns are paid in Dutch crowns and ducats, Spanish piastres, and Russian silver roubles. The total exports to Russia are valued at nearly £290,000. Silk and cotton are sent in large quantities to Caubul, and even into India; and wool as well, which fetches from 6½ to 8 silias (£4 to £5 7s.) per 256 lbs. Engl. The lamb-skins of Karakool are paid for in ready money by foreign merchants.

Imports.—The imports from India are the same as those into Caubul; a half of the 2,000 camel-loads that reach the latter country yearly from India pass on into Turkestan. Muslins, Benares brocade (about 500 pieces), white cloth from the Punjab for turbans, sugar, and shawls, which pass through to Russia, are the chief imports. Till within the last twenty years the trade in European fabrics was with Russia only, through Orenburg and Froitsha; but it is now carried on more extensively through India and Caubul. There are four great roads from Russia; viz., 1st, from Astrakhan to Bokhara, across the Caspian, and through Orgunje (Khiva), 20 days; 2dly, Orenburg to Bokhara, between the Caspian and Aral, through Orgunje, 60 days; 3dly, Froitsha, across the desert of Kipchak, E. the Aral, 42 days; 4thly, Petropolok, through Tashkend to Bokhara,

90 days. The first is the best and safest, and is taken by the great yearly caravan, which leaves Bokhara in June; it is, however, necessary that amicable relations should subsist between Bokhara and Khiva. The less valuable merchandise goes to Froitsha, generally in August. The imports from Russia are white cloth, muslins, chintzes, and broadcloth, both of Russian and English manufacture, and the chintzes often Polish or German, imitation brocade, velvet, nankeen, gold thread, hardware, metals, cutlery, jewellery, leather, paper, Kirmis dye, refined sugar, &c. Not less than three fourths of the articles from Russia and India are of British manufacture. British chintzes, which realize sometimes 50 per cent., and broadcloth (the finest selling for 30*s*. per yard) are, like most other British manufactures, valued by the females of both Caubul and Bokhara greatly above those of Russia; and though we may have to yield to Russia the trade in metals, which are so readily supplied from her S. frontier, we shall, no doubt, supersede her in the supply of piece-goods; the demand for those of Britain has been for some time increasing, while that for those of Russia has been proportionally diminishing. Russian muslins are said to be better than the English (though of this we are very skeptical); but all other white goods are inferior, and none now find their way S. of the Oxus. The vizier of Bokhara told Burnes, that a more extended export of white cloths, muslins, and woollens from England would effectually supplant the Russians in those branches of commerce. The transport through Caubul costs little; and if Russia navigate the Wolga, Britain commands the two great thoroughfares of the Ganges and the Indus. By the trade with the Chinese territ. of Cashgar and Tarkund, Bokhara derives coarse porcelain, musk, bullion, tea, silks raw and manufactured, rhubarb, and Tibet wool; in all about 800 camel-loads, but chiefly conveyed by horses. Tea is drank at all hours of the day in Bokhara, and especially among the Turkmans; and 950 horse-loads, about 200,000 lbs., were imported from China in 1832. The Persian trade is inconsiderable; Kirman shawls, sugar, and opium, are the chief imports; the latter is re-exported to China. The merchants of Caubul bring indigo and Cashmere shawls, most of which come through their hands. From Kokan are received white cottons, silks, more durable than those of Bokhara, and a raw silk of inferior quality. The commerce with Russia is said to employ 3000 camels; that with all other countries as many more: but it is said that none of the merchants are possessed of £40,000, from their frequent and severe losses by the pillage of the wandering tribes. The total capital vested in foreign commerce is believed to be from £500,000 to £600,000.

Money, Weights, &c.—The coins in use are the *tilla* (gold), worth 13*s*. 4*d*.; the *tenga* (silver) = 7·6*d*.; and the *pool* (copper) = ·276*d*. Weights: the *batman* = 131·104 kilog. (291 lbs.); *seer* (35⅔ lbs.). The duties on European goods are very moderate, being only 2½ per cent.; a Christian must, however, pay 20 and a Hindoo 10 per cent. These injunctions are derived from the Koran; but as the Koran inculcates strict protection to the merchant, and as the people are strict observers of its precepts, in no Mohammedan country is there so much safety and freedom from exaction for the trader.

The Public Revenue is professedly spent in the support of mosques and moollahs, but the present khan is supposed to use a considerable portion to maintain his armed force. These revenues are derived chiefly from land, which in Turkestan is valued according to the water which fertilizes it: the total amount is estimated by Meyendorff at about £400,000 (by Burnes, at £369,350); but half the land is enjoyed by the church. Other taxes are those on merchandize, which in the late khan's reign were not levied until the goods were sold; taxes on the farmers' produce, on gardens, orchards, and melon beds; on dried fruits, manna, and skins; customs on goods entering the capital (according to Meyendorff, about £16,000 a year, which ought to be applied to the use of the schools and clergy); a capitation-tax on all the inhabitants of the country not Mohammedans, and in time of war a tax on each householder. The land revenues are received by the *hakims*, or governors of districts, who pay the *employés* and troops cantoned in their prov. before forwarding the collections to the royal treasury: the administration of the finances is entirely in the hands of the khan himself and his vizier.

The Government is a combined monarchy and hierarchy: the khan is despotic; but does nothing without the advice and authority of the moollahs, or priests. This arises from no inability on his part to assert his power; but from the constitution of the monarchy, which is exclusively bottomed on the laws of the Koran, which are here more strictly enforced, perhaps, than in any other Mohammedan country. The order of succession to the throne formerly required only that the khan should be of the family of Jenghiz, whether by the male or female line; but that family is not now on the throne. He takes the title of *emeer eel moomunees*, or "commander of the faithful," and looks upon himself as one of the heads of the Mohammedan religion, paying, however, a respect to the sultan of Constantinople, of whom he calls himself "the bow-bearer." Everything that the khan eats or drinks is first tasted by the vizier and his attendants, and an hour elapses to judge of their effects (poisoning being common) before they are sent him. Hence we may fairly suppose, with Sir A. Burnes, that the ruler or the Uzbeks seldom enjoys a fresh-cooked dinner. The present khan, Nussair Oollah, came to the throne in 1829, after the dispute which ended in his putting to death *five* of his brothers! He is about 40 years of age; and, notwithstanding his fratricide proceedings, is said to be just, liberal, and strict in religious observances, though bigoted. (*Burnes.*) The *koosh beges*, or vizier, has great influence, and his high office has seemed latterly to have become hereditary in his family: all the local governments are at present filled by his dependants or nominees. Every town or village is ruled by moollahs, the descendants of the first caliphs, and, excepting the khan, the vizier, and priesthood, there is no other body having any weight in the country: there are no subordinate khans, nobles, or rajahs, as in Caubul or India; nothing, in short, bearing any semblance of a feudal aristocracy. The court displays no magnificence; the same system of government has existed in Bokhara from the earliest ages of Mohammedanism. The tomans, or districts, are governed by hakims, who are in direct communication with the khan; each is assisted by three functionaries, viz., a superintendent of police, a receiver of imposts, and a secretary. All the chief towns have a *cadi*, or judge; the smaller ones only a commissary of police: the *cadi* is assisted by a mufti, and in the capital by two: the police is strict and efficient, and the roads in the interior are free from robbers.

Justice is summary and severe; guided wholly by the Koran, and often capricious and contradictory; but nowhere in Asia is there so much protection afforded to all classes. The most trivial offences are punished with death; fines, imprisonment in dungeons, and blows, are also employed. Burnes relates that, though tobacco be publicly sold without prohibition, to be seen smoking it subjects the party to severe punishment. Meyendorff says, that a Jew, who had sold brandy to a Cossack, was imprisoned by order of the police commissary; his family fined 50 *tillas* (about £33), and himself beaten with 60 strokes of a club. This punishment is very severe, for the blows are often given on the stomach, and 75 strokes are equivalent to capital punishment. Another mode of torture consists in shutting up a criminal in a room with stinging insects, which destroy him in a day or two.

The *armed Force* consists of about 20,000 horse and 4000 foot; levied from the different provs., but without discipline; independent of a militia of 50,000 horse, 10,000 of which are from Balkh and the countries S. the Oxus; and which are seldom called on to serve, and when embodied receive no pay. The regulars are paid in grain, each soldier receiving 8 maunds of 256 lbs. yearly; their chiefs have assignments of land. The regular force consists wholly of Uzbeks, who, though not good soldiers, are superior as irregular cavalry. They are armed with curved sabres, long knives, and heavy spears 20 feet in length, with a short blade: some wear a short coat of mail, a helmet of iron, or a round shield of buffalo hide; the infantry carry matchlocks, but use them very indifferently. There are no native artillerymen; the artillery consists of forty-one field pieces, which lie neglected in the citadel at Bokhara. Few troops are drawn from the S. of the Oxus; the Arabs are good soldiers, but the Turkmans cannot be coerced.

Religion.—The people are all Soonite Mohammedans; their religion has great influence over all their usages; and the intolerance of their sect causes incessant hatred towards their Shiite neighbours, the Persians. Intolerance and bigotry are among the most prevalent national vices, and no religion other than the national one may be publicly professed; though the Jews find means to avoid the injunction. Daily public prayer is enjoined, and in the capital nothing is allowed to be sold during the hour so employed; and the police officers expel with whips persons then exposing their merchandize in the markets. There are colleges at Bokhara, but theology alone is studied, and proselytism is greatly encouraged by the government. Astrology is honoured highly, for superstition is very prevalent; magic is firmly believed in, and its origin referred to India.

Public Education.—Bokhara itself for a long period was considered a learned as well as a holy place; Timour and Baber encouraged literature; which has, however, greatly declined since the Uzbek conquest. Notwithstanding a great number of colleges in the capital, and schools in the country, most of the population know neither how to read or write. The children of the Tadjiks acquire these branches, and some knowledge of figures, to serve them as merchants, since they are very rarely members of the chief

clergy: the sons of the most opulent persons generally learn only to read, write, and get the Koran by heart. Still a respect for knowledge and its professors is generally prevalent: to found schools is an act of piety, as well as to feed poor scholars; and these often come uninvited and unknown to the *ménages* of the rich, and receive money. Geography, astronomy, history, and medicine are, as may be expected, in a very low state.

Habits, Usages, &c.—The diet of the people is very simple: after morning prayers, they take tea, mixed with milk, salt, and oily substances, of which mixture they are very fond. At 4 or 5 o'clock they dine, on rice, carrots, turnips, &c., with mutton, or other meat. The Uzbeks sometimes eat horseflesh, but it is expensive; cheese, milk, and fat, are much used; a sheep is killed, and the entire tail, however large or fat, is melted up with the meat, and cooked in a single boiler. Immediately after dinner they take tea, prepared as in Europe; coffee is not used. They eat with their fingers, knives and forks being unknown. Drunkenness, if public, would be perhaps punished even with death.

Dress—of the men, is one or two long robes of cotton cloth; the under longer than the upper; and a white cotton turban; or among the Uzbeks, a cap of red cloth, bordered with martens' skins: here, as well as at Constantinople, the form of the head-covering indicates the distinctions of rank. All wear large white trowsers, and close short drawers: the rich public functionaries are often habited in Cashmere shawls, and cloth of gold. The dress of the women differs little from that of the men; they wear the same pelisses, but the sleeves are tucked together, and tied behind; richly decorated boots; and have always a black veil over the face: the Turkman women are, however, not veiled. Both sexes often stain the nails red with henna, and the Persians use this herb to dye their beards; the women braid their hair, and blacken their eyelids and eyebrows with plumbago. The languages in use are the Persian and Turkman; the latter is spoken by the Uzbeks, and wandering tribes S. of the Oxus, and is remarkable for its rudeness. The articles of luxury in use are very few; their dress and horses constitute nearly all the personal property of the people; their houses are ill built, almost destitute of furniture; they have neither plate, glass, nor clocks, and very seldom a watch. The rich have many slaves, who are brought from Orgunjé, and are mostly Persians, seldom Russians or Chinese.

History.—Alexander penetrated into both Bactriana and Transoxiana, which were after his death ruled by his successors. The Arabs conquered this country at the end of the 7th, or in the early part of the 8th, and Jenghiz Khan devastated it in the 13th century: it was the native country of the next great eastern conqueror, Timour, whose successors were dispossessed, by the Uzbeks, in the beginning of the 16th century. Nadir Shah, early in the 18th century, took Bokhara; but the government soon after fell again into the hands of the Uzbeks and of the descendants of Jenghiz: that family has, however, ceased to reign since 1800. The late khan devoted himself wholly to religion, and died in 1825, leaving a kingdom that had suffered insults and encroachments on every side, from his own want of attention to temporal concerns. The present sovereign, his son, is on amicable terms with the neighbouring states of Khiva and Caubul, and the empires of China and Turkey: with the Persians the Uzbeks hold no communication; and in Kokan the influence of Russia predominates. (*Burnes's Travels in Bokhara in* 1832–1834, 3 vols. 8vo, 1835; *Meyendorff, Voyage d'Orenbourg à Boukhara*, Paris, 1826.)

BOKHARA (*the treasury of sciences*), a celebrated city of Central Asia; capital of the above *khanat*, and seat of the khan; on the left bank, and within 6 or 7 m. of the Zer-afchan, at the W. end of its valley; 115 m. W.S.W. Samarcand, and 250 m. N.W. Balkh; lat. 39° 48′ N., long. 64° 26′ E. Pop. (*Burnes*, 1835) 150,000, but this is probably beyond the mark. It is 8 m. in circ.; of a triangular shape, and surrounded by a wall of earth about 20 feet high, flanked by round towers and bastions, and pierced by 12 gates, with brick masonry. Bokhara is surrounded by a flat but rich country, and is quite embosomed in trees, giving it a beautiful appearance at a distance, which, however, vanishes on entering it. The streets are so narrow that a laden camel fills up even the largest, and in the smaller ones two persons have difficulty in passing each other: they are also extremely dirty, and always crowded with camels, horses, and asses. The houses are mostly small, and of one story; the common ones built of sun-dried bricks, on a frame-work of wood; others of a superior kind are painted and stuccoed, with Saracenic or pointed arches set off with lapis lazuli and gilding; the roofs of all are flat; and they have but a bare wall without windows facing the public ways: except in one building, there is no glass whatever. About 100 ponds and fountains, constructed of squared stone, furnish the population with water: the city is also intersected by canals shaded by mulberry-trees, which bring water from the Zer-afchan; the main canal from which is opened every fifteen days. There is scarcely a garden or burying-ground within the walls; "the traveller winds his way among lofty and arched bazars of brick, and sees each trade in its separate quarter of the city: here the chintz-sellers, there the shoemakers; one arcade filled with silks, another with cloth. Everywhere he meets with ponderous and massy buildings, colleges, mosques, and lofty minarets." The principal structure is the *Aerk*, or khan's palace, nearly in the centre of the city, built on a natural elevation between 250 and 300 feet high, surrounded by a brick wall 70 feet high, with a lofty entrance of brick decorated by a minaret on either side. This fortress contains the residence of the sovereign, his harem, and a mosque, all encircled by a garden, together with the residence of the vizier, and his public courts of audience; stables, barracks, &c.: the gates, both of the palace and of the outer city, are shut at twilight, and a double guard mounted. There are 360 mosques, and 366 schools and colleges in Bokhara, superintended by about 300 moollahs, who undertake the charge of both religion and education; Bokhara always enjoyed the titles of holy and learned. The mosques and colleges are generally situated opposite each other, and have a striking resemblance in their architecture: that of the former is the most varied; the principal mosque covers a space 300 feet square, and has a cupola rising to one third that height, and covered with blue enamelled tiles: most of these buildings are of brick, and the courts of some paved with stone. The handsomest structure in Bokhara is a college of King Abdoolla, built in 1650, which has a lofty arched entrance, some beautiful enamel, and a white marble pavement: the largest college here was built at an expense of 40,000 roubles in specie, defrayed by Catherine II. of Russia. Attached to the great mosque is a brick tower, or minaret, 210 feet high, built by Timour, in good proportions; the materials disposed in ingenious patterns, and the whole in good preservation. Criminals are thrown from this tower; but, excepting on these occasions, no one ascends it but the high priest, to call the people to prayers; and he only on Fridays, since it overlooks most of the private gardens in the city, and the most scrupulous endeavours are made to seclude the women in Bokhara from the gaze of every stranger. W. of the palace is a small square, the Segistan, surrounded with massive buildings, colleges, shops, and stalls; a third part of the city consists of shops and hotels: and the jewellery and cutlery of Europe, the tea of China, the sugar of India, the spices of Manilla, the shawls of Cashmere, and every other article of use or ornament, may be purchased. Many of the merchants remain night and day in their shops, having no other habitation; the bazars are generally open every day, excepting those for slaves, gems, and other such luxuries, which are open but twice a week. There are 4000 Jews in Bokhara, which is proportionally more than in any other eastern city, and they contend they are better treated here than elsewhere, though they are confined to a residence in three particular streets, are subject to high imposts, and not permitted to build a new synagogue. Sir A. Burnes gives a graphic description of the daily scene in Bokhara (*Travels*, ii., 237–239): "From morn to night the crowd which assembles raises the humming noise, and one is stunned at the moving mass of human beings. In the middle of the area, the fruits of the season are sold under the shade of a square piece of mat, supported by a single pole. One wonders at the never-ending employment of the fruiterers, in dealing out their grapes, melons, apricots, apples, peaches, pears, and plums, to a continued succession of purchasers. It is with difficulty that a passage can be forced through the streets, and it is only done at the momentary risk of being ridden over by some one on a horse or donkey. The latter animals are exceedingly fine, and amble along at a quick pace with their riders and burdens. Carts of a light construction are also driving up and down, since the streets are not too narrow to admit of wheeled carriages. In every part of the bazar there are people making tea, which is done in large European urns, instead of teapots, and kept hot by a metal tube. The love of the Bokharese for tea is, I believe, without parallel: for they drink it at all times and places, and in half a dozen ways: with and without sugar; with and without milk; with grease; with salt, &c. The day is ushered in with guzzling and tea-drinking, and hundreds of boys and donkeys, laden with milk, hasten to the busy throng. The milk is sold in small bowls, over which the cream floats: a lad will bring 20 or 30 of these to market in shelves supported and suspended by a stick over his shoulder. Whatever number may be brought, speedily disappear among the tea-drinking population of this great city. Next to the venders of this hot beverage, one may purchase '*rahut i jan*,' or 'the delight of life,' grape jelly, or syrup mixed up with chopped ice. This abundance of ice is one of the greatest luxuries in Bokhara, and it may be had till the cold weather makes it unnecessary." It seems to be as available, and used as much by all classes, as in Sicily; no one in Bokhara ever thinks of drinking water unless iced.

The learned, or would-be-learned, are seen poring over the tattered pages of Toorkee or Persian lore, at book-stalls, and at the doors of the colleges the students are often seen lounging after the labours of the day; "not, however, so gay, or so young, as the tyros of a European university, but many of them grave and demure old men, with more hypocrisy, but by no means less vice, than the youths in other quarters of the world." Each of these resident students has a fixed allowance, as well as the professors; the colleges are well endowed, and possess many of the surrounding lands, which have been purchased by pious individuals for that purpose, as well as the whole of the bazars and baths. The baths, of which there are eighteen, can accommodate 270,000 people yearly, and bring an annual revenue of £1800: some are very large. The colleges are shut for six months in the year, when the students work in the fields for a subsistence; their course of study generally lasts seven or eight years: they come from all the neighbouring countries except Persia. 'With the twilight, the busy scene in Bokhara closes, the king's drum beats, it is re-echoed by others in every part of the city, and at a certain hour no one is permitted to move out without a lantern. From these arrangements, the police of the city is excellent; and large bales of cloth are left on the stalls at night with perfect safety. All is silence until morning."

The origin of Bokhara is uncertain, but it is believed to have been at first but a collection of fishermen's huts, its site having abounded with small lakes. It is supposed to be at no great distance from the ancient *Tyrbaetra*, but which Ptolemy places on the opposite side the Zer-afchan, or river of Sogdiana; in A.D. 705 it was taken by the Arabs, and between 896 and 998 was very flourishing, and the seat of the Samanide dynasty. Jenghis Khan burned it in 1219, and it was not rebuilt till near the end of his life; it was threatened, but saved, by his grandson. Under Timour it flourished anew, but since the rule of the Uzbeks has rather declined, though it be still the most renowned city in Central Asia. Its priests affirm that while light *descends* to all other parts of the world, it *ascends* from the "holy" Bokhara! (*Burnes's Travels*, ii., 229–261; *Meyendorff, Voyage*, p. 164–188.)

BOLBEC, a town of France, dep. Seine Inférieure, cap. cant. at the foot and on the declivity of a hill washed by the Bolbec, 18 m. E.N.E. Havre. Pop. 9802. This is a handsome thriving town. Having been almost entirely burned down in 1765, it was rebuilt on a regular plan. Houses partly of brick and partly of hewn stone; streets wide and well laid out, the principal being ornamented with two fountains surmounted by statues in marble. In the environs are a number of country-houses. It has a chamber of commerce, and a council of prud'-hommes; and was early, and is now, very extensively engaged in the spinning and manufacture of cotton. "Bolbec," says M. Dupin, "is advantageously situated for commerce, bringing raw cotton from Havre, and coal from Fecamp and Harfleur, while she sends her products to Rouen—the great mart for all sorts of cotton goods. The manufacturers of Bolbec unite a spirit of order and economy to activity and enterprise: their establishments are on a level with the progress of industry. The workmen are not all concentred in the town; many of them live in the adjoining country; they are in comfortable circumstances and happy." M. Dupin farther states, that there were, in 1827, in the district of which Bolbec is the capital, 18,172 work-people employed in the spinning and weaving of cotton, producing goods of the annual value of above 25,000,000 fr., or £1,000,000 sterling. (*Forces Productives et Commerciales de la France.*) Exclusive of cotton, it also produces various descriptions of woollen and linen goods, and has tanneries, dyeworks, &c. There is here no local tax or *octroi* on the goods imported into the town. (*Hugo*, art. *Seine Inférieure; Dict. Géog.*, &c.)

BOLGARY, or OUSPENSKOI, a village of Russia in Europe, gov. Kasan, near the Wolga, 16 m. S.W. Spask. In its vicinity are the ruins of the ancient city of Boulghar, the capital of the Bulgarians. It was visited by Peter the Great in his expedition against the Persians in 1722, and has since been visited and described by Erdmann and others.

BOLI, a city of Asiatic Turkey, in Natolia, cap. sanjiak, 85 m. N.W. Angora; lat. 40° 36′ N. long. 31° 19′ E. Pop. 6000? It is situated on an eminence at the W. extremity of a rich and fertile plain, on or near the site of the ancient city, known to the Romans by the name of *Hadrianopolis*. The ruins of a castle stand on the summit of a small hill. It is a poor place, consisting of about 1000 houses, principally inhabited by Turks, with a few Armenians, but no Greeks. It has 12 mosques, a square or market-place, a public bath; is the residence of a pacha of two tails, and, as it lies on the direct road from Erzeroum to Constantinople, is a considerable thoroughfare for caravans. There are mineral baths within about four m. of the town, to which the Turks resort in great numbers. (*Kinneir's Journey in Asia Minor*, &c., p. 271.)

BOLIVAR, county, Miss. Situated in the W. part of the state, and contains 1700 sq. m. Bounded W. by Mississippi river. Watered by Sunflower r. It contained in 1840, 2414 neat cattle, 173 sheep, 2605 swine; and produced 42,350 bushels of Indian corn, 5015 of potatoes, 274,155 pounds of cotton. It had one school, 14 scholars. Pop.: whites, 384; slaves, 971; free-coloured 1; total, 1356. Capital, Bolivar.

BOLIVAR, p. t., Alleghany co., N.Y., 15 m. E. Angelica, 285 m. W.S.W. Albany, 312 W. It contains two stores, one fulling-mill, one grist-mill, three saw-mills, one school, 27 scholars. Pop. 408. The village has one store and about twenty dwellings.

BOLIVAR, p. v., capital of Hardeman co., Tenn., 162 m. S.W. Nashville, 847 W. Situated on the S. side of Hatchy river, a mile and a half distant from it. It contains a court-house, jail, three churches, one Methodist, one Baptist, and one Episcopal; two academies, and about 500 inhabitants.

BOLIVAR, p. v., capital of Polk co., Mo., 133 S.W. Jefferson city, 1068 W. Situated near a branch of Pomme de Terre river. It contains a court-house, jail, a Methodist church, and about 150 inhabitants.

BOLIVAR, p. v., capital of Bolivar co., Miss. Situated on the S.E. bank of Mississippi river, near the outlet of lake Bolivar.

BOLIVIA, or UPPER PERU, a republican state of S. America, comprised between lat. 9° 30′ and 25° 40′ S., and long. 58° and 71° W., having N. and N.W. the states of North and South Peru, E. Brazil and Paraguay, S. La Plata and Chile, and W. the Pacific ocean: extreme length, N. to S., above 1100 m.: do. breadth, above 750 m.: the area has been estimated at 318,000 sq. m. Poppig estimated the pop. at 1,200,000, but others estimate it at little more than half that amount. The Weimar Almanac gives the following statement, which, however, we rather incline to think, makes the population greater than it should be:

Departments.	Area in sq. m.	Pop.	Chief Towns.	Inhab.
1. La Paz . . .	39,856	380,000	La Paz . . .	48,000
2. Oruro . . .	8,400	80,000	Oruro	5,000
3. Potosi . . .	31,800	220,000	Potosi	30,000
4. Cochabamba .	55,120	250,000	Oropesa . . .	25,000
5. Chequisaca . .	84,344	175,000	Chuquisaca . .	15,000
6. Santa Cruz de la Sierra .	148,400	25,400	S. Lorenzo de la Frontera	10,000
Total .	318,000	1,080,000	. . . . .	133,000

Chuquisaca is the capital city and seat of government.

Surface, Mountains, &c.—This large tract of country presents, in its various divisions, very different conditions of surface, elevation, and climate. On the W. it is traversed by lofty mountains, while on the E. it stretches out into immense plains. The Andes, which enter Bolivia at its S. extremity, give off, near lat. 24°, a lateral E. range of no great elevation, which forms the boundary for a considerable distance between Bolivia and La Plata. About lat. 20° the Andes divide into two great chains, which run parallel to each other to between lat. 14° and 15° S., where they again unite. The farthest W. of these chains is called the Cordillera of the Coast, or of the Andes, and the farthest E., the Cordillera Real: including the intermediate country, they occupy a breadth of more than 230 m. N. of lat. 18°, and S. of that parallel of upwards of 300 m.; and cover at least 100,000 sq. m. of surface, which, however, is partly in Peru. Many lateral ridges, sent off by the Cordillera Real, cover the deps. of Cochabamba and Chuquisaca, together with a part of those of Potosi and St. Cruz de la Sierra: the principal of these transverse ridges branches off from the Cordillera about lat. 17° 10′, and, running N. past the city of Cochabamba, terminates within a few leagues of the town of St. Cruz de la Sierra. The summits of the W. Cordillera generally appear in the form either of a truncated cone, or of a dome, and are often volcanic: those of the E. Cordillera, as seen from the W., offer a succession of sharp, ragged peaks and serrated ridges, and are not volcanic, but in many parts highly metalliferous. The declivity of the Bolivian Cordillera is rapid on either side, but particularly so on the E.: the principal elevations of both Cordilleras are about lat. 15° 19′ S., where that of the E. chain is 24,200 ft. (Illimani); of the W., 22,000 ft. above the level of the sea. Many of the passes across both chains are between 15,000 and 16,000 ft. in elevation, or near the limit, in this region, of perpetual snow; while beneath the peaks of the Illimani there is a gorge, or valley, perhaps 18,000 ft. below the neighbouring summit, probably the greatest difference in elevation that has ever yet been observed between any two similarly contiguous points. (*See* ANDES.)

In the E. the country, which is, in many parts, very little above the level of the sea, is watered by the Beni, Mamore, Ubahy, Pilcomayo, and other considerable rivers: a few isolated ranges of hills are scattered over it, and in its

S. part is the watershed between the sources of the Amazon and La Plata rivers, both of which receive considerable affluents from Bolivia; but neither this last-named tract, nor the isolated hills previously mentioned, appear to rise to any great height above the sea. The whole region is extremely fertile; but it is nearly in a state of nature, and covered with vast primeval forests. The desert of Atacama (*see* ATACAMA) occupies the country between the Andes and the Pacific: it extends for about 250 m. along the coast, having a variable breadth of from 30 to 60 m. It is never refreshed by rain, and is almost as sterile and worthless as the Sahara. The surface, which is undulating, and in parts hilly, is covered with loose sand; the only habitable parts being the narrow strips along the banks of the rivers.

There are numerous valleys in the Andes; the principal is the great valley of Desaguadero between the two Cordilleras, extending from lat. 15° 5′ to 19° 30′ S., having an area (including the lake of Titicaca in its N. part) of 16,000 geographical sq. m.

Rivers, Lakes, &c.—The principal rivers are the Beni, Mamore, and the others which unite to form the Madeira, the largest affluent of the Amazon, and which run mostly in a N. direction; and the Pilcomayo, one of the chief branches of the Plata, which waters the S. part of the country, flowing mostly in an E. direction. Bolivia includes the E. and S. shores of the largest accumulation of fresh water in the S. American continent—the lake Titicaca, which occupies an area of 4600 sq. m., at the height of 12,795 ft. above the ocean, an elevation superior to that of the highest summits of the Pyrenees. (*See* TITICACA.) It contains numerous small islands, from one of which, celebrated for some Peruvian ruins, it derives its name: the only outlet for its waters is the river Desaguadero, running from its S.W. extremity through the valley to the lake of the same name; which latter, having no outlet, is kept at the same level by spontaneous evaporation. In the E., lakes are numerous, and some of them, as those of Ubahy and Grande, 30 or 60 m. in length; but they have been little explored by Europeans.

Climate.—Rain, as already stated, never, or but very rarely, falls on the coast; in the plains to the E. of the Andes, the rainy season, which is identical with summer, lasts from Oct. to April, during which the rains are almost continuous, and the rivers inundate the country to a great extent. In the plains the climate is excessively hot, and far from healthy; but in the valley of the Desaguadero, 13,000 ft. above the level of the sea, it is temperate, and snow falls in Nov. and April, at the beginning and end of the summer season. The winter, from May to Nov., in the Desaguadero valley, is extremely dry, and although the nights are cold, the sky is serene and cloudless. Tremendous hail and thunder-storms are frequent on the mountains, and earthquakes on the coast. The reflection of the sun on the snow produces, in the higher regions in winter, a temporary blindness: few remarks as to comparative salubrity have met our eye, but the banks of the Beni have been particularized as remarkably healthy.

Minerals.—Gold is found in many places, especially on the E. declivity of the E. Cordillera, and in the sands of all the rivers which fall from that range into the Beni or its branches. Every one has heard of the riches of the silver-mines of Potosi, but it is supposed that they are nearly exhausted, and, at all events, they are now comparatively neglected. (*See* POTOSI.) Copper abounds at Corucuero, &c.: ores of lead and tin, salt, brimstone, nitre, and other volcanic products are also found.

Vegetables.—The mighty forests which cover the banks of the E. rivers abound in the finest timber, fit for every purpose of ship-building, carpentry, &c. The coca of Apolobamba, Moxos, &c., is infinitely superior to that of Guyaquil (Ecuador): it is used by all classes, and is celebrated for its nutritious and restorative qualities. Tamarinds, the chirimoya, oranges, lemons, figs, sugar-cane, pine-apples, plantains, &c., flourish in profusion on the banks of the Beni.

Cascarilla, indigo, cotton, rice, coffee, grain, cinchona, copaiba, sarsaparilla, and other valuable drugs; gum-elastic, vanilla, dye-woods, tobacco, and canes of various kinds, are all produced in an extraordinary abundance E. of the Andes. Among other products, there is a species of cinnamon, called *canela de clavo*, said to differ only in the greater thickness of its bark, and darker colour, from the true cinnamon. The vegetation of the Desaguadero valley is peculiar: it has no trees, but the lower districts, if uncultivated, are covered with a very fine turf. There are here extensive plantations of quinoa (*Chenopodium quinoa*, Linn), and of potatoes, which are found wild on the adjacent hills; but it does not ripen the drier European grains, nor are there any peculiar seasons for sowing or harvesting, both these operations being carried on consentaneously. In the narrow strips of land along the rivers that run through the desert of Atacama, maize is raised, with excellent fruits, cotton, sugar-canes, and the plant called *Arundo donax*.

Animals.—The tapir, jaguar, leopard, and six or seven sorts of monkeys, inhabit the banks of the Beni: guanacos, alpacos, a kind of hare, and a small animal of the family of *Redentia*, whose burrowing often renders travelling on horseback unsafe, are found in the Desaguadero valley. Parrots, a bird of beautiful plumage, as well as a multitude of singing birds, including the thrush and whistler; several kinds of turkeys, &c.; several species of *Amphibia*, and an abundance of fine river fish, are met with in Bolivia: the E. plains are infested with myriads of annoying reptiles and insects. Vast herds of horned cattle feed on the banks of the rivers; horses, asses, and mules, are the other domestic animals: the climate of the plains is too hot for sheep.

People.—More than three fourths of the inhab. are said to be aboriginal Indians, who are divided into a great variety of tribes, presenting considerable differences in their physical and mental endowments, disposition, progress in civilization, &c. Some, on the Beni, are wild and warlike, and go naked, even the women wearing nothing but a few leaves tied round the waist; another tribe, the Maropas, in the immediate vicinity of the former, although also a warlike and proud race evince considerable ingenuity and aptness for many sorts of work: they manufacture beautiful cloths; are pretty good carpenters; and are said to show a marked taste for music and painting, in which they were initiated by the Jesuits. The Indians are excellent sailors on their own rivers, and very dexterous in the management of their canoes, which are often 50 or 60 ft. in length, and of considerable burden; in these they frequently make long inland voyages, subsisting wholly on the wild animals and vegetables they may happen to meet with. Some of the Mossetene tribes on the Beni display a remarkable acquaintance with the medicinal qualities of plants, which they administer in cases of sickness. These, as well as some other tribes, are peaceable, friendly to strangers, and free from superstition. Not a few Indians, especially in the Desaguadero valley, and on the coast, where the Quichua language is spoken, have been converted to the Catholic faith; such as have embraced Christianity, instead of going naked, or leading a roving life, wear a light dress of cotton, have fixed dwelling-places, and apply themselves to agricultural pursuits, though in these they are said to make but little progress. The foreign settlers are mostly of Spanish descent in the mining districts, and the valleys of Cochabamba and Cachy Picho: those of the pure African race are few; but those of mixed blood are numerous on the coast.

Manufactures chiefly consist of cottons, the best of which are made at Oropesa; woollens of the hair of the llamas and alpacos, the best at La Paz; hats, of the wool of the vicuna, at St. Francisco de Atacama; glass at Oropesa; vessels of silver wire in the mining districts; fans, parasols, plumes, &c., of the feathers of the American ostrich, by the Indians.

Commerce.—The commerce of Bolivia is at present very inconsiderable. This does not arise so much from the low state of industry, or the apathy of the people, as from the difficulties they have to encounter in bringing their produce to market. They have not yet learned to avail themselves of the means afforded by the great rivers of S. America for opening an intercourse with the ports on its E. shore. At present, nearly all the commodities brought from Bolivia to Europe come through the ports on the Pacific, to reach which they have to be conveyed first by toilsome passages against the currents of the rivers to the foot of the Cordillera, so fatal by its rigorous climate to the Indians of the plains, and then across the Andes, the passage of which has been considered by Condamine as equivalent to 1000 leagues of transport by sea. The country W. of the Andes, besides being a desert, has no really good harbours, and is traversed by but one road, that from Oruro to Cobija (the only Bolivian port), and that is practicable only for mules and llamas. Cobija, though it has been made a free port, is, owing to these disadvantages, little frequented, the Bolivians preferring to obtain their small imports of foreign commodities through Arica and Tacna, notwithstanding they are there charged with a transit duty of 3 per cent., imposed by the government of Lower Peru, through whose territory they have to pass. The products of Chiquitos and Moxos are transported over the double range of the Andes to Lima, a distance of more than 900 leagues; or if sent to Europe by way of Buenos Ayres, the distance, not to speak of the difficulties of the road, cannot be calculated at less than 600 leagues. Nothing but bullion and gems can repay the enormous expenses of transport on beasts of burden over such immense distances; and, in fact, the exports of Bolivia are nearly altogether limited to the precious metals, and different kinds of woollens and hats.

The imports, which are very few, are chiefly iron and hardware, silk, and a few articles of finery.

But, notwithstanding this unfavourable state of things, the E. and most fertile portion of Bolivia is traversed by the Madeira, and other navigable affluents of the Amazon, on the one hand, and by the Pilcomayo, and other affluents of the Paraguay on the other; so that, if the extraordinary facilities which these great rivers afford for penetrating into the interior of S. America, be ever made use of, the products of Bolivia will meet with a ready and advantageous outlet; and her all but boundless capacities of production, which, at present, can hardly be said to be in any degree availed of, will receive a stimulus, of the influence of which we can form no adequate idea.

Within the Brazilian dominions, not very far from the Bolivian frontier, a short break, of 3 m. only, separates a tributary of the Amazon from one of the Plata river: were these streams connected by a canal, there would be a continous water communication, for the most part navigable, through the heart of S. America, from Buenos Ayres, in lat. 35° S., to the mouth of the Orinoco, in nearly 9° N! In 1835 the Bolivian government were represented as endeavouring to promote internal traffic, by offering grants of land to persons settling, and considerable premiums for the establishment of steam navigation on the S. affluent of the Amazon; but we have not learned whether these have had any considerable success.

The public revenue in 1832 is said to have amounted to 1,700,719 dolls.; the public expenditure to 1,586,096 dolls.; and the total public debt in the same year to no more than 1,500,000 dollars.

The standing armed force is limited to 2000 men; the country is divided into three bishoprics, but there is no established church. There is a university in the capital and other public academies.

History, Constitution, &c.—This country, under the name of Upper Peru, formed, previously to the battle of Ayacucho in 1824, a part of the Spanish viceroyalty of Buenos Ayres. The republicans, under Gen. Sucre, having then defeated the royalists, the independence of the country was secured. Its present name was given to it in 1825 in honour of the liberator Bolivar, who, on being requested, drew up a constitution, which was adopted in the year following. This constitution, which was exceedingly complicated, vested the executive power in a president for life, with the privilege of naming his successor; and the legislative functions in three bodies, a senate, tribunes, and censors. The code and constitution of Bolivar were soon after abandoned; but the legislative powers, are still, nominally at least, vested in the three bodies above named; and the executive power is in the hands of a president. Generals Sucre, Velasco, and Blanco, successively filled this last office, which is at present held by Gen. Santa Cruz elected in 1829. (*Pentland, Parish, Miller, Haenke, &c.*, in *Geogr. Journal*, v., vi., *&c.*; *Mod. Trav.*, xxviii.; *American Almanac*, 1839, *&c.*

BOLKHOF, a town of Russia in Europe, gov. Orel, cap. distr., on the Nougra, 36 m. N. Orel. Pop. said to exceed 10,000. It is well built of wood, has numerous churches, with manufactures of hats, gloves, and stockings, and a considerable trade in hemp, linseed oil, tallow, and hides. (*Schnitzler, La Russie, &c.*, p. 352.)

BOLLENNE, a town of France, dép. Vaucluse, cap. cant., 24 m. N. Avignon. Pop. 4744. It stands on the declivity of a hill, and has filatures of silk and dye-works. Various remains of antiquity have been found in the vicinity.

BOLOGNA (an. *Bononia*), a city of N. Italy, the second in rank in the Papal States, cap. leg. same name, between the rivers Reno and Savena, on the verge of the valley of the Po, and at the foot of the hills forming the commencement of the Apennine chain; lat. 44° 30′ N., long. 11° 22′ E.; 22½ m. S.E. Modena, 25 m. S.W. Ferrara, and 399 ft. above the level of the Adriatic. It is nearly 1¾ m. in length (1500 toises) by 1¼ m. in breadth (1073 toises), and 4 m. in circ.; it is walled; and divided into four quarters. Pop. 69,000. Except one square, it is indifferently built; streets crooked and narrow; houses mostly three stories high, in a palace style of architecture, chiefly of brick fronted with stucco, with deep projecting roofs, and generally surrounded with arcades. The *Piazza Maggiore*, or principal square, boasts of many fine buildings; among them are the *Palazzo Publico*, the residence of the cardinal legate, and seat of the courts of justice: in the centre of the square is a fountain, adorned with a statue of Neptune, reckoned one of the best modern statues in Italy, the work of Giovanni di Bologna. In the middle of the city stands the two leaning towers, inclining in different directions: that of Asinelli, 320 ft. high, inclines about 3½ ft.; Garisenda, 145 ft. in height, 8 ft. It is said that from the top of the former 103 cities may be seen. Bologna has 74 churches, 35 convents for monks, and 38 for nuns. The cathedral, built A.D. 432, has the meridian line by Cassini traced on its floor, and possesses an Annunciation (the last work of Lodovico Caracci), and other fine paintings. The church of Madonna di San Luca, 3 m. distant, has a covered walk to it the whole way from the city. The university, one of the oldest and most celebrated in Italy, owes its origin to the Emperor Theodosius, A.D. 425, and was restored by Charlemagne; it has a library of 150,000 vols., and was formerly attended by many thousand students; but it has declined in celebrity, and at present is not attended by above 1000. There is another public library, the legacy of a clergyman, containing 83,000 vols. and 4000 MSS.: there are also cabinets of mineralogy, natural history, and other physical objects; academies of sculpture, science, music, and the fine arts: the whole city abounds in pictures, statues, and other works of native artists. There is a public school for the poorer classes, where the rudiments of education, with Latin, arithmetic, singing, drawing, &c., are taught gratuitously; 9 hospitals; a *monte di pietà*; and many other benevolent institutions. The manufacture of crape, for which the city has been long famous, and which was at one time very extensive, has now declined, so as not to be worth more than 30,000 crowns a year. There are also manufactures of silk, glass, sulphuric acid, nitric ditto, kid gloves, wax candles, musical instruments, paper, cards, *mortadella* sausages, celebrated all over Europe, &c., &c., exclusive of preparations of wine, oil, hemp, flax, and other natural produce, as stones, &c. Bologna is an archbishop's see, and has been so since the 4th century. The city and leg. are at present governed by a resident cardinal-legate; the court of appeal for the four provinces of Bologna, Ferrara, Ravenna, and Forli, sits here, and consists of six judges. The Bolognese are courteous and affable, independent, and remarkable for their love of liberty; industrious, quick, ingenious; ardent alike in their friendships and enmities; the women handsome. The middle classes are well informed; they are fond of the casinos, or reading-rooms, conversazioni, and theatres, of which there are three. The higher classes are wealthy; the lower bold, turbulent, and noisy. The prevailing dialect is not in use elsewhere; there is a tendency to pronounce words with masculine terminations, and in other respects it is the coarsest in Italy. The proportion of illegitimate births is as 1 to 7. No Italian city, Florence excepted, has produced so many celebrated men in science and the fine arts. Bologna always assumed the title of "learned," and had the motto *Bononia docet* on its money and public buildings, as well as the word *libertas*. It has given birth to 8 popes (including Benedict XIV.), nearly 200 cardinals, and to more than 1,000 literary and scientific men and artists; among them the naturalists Galvani and Aldrovandi; the anatomists Mondino and Malpighi; the astronomer Marsigli; the mathematicians Manfredi and Canterzani; the brothers Zanotti, Ghedini, and Guercino; and the painters Francia, Guido, Albano, Barbieri, Domenichino, the three Carracci, Zambeccari, Aldini, &c. The air of Bologna is pure, but subject to sudden changes, which produce frequent inflammatory diseases. Its environs, both on the hills and in the plain, are studded with a number of country residences in a richly productive soil. For the natural productions of this region, *see* PAPAL STATES.

This city, originally built by the Etruscans, was anciently called *Felsina*; it was subsequently occupied by a Gallic tribe, the *Boii*, who designated it *Bononia*. It received a Roman colony A.U.C. 653. A Christian church was built here so early as the 3d century. Alaric besieged, but did not take it: it escaped Attila, and formed a part of the exarchate of Ravenna. Pepin gave it to the Holy see, to which it belonged during the Carlovingian dynasty; after which it was governed by its own magistrates; it was next governed by feudal nobles; but these having abandoned their pretensions, and been admitted as private citizens, it became a republic, extending its rule over all Romagna as far as Rimini. In the 13th century it fell again under the Holy see to which it was finally annexed in 1506. In 1796 it was taken by the French, but restored to the Popedom in 1815, to which it still belongs; although at different periods revolts have occurred, especially one in 1831, suppressed by Austrian interference. (*Rampoldi Corografia dell' Italia*, p. 267; *Schutz, Allgem. Erdkunde*, xxii., 436–440; *Bowring's Report on Statist. of Pontif. States, &c.*)

BOLOTANA, a town of Sardinia, bishopric of Alghero, 16 m. W. Bosa, near the centre of the island. Pop. 2274. It is situated on a hill, and the air is said to be good. The contiguous country is productive of corn and pasture. (*Smyth's Sardinia*, p. 330.)

BOLSENA (an. *Vulsinium*), a town and lake (*Lacus Vulsiniensis*) of the States of the Church, deleg. Viterbo, 11 m. W.S.W. Orvieto. Pop. 2000. The town stands near the N. shore of the lake, to which it gives its name. It is surrounded by a high wall, flanked with towers and a deep ditch; but it is remarkable only for the ruins, in or

near it, of the temple of the Etruscan goddess Nortia, a granite sarcophagus, ornamented with bas-reliefs, and other remains of antiquity. This was anciently a place of great wealth and luxury. Pliny says (*Hist. Nat.*, lib. xxxiv., § 7) that when taken by the Romans, anno 266 B.C, it contained no fewer than 2000 statues. Having been destroyed by the conquerors and rebuilt, it was noted at a later period as the birthplace of Sejanus, the minister of Tiberius.

The lake of Bolsena continues, as of old, to be surrounded by finely-wooded hills,

Aut positis nemorum inter juga Volsinii.—*Jun. Sat.*, iii., 191.

It is of an elliptical shape, about 12 m. long. by 8 m. in breadth; its depth is various, but near the banks it is generally shallow; it is well stocked with fish. It has two islands, which, in Pliny's days, were believed to be floating. Its superfluous waters are carried off by the river Marta, to which it gives birth. The country round this lake is now become exceedingly unhealthy; a circumstance which has most probably occasioned the decay of Bolsena, as well as the total ruin of several other cities, that once gave life and animation to its banks. (*Cramer's Ancient Italy*, i., 221; *Conder's Italy*, iii., 84, and other authorities.)

BOLTON, or BOLTON-LE-MOORS, a flourishing bor. and manufacturing town of England, co. Lancaster, hund. Salford, par. Bolton, on the Croale, an affluent of the Irwell; 170 m. N.W. by N. London, 25 m. E.N.E. Liverpool, and 10 m. N.W. Manchester; lat. 53° 33′ N., long. 2° 26′ W. The progress of pop. has been as follows:

	1773.	1801.	1811.	1821.	1831.
Bolton, Great . .	4,568	12,549	17,070	22,037	24,299
Bolton, Little . .	1,036	4,576	7,079	9,258	12,526
Tonge with Haulgh .		1,158	1,402	1,678	2,201
Total . .	5,604	18,283	25,551	32,973	43,397
Bolton parish . .	. .	29,826	39,701	50,197	63,034

The appearance of the town scarcely corresponds with its real opulence and importance, a considerable portion of the houses being crowded in narrow irregular lanes, which are but indifferently paved and sewered. Within the last 20 years, however, great improvements have been effected, and are still in progress; flagged footpaths have been formed in most of the streets, and the whole town has been completely lighted with gas; 3 new squares have been formed; and a considerable number of handsome houses and villas have been erected, mostly near the S. entrance. It is well supplied with excellent water, from a reservoir covering an area of 15 acres, placed at such an elevation as admits of this indispensable fluid being conveyed into the upper rooms of every house in town. This important improvement was effected by a company, under an act obtained in 1824, at a cost of £40,000. The church, on an eminence at the E. end of Great Bolton, is a plain ancient structure with a low tower, built of the dark red sandstone of the district. There are besides this, three episcopal chapels of ease; two in Little, and one in Great Bolton: the last, an elegant Gothic edifice, built by the parliamentary commissioners in 1826, cost £13,400, and has 923 free sittings. The Methodists of various denominations, have seven places of worship; the Baptists, Independents, and Unitarians, have each two; and the Catholics, Friends, and Swedenborgians, one each. It has a free grammar school, founded in 1641, with an annual revenue of about £485: Ainsworth and Lempriere, compilers of the well-known dictionaries that bear their names, were masters of this school. Three other charity schools educate, in all, about 230 children, at an expense of £1200 a year, defrayed by subscription. The Sunday schools of the different sects educate upwards of 10,000 children. The other charities are—Gosnel's, which consists of lands producing £80 a year, 2-3ds of which is appropriated to a church lecturer, 1-6th to the grammar-school, the rest to the poor; Hulton's lands and houses producing £277 a year, for a church lecturer, apprenticing poor boys, and providing a classical teacher; and various smaller ones, amounting in all to £67 a year, distributed among the poor. The above all belong to Great Bolton, the charities peculiar to Little Bolton being quite inconsiderable. But all parts of the town participate equally in the munificent donations left by Mr. Popplewell, who died in 1829, and his sisters, amounting to £27,700 three per cent. consols, for the promotion of religion, learning, and charitable purposes.

Bolton has an exchange; a town-hall in Great, and another in Little Bolton; two cloth-halls, a theatre, assembly and concert rooms; a dispensary, established in 1825, and three public libraries, all well-built, modern structures. Two weekly newspapers, the *Bolton Chronicle* and *Bolton Free Press*, are published in the town.

The progress of Bolton has been greatly promoted by its command of coal, and its improved communications. The Bolton Canal extends to Manchester (12 m.), and a branch from it to Bury; a railway from Bolton to Leigh (8 m.), and thence to Kenyon, where it joins the Liverpool and Manchester Railway, was completed in June, 1831. A railway along the canal banks, *via* Bury, to Manchester, has also been formed since 1833. The weekly market for general provisions is held on Monday, and is well supplied; there is also a market for store cattle, held every alternate Monday, between 5th Jan. and 12th May, and two annual fairs, one on the 30th and 31st July, the other 13th and 14th Oct. The first day of each is for cattle; the last for hardware and toys.

The entire consequence of Bolton is derived from its manufactures, which were carried on at a very remote period. As early as 1337, some Flemish clothiers established themselves in the town; and in the reign of Hen. VIII. it was famous for its cottons, that is, for a peculiar description of *woollen* goods that went by that name. Cotton goods, however, began to be produced in Bolton, in considerable quantities, about the middle of the last century. But the real prosperity of the town dates from 1770–1780, when the wonderful inventions of Arkwright, himself a native of Bolton, began to come into operation. From that epoch its progress has been rapid in the extreme; and it is now a principal seat of the cotton manufacture. The articles chiefly produced are—muslins, superfine printing calicoes, quiltings, and counterpanes, dimities, salteens, jeans, cotton shawls, &c. The average quantity of cloth bleached in the parish is estimated at between 6,000,000 and 7,000,000 pieces. The principal manufacturers have warehouses in Manchester, where they generally attend on the Tuesdays, to effect the sale of their goods; but sales are also effected on other days, though not to the same extent. In the town and its immediate vicinity, there were, in 1835, 44 cotton-mills, employing in all 7620 persons, and worked by 41 steam-engines and 10 water-wheels, of the aggregate power of 1419 horses; with 1085 power-looms weaving calico, and 546 weaving fustian; 1 large flax-mill, employing 480 persons; 23 bleacheries, 12 iron-foundries, some of them on a very extensive scale, and employed in the construction of steam-engines, mills, and machinery of various kinds; with paper-mills, flax and saw-mills, and chemical works, &c. In these, and the various coal-mines (of which there are about 30 in work), upwards of 200 steam-engines, having an aggregate power of upwards of 2500 horses were employed, besides a number of water-wheels, worked by the river; to increase and equalize the power of which, reservoirs, covering an area of 136 acres, have been formed on the adjoining hills; whence, in seasons of drought, the stream is supplied.

There is a joint-stock banking company at Bolton; a private banking company, and branches of some other banks.

We have already noticed the fact, that Sir R. Arkwright, the inventor, or, at all events, the introducer, of the spinning frame, was a native of Bolton. He was the youngest of a numerous family, and was brought up to the humble occupation of a barber! With the exception, perhaps, of Watt, there is no individual to whom the manufactures of this country owe so much. Crompton, the inventor of the mule jenny, was a native of Bolton parish.

The Reform Act conferred upon Bolton the privilege of returning two mem. to the H. of C. The limits of the parliamentary bor. and municipal bor. coincide, the population of both, in 1831, being estimated at 42,395; the number of houses being 7633, of which 1612 were worth £10 a year and upwards. At present the pop. of the bor. is probably not under 50,000. Registered electors, in 1837–38, 1405.

It is governed by a mayor, aldermen, and councillors, assisted by a recorder: the mayor is chosen by the aldermen; these, by the councillors; and the councillors, by such of the burgesses as are qualified to vote for members of parliament. Previously to the municipal act, the government of the two towns was distinct; the police of each having been managed by portreeves and constables, annually elected at the respective courts leet, in Oct.; and the paving, cleansing, and lighting of each, by trustees incorporated under distinct local acts. Petty sessions for the bor. are held every Monday and Thursday. Bolton is the centre of a union under the Poor Law Amendment Act which comprises twenty-six other townships and chapelries. The poor-rates levied in 1836, in Great Bolton, were £3070 7*s.*; in Little Bolton, £1734 7*s.*

The parish within which this borough is comprised extends over 31,390 acres, and includes nineteen other townships, chapelries, and hamlets; the entire population, in 1831, being 63,034. It is geologically situated in a large coal formation, and its surface is for the most part of a peaty nature. It contains numerous quarries, some of excellent flagstones, a few of roofing slate and veins of lead, none of which are worked at present. Three small streams (the Tonge, Croale, and Bradshaw) take their rise in the hills that overlook the town. It contains a few well-

wooded and romantic valleys, but its general aspect is barren and cheerless, with scarcely a tree visible. About one fourth part is under the plough; of the rest no inconsiderable portion consists of unreclaimed mosses; and though the land increases in value near the town, such is not the case in its northern townships. Bolton is a place of considerable historical interest; its inhabitants from a remote period were distinguished for their archery, which is still continued as a sport, there being a target ground near the E. entrance of the town, for the use of a society of archers, who shoot for prizes during the summer. The labouring classes have long been accustomed to settle their quarrels by single combat; or by what is called an "up and down" fight, which includes the right of *kicking* and *throttling!* Death has often followed from these brutal contests, which used to take place at all races, fairs, and such like occasions; but the practice is now, happily, on the wane, and will, it is to be hoped, be shortly known only as matter of history.

At the commencement of the last civil war, the inhabitants took the parliamentary side, and held out till 1644, when, after a desperate struggle and several repulses, the town was at length taken by the Earl of Derby, who held it till after the battle of Worcester. He was subsequently taken and beheaded here. (*Baines's Lancashire; Boundary Reports, and Muncipal ditto, &c.*)

BOLTON, p. t., Chittenden co., Vt., 15 m. E.S.E. Burlington, 19 m. N.N.W. Montpelier, 521 W. Bounded S. by Onion or Winooski river. It contains four saw-mills, three schools, 70 scholars. Pop. 470.

BOLTON, p. t., Worcester co., Mass., 33 m. W. Boston, 419 W. Watered by branches of Concord and Nashua rivers. It contains four churches, one Congregational, one Unitarian, one Baptist, and one Friends', three stores, three grist-mills, four saw-mills, two tanneries, eight schools, 298 scholars. Pop. 1186.

BOLTON, p. t., Tolland co., Ct., 14 m. E. Hartford, 350 W. Watered by branches of Hop river. It contains a Congregational church, two stores, one fulling-mill, five saw-mills, one distillery, five schools, 220 scholars. Pop. 739.

BOLTON, p. t., Warren co., N. Y., 73 m., N. Albany, 446 W. Schroon branch of Hudson river bounds it on the W., and Lake George on the E. It contains two stores, one grist-mill, thirteen saw-mills, one powder-mill, one fulling-mill, eight schools, 279 scholars. Pop. 937.

BOMBA, a village of Naples, prov. Abruzzo citra, cap. cant., on the Monte Pallano, watered by the Sangro, 18 m. W.S.W. Vasto. Pop. 2602. Its parish church is said to be one of the handsomest in the province. On the mountain on which Bomba is situated are the ruins of walls, gates, and towers, on the most gigantic scale. They are formed of enormous blocks of stone, united, without cement, after the Etruscan fashion. Large caverns have also been excavated in the rock, and coins of the most renowned cities of Magna Græcia have been found among the ruins. Nothing authentic is known with respect to the history of these extraordinary ruins. (*Del Re Descrizione de l'Abruzzo*, ii., p. 431.)

BOMBAY (PRESIDENCY OF), the most westerly and smallest of the three presid. of British India; between lat. 14° 18' and 23° 36' N., and long. 71° 48' and 76° 25' E.; having N.W. and N. the Guicowar's dom.; N. E. those of Scindia; E. those of the Nizam; S. Mysore and the Madras presid.; W. the ocean and the territ. of Goa, exclusive of the detached territ. around Wyrng and Kurdla, surrounded by the Nizam's dom.: area, 68,074 sq. m. Pop. 7,000,000. It nearly encloses the territ. of the rajah of Satarrah, and the distr. of Baroda, Cambay, and others belonging to the Guicowar, and at its E. extremity, approaches within 50 m. the ceded Nerbudda distr. of the Bengal presid. It is divided into the following collectorates:

Collectorates.	Sq. m.	Pop.	Collectorates.	Sq. m.	Pop.
Bombay Island .	18	230,000	S. Concan . .	6,770	656,857
Poonah . . .	8,231	558,313	N. Concan . .	5,500	387,264
Ahmednuggur .	9,910	666,376	Surat, &c. . .	1,449	454,431
Candeish . . .	12,527	478,457	Baroach . . .	1,351	239,527
Dharwar . . .	9,122	838,757	Ahmedabad .	4,972	528,073
S. Jaghireders .	2,978	778,183	Kaira . . .	1,827	484,735
Sattarah, &c. .	6,169	736,234	Total . .	68,074	6,940,277

Aspect, &c.—The N.W. parts of this presid. are more level than the S. and E.: Ahmedabad, Kaira, and Baroach are well watered, and some parts among the best cultivated and peopled lands in India; Surat is more undulating, its E. part hilly and jungly, and much of it waste; Candeish is interspersed with low barren hills; some spots are in good cultivation, but much is covered with jungle; Ahmednuggur abounds in rocks, hills, and waters; Poonah is irregular and mountainous, but with many fertile valleys; Dharwar is an elevated table-land; and the Concan a long narrow tract stretching for 225 m. along the sea coast, having E. a chain of rocky hills, formerly crowned by a number of fortresses, and W. a low, straight shore, broken into numerous bays and harbours, till lately affording a resort to pirates, by whom it had long been infested.

The mountain ranges in the S. belong to the W. Ghauts; in Candeish, to the Sydaree (a continuation of the former) and Sautpoora ranges; and N. the Nerbudda, they are branches from the Vindhyan chain. The principal rivers are the Nerbudda, Taptee, Mhye, and Saubermuttee, falling into the gulf of Cambay, in the N.; in the central parts the earlier branches of the Godavery and Beemah; and in the S. the Kistnah and Toombuddra.

Porphyritic trap, extending as far N. as Bulsaur, forms the inland hill ranges; sandstone, with many shells, and conglomerates containing fossils, are common in N. Concan and the N. parts of the presid. A primitive range of red sandstone formation, extending from Delhi, terminates at the head of the gulf of Cambay. The great basaltic district of India, which commences at Nagpoor, occupies the whole coast from between Goa and Bombay to the head of the Cambay gulf; which coast has been the theatre of volcanic phenomena, earthquakes, and tremendous whirlwinds, even within the last few centuries. Basalt and amygdaloid, yellowish porphyry, and green claystone, are found at Salsette and Elephanta, and near Rattanpoor an abundance of cornelian stones, imbedded in red gravel. A black soil, well suited to the culture of cotton, is widely diffused throughout the centre of this presidency.

Climate.—The mean temp. at Bombay, about the centre of the presid. is between 81° and 88° Fahr. But though Bombay be rather unhealthy, the Concan and Malabar coast, generally, is by no means so, except in the marshes below the Ghauts. The climate of the N. distr. is reckoned among the worst in India: the thermom. in the hot season rises sometimes to 116° Fahr.; and Europeans are affected with fever, ague, and other tropical complaints. Some amelioration must, however, have lately taken place, or greater care been adopted in guarding against it; since, between 1826 and 1832, the number of dead and invalided among the troops serving in the Bombay presidency had decreased from 357 to 126, while the average number of Europeans had been augmented from 3000 to 3700 nearly.

Vegetable Products.—Teak of very good quality grows on the Ghauts and lower hill-ranges, and in some parts poon is plentiful; the district of Surat abounds with the wild date and babool. Cocoa-palms cover an immense tract of sandy land, bordering the coast of the Concan; and various other trees of the same family are abundant. The N. part of this presidency is remarkable for the great variety of fruits it produces; the district of Ahmedabad, in particular, is noted for the size of its mango-trees, and their fruit. Rice, cotton, and the other chief articles of culture, will be mentioned presently.

Animals.—Wild elephants are met with in the Ghauts, that is, in the woody chain of mountains running along the W. side of Southern India; and tigers, panthers, leopards, and hyænas, are numerous in the jungles and wooded parts; buffaloes, wild boars, deer, antelopes, jackals, generally so, and in the N. the flying macanco is found. Birds in great variety inhabit this part of India.

People.—Besides Hindoos, Mohammedans, Parsees, Jews, and Europeans, many distinct tribes, some of whom are supposed to be aboriginal, inhabit this presidency. Bheels live E. of the Ghauts, from the hills near Poonah to the banks of the Nerbudda and Taptee; the Ramooses meet these S. of Poonah: W. of the Ghauts and around the gulf of Cambay, Koolies, a very barbarous tribe, reside; Catties, Aheers, and Babreesa, are found in Kattywar; Dhooblas and Koombies in Gujrat, &c. All these are met with in the Bombay British army. The Jain sect is very numerous in the Gujrat districts; and nearly all the Parsees in India have settled within the limits of the Bombay presidency. A tribe, called Boras, reside in the district of Surat and its neighbourhood, who are Mohammedans as to religion; but in all other respects are similar to Jews.

Agriculture and Cattle.—Rice and cotton are the chief articles of culture; compared with these, the other great staples of Indian produce are grown only in insignificant quantities. An important item in the public revenue is the sum derived from the transit duties on opium; but none of this drug is grown within the limits of the presidency, the whole being brought from Malwah, where the soil is peculiarly adapted for its culture, and where the native princes are under engagements to dispose of the whole of the produce to the British authorities. Rice is largely grown in the central parts of the presidency; and in S. Concan it constitutes 4-5ths of the whole crops. The culture of cotton is extensive, and the produce is an important article of export. The cotton of this side of India is decidedly superior to that of the other; that grown in Baroach is particularly good. Sugar and indigo are cultivated in Candeish; where the first occupies a considerable extent of country,

and where late reports speak of an intention on the part of government to erect sugar-mills. The indigo of Candeish has been said to be as fine as that of Bengal, but wanting in depth of colour. The mulberry-tree grows in some parts with immense rapidity, and great exertions are being made by various private individuals to introduce the culture of silk, and to render it important as an article of trade. Wool has lately been imported in considerable quantities from Bombay, and efforts are making by the government to improve the breed of sheep, by importing stocks into the presidency from Caubul, Sinde, and Cutch, and crossing them with Merino and Saxon breeds from the cape of Good Hope. The cattle of Gujrat are of a remarkably large size, and in great request throughout India; at Surat there is a diminutive species of ox, 2 ft. only in height. S. of Surat the ox supersedes the horse for both draught and carriage: below the Ghauts the only other domestic animal is the buffalo. Poultry is not generally kept by the natives.

Public Revenue.—The whole of the Bombay territories, excepting Surat and Kaira dist., where the ryotwarry settlement is established, are assessed under the village land-revenue system. By this system an arrangement is entered into with the heads of the different villages, to which the various tracts of land belong in common. These heads are called *mocuddims* or *potaus*, and either by descent, or sometimes by personal influence, have obtained a superiority in the village, and the management of its affairs. They do not, however, hold this power by any hereditary right, but are appointed or removed at the pleasure of the villagers. The village communities are little republics, providing for all their own wants among themselves, and independent, generally, of any relations with other villages: certain rights are possessed by the schoolmaster, accountant, washerman, barber, blacksmith, watchman, &c., in the produce of the soil; some portions are also set aside for certain recognised expenses of the village, and for defraying the expenses of hospitality toward strangers, &c. The land-tax here is higher than in Bengal; and the portion of the produce paid to gov. is, besides, uncertain, and dependant on the crops, which have often failed extensively in many districts. The assessment is fixed, after inquiring into the prosperity of the village—what it has hitherto paid—what it is capable of paying—the state of the village lands—and what assessments they ought to bear with reference to the produce. Should any of the brotherhood fail to pay his portion, it becomes an internal village arrangement, with which government has nothing to do; the rest come forward and pay it for him, and the *mocuddim* has no power from the government to enforce the assessment from the individual. In a great part of Poonah there are a number of acknowledged proprietors of usually small estates, called *meerasdars*, who generally cultivate their lands themselves, and pay their rent direct to government, unconnected with any village republic: in Surat and Kaira, although another is more general, the village settlement prevails pretty extensively. Col. Sykes (*Rep. Revenue*, iii. 164) thinks that the *mouzamer* or village system realizes more revenue to government than the ryotwarry system; that it occasions the officers little trouble; maintains a class of respectable persons (potails, &c.) in society; prevents peculation; and advances the comfort of the cultivators generally: but, on the other hand, Mr. Campbell (*Rev.*, p. 201) observes, that the potails often oppress the ryots; shut them out from communication with the government; "in good seasons pocket all the profits, and in bad cast upon them (the cultivators), by extra assessments, or saddling them with the waste land, the greater burden of the losses."

Manufactures are not in a flourishing state, nor can they ever become so, until better means of transit for goods be constructed to afford a vent for their products: the principal are woollens and cottons. In Poonah city, silks, ornamented with gold and silver, are woven. A discriminating duty was formerly laid on Indian sugar imported into Great Britain, but that is now repealed, and its manufacture, as well as the manufactures of silk and indigo, is on the increase.

Trade.—This presid. is much less favourably situated than that of Bengal for commerce and internal communication. It has no large navigable river, like the Ganges, intersecting its richest provinces; the streams of the Deccan are too impetuous for navigation; and, notwithstanding the internal trade is thus wholly dependant on land-carriage, the entire length of all the roads which have been constructed does not exceed 450 m. Most of the roads are impassable for carriages, and merchandise has therefore to be conveyed chiefly by *pack-bullocks;* indeed, the only good line of road is from Panwell to Ahmednuggur, a distance of 165 m.; and it is both unconnected with the S. of India, and at a distance unavailable for the produce of Candeish and Berar. Government has recently, however, ordered a survey for a road between Bombay and Agra.

For an account of the foreign trade of the presidency, see Bombay (City.)

The revenue and expenditure of the Bengal presidency, during the year 1835–36, were as follows:

Revenue.	£	Charges.	£
Land revenue . . .	1,671,998	Total civil and political charges . . .	303,417
Customs, sea and inland	406,072	Total judicial and police ditto	238,770
Mint duties	34,778	Total military and naval ditto	1,436,412
Post-office collections .	14,076	Buildings, roads, and public works . .	8,704
Stamp duties . . .	39,165	Allowances, &c., in accordance with treaties, allowances to village officers, &c. .	407,951
Sayer (duties on spirits, &c.)	159,691	Charges of collecting revenues	250,251
Receipts from salt	25,752	Interest on debt . .	34,248
Do. opium	191,884	Total charges . . .	2,739,253
Marine and dock dues	13,735	Total ordinary rev. .	2,582,033
Judicial fees, fines, &c.	7,012	Deficit for 1835–6 . .	157,220
Miscellaneous civil receipts	850		
Subsidy from the Cutch government . .	17,022		
Total ordinary rev.	2,582,033		

The Government is vested in a governor independent of local control; but subordinate to the authority of the gov.-general of India, in matters of general and internal policy, and the disbursements of the public revenue. He is assisted by three counsellors, and the whole administration is conducted by a single board.

Military Force.—The Bombay native army, although the smallest, is the most ancient of the three presid., sepoys having been disciplined toward the end of the 17th century. The sepoys are said to be brave, patient, capable of enduring fatigue, and bear the highest character for fidelity; still, however, it is very doubtful whether they would oppose any effectual resistance to an army of Europeans. The Bombay army has been always more ready than those of the other presid. to volunteer for distant expeditions. By recent returns the total armed force of this presid. is 30,190 of which number 6,252 are Europeans.

Marine Force.—The whole of the Indian marine is attached to this presid. It has been of late much diminished, with the diminution of piracy, and now (*Martin*, 1839) consists of only one frigate, four 18-gun ships, six 10-gun corvettes and brigs, two armed steamers, and some surveying vessels. These are manned by about 1200 seamen, with 143 officers; and the whole costs annually £211,128. Measures are now, however, taken for converting this force into an armed steam flotilla.

Church Establishment, &c.—Bombay is the see of a bishop, subordinate to the bishop of Calcutta, who has under him 14 chaplains: the total ecclesiastical charges in 1837 were £19,038. Roman Catholic Christians are more numerous in this than in either of the other presid., and their religious estab., which receives the aid of the gov., is subordinate to an apostolic vicar at Bombay, with authority direct from the pope. But the most numerous body of Christians within the Bombay gov. are Nestorians.

Education, &c.—Sir Lionel Smith, in his evidence before parliament, 1831, said, with regard to Bombay, "Education is in such extensive progress that I hardly think it could be more extended;" but this statement is evidently extravagant, and must be received with much modification. The Native Education Society, consisting of a nearly equal proportion of natives and Europeans, disbursed, in 1830–31, nearly £8000; and have about 56 schools, educating 3000 children: at Poonah there is a Hindoo college. The total number of public schools in this presid. is 1705; scholars, 35,153: in Candeish the boys receiving instruction are, to the whole male pop. of that distr., as 1 in 18.

History.—In 1617 Bombay was created a regency, and made supreme over all the company's establishments in India, but in 1707 Calcutta was declared independent of it. In 1726 a chartered court for penal causes was established; and in 1775 Salsette, Bassein, and the revenues of Baroach, and other places, were acquired by treaty with a Mahratta chief. In 1780 Dobhoy and Ahmedabad were taken, but restored to the Mahrattas in 1782. In 1803 Baroach and Ahmednuggur districts were acquired, and the latter, with Poonah and Ahmedabad, were formally ceded in 1817. Concan, Marwar, Candeish, and the remainder of the expeishwa's dom., fell to the British in 1818. The seat of gov. was transferred from the city of Surat to that of Bombay in 1686. (*Hamilton's E. I. Gaz.*, i.; *Rep. on E. I. Affairs before the Select Committees, &c.*, 1830 to 1832; *Bombay Calendar*, 1838; *Reports of the Chamber of Commerce, Bombay*, 1838.)

Bombay (*Buon Bahia*, Portuguese, *a good harbour*), a marit. city of Hindostan, prov. Aurungabad, cap. of the above presidency, and, after Calcutta and Canton, the greatest emporium of the East. It is built at the S.E. extremity of the small island of the same name, contiguous to the Concan coast, 650 m. N.W. Madras, 1050 m. S.W. Calcutta, and 150 m. S. Surat; lat. 18° 56′ N., long. 73° 57′ E.

Pop. upwards of 230,000. Bombay island belongs to a group, including Salsette, joined to it by a causeway, Caranja, Elephanta, Colabba, Butcher, Woody, and Cross islands, which, being disposed in a crescent manner, enclose its harbour. The island itself is of an oblong shape, 8 m. in length, N. to S., by about 2 or 3 m. wide; it is for the most part low, swampy, and barren, and was formerly very unhealthy; but in this respect it has been much improved, by means of drainage and embankments. The city consists of two portions; the old town, or fort, and the new town, or Dungaree. The fort stands on the S.E. extremity of the island, on a narrow neck of land immediately over the harbour; it is surrounded by extensive fortifications, which, toward the sea, are very strong; it contains some good buildings, but is, generally speaking, close and dirty, and little inhabited by Europeans; its streets are uneven and disagreeable, and the houses mostly built of wood, and mean in appearance. The Portuguese began to build the town within the walls in the same style that has ever since been followed: the verandahs of the houses are supported on wooden pillars, and shut up with Venetian blinds; the upper stories project beyond the lower, and the roofs are sloped and tiled.

Bombay bears no external resemblance to Calcutta or Madras, and its best streets scarcely equal their suburbs. There is no Asiatic magnificence; every thing has an air of dinginess, age and economy, though the shops and warehouses are built on an extended scale. The government-house, a large but dismal-looking structure, somewhat like a German free city *stadthaus*, is little used except for holding councils and other public business; there is a castle, now occupied as an arsenal, and near it are the capacious docks constructed by, and belonging to, the E. I. Company, capable of accommodating ships of any size. These establishments, together with the barracks and the other buildings within the fort, have cost the company very large sums. The supreme judicial court, or *sudder adawlut*, the Protestant church, and the office of the gov. secretary, on the Green, an open irregular area, are among the chief edifices; there are many Portuguese and Armenian churches, both within and without the walls, some synagogues, and a vast number of mosques and temples. The new town of Bombay is larger than that within the fort, and in a low, wet, unwholesome situation, N. of the latter, and separated from it by the esplanade; it extends in one part from the harbour, on its E., quite across the neck of land to Back bay: for seven or eight months of the year the inhab. suffer from inundation or its effects, few of the ground-floors of the houses being above high-water mark. The most remarkable structure in the new town is a pagoda, the largest in Bombay, dedicated to the worship of *Momba Devi*. Substantial buildings now extend to near 3 m. from the fort, outside of which most of the poorer classes live in huts of clay, roofed with mats of palmyra leaf. Ground in the city is very valuable, especially within the fortress. Most part of the island now belongs to Parsees, who form a wealthy and influencing part of the population, and are comparatively more numerous, perhaps, than in any other large town in India. They are the descendants of the Ghebers, driven out of Persia by Shah Abbas; a comely, tall, athletic, active race; fairer than the other natives; mild in their manners; bold, enterprising, intelligent, persevering, successful in the pursuit of wealth, and contributing greatly to the prosperity of the place. "There is not a European house of trade in which one of them has not a share; and generally it is the Parsee that produces the larger part of the capital." In every department connected with ship-building and the docks, the Parsees have the chief interest; the whole N. quarter of the fort is occupied by them; their country houses are furnished with European decorations; and they make no scruple to eat, drink, and hold constant communication with Europeans. They have many temples for the adoration of Fire; and morning and evening all the males repair to the esplanade, and prostrate themselves in worship to the sun: the females do not join in these devotions, but of whatever rank, continue, as in patriarchal times, to fetch water from the wells. The Parsees are firmly attached to their original customs; among which is that of exposing their dead to be devoured by vultures, in buildings open at the top for the purpose; they are extremely dirty in their persons; but their women, although enjoying more liberty than any others in India, are certainly the chastest. The Parsees provide for their own poor, and not a single courtesan of their sect is to be found. Of the rest of the population, about two thirds are Hindoos, one fifth part Mohammedans, and one thirteenth part Christians, besides about 2300 Jews: the floating pop., besides the native and British seamen, consists of Arabs, Persians, Goa-Portuguese, Parsees, and the crews of vessels belonging to most other nations frequenting the port. The harbour of Bombay is one of the largest, safest, and most commodious in India; it is 8 m. in diam., and affords good anchorage and shelter for fleets of ships of the largest burden. It is also the only great inlet in India where the rise of the tides is sufficient to permit the construction of wet-docks on a large scale, the spring tides ordinarily rising 14, and occasionally 17 ft. Frigates and ships of the line may be built at Bombay in a very durable manner, and cost, it is said, 25 per cent. less than in England. This comparative cheapness is ascribed to the facility with which supplies of timber are obtained; but whether it be owing to a defect in the building, or to the weight of the timber, it is, we believe, generally admitted that Bombay-built ships are but indifferent sailers. It should also be observed, that if ships really cost more in England than in Bombay, the difference is wholly owing to our timber duties; were these repealed, it may be safely affirmed that British-built ships would be cheaper than those of any other country. Previously to 1819, a considerable fleet of small armed vessels was kept at Bombay, to check the piracy which had prevailed on the Malabar coast ever since the time of Alexander the Great; but at this epoch the nuisance was finally abated, by the capture of the strongholds of the pirates in the Arabian and Persian gulfs.

Bombay has a more extensive trade with China than either of the other presidencies: the rest of its commerce is chiefly with Great Britain, the Arabian and Persian gulfs, Calcutta, Cutch, Sinde, and the Malabar coast. The imports from China consist principally of raw silk, sugar, and sugar candy, silk piece-goods, treasure, &c. The principal articles of export to China are, raw cotton (44,464,364 lbs. in 1836–7), opium (20,882¼ chests, 1836–7), principally from Malwa, pearls, sharks' fins, fish maws, sandal wood, &c. The exports to China being much larger than the imports, the returns for several years past have been made to a large extent by bills on London, drawn by American and other houses in China, and in bills on the Indian government, drawn by the agents of the E. I. Company in China. The trade with the United Kingdom has been regularly increasing since the abolition of the restrictive system. The chief articles of import thence are, cotton and woollen stuffs, cotton yarn, hardware, copper, iron, lead, glass, apparel, fur, stationery, wine, &c. The principal exports to Britain are, raw cotton (68,163,901 lbs. in 1836–7), raw silk from China and Persia, ivory, pepper, and spices, piece-goods, coffee, and wool; the export of the last has increased with wonderful rapidity of late years; it comes chiefly from Cutch, Sinde, and Marwar. In 1837, twenty-eight ships, mostly owned by native merchants, were employed in the China trade; there are, besides, many large ships engaged in the trade to England and elsewhere; and a numerous class of native craft, the largest of which make five or six trips during the eight fair months, from Oct. to May, to the chief ports N. of Bombay. They carry thither the produce of Europe, Bengal, and China, and return laden with cotton, ghee, oil, pulse, wheat, cotton cloths, timber, fire-wood, &c.: the capital employed in this trade, exclusive of cotton, has been estimated to amount to £1,500,000 sterling. In 1836–7 there arrived at Bombay 253 ships (222 under British colours), of the aggregate burden of 104,913 tons: the value of the imports and exports in that year was as follows:

Countries.	Imports.	Exports.
	Rupees.	*Rupees.*
Great Britain	1,32,41,910	1,35,25,317
France	5,25,853	2,37,443
Madeira	24,725	
Cape of Good Hope	9,752	612
Brazil	92,490	
Coast of Africa	3,50,442	6,18,351
Isle of France	1,39,363	1,07,671
America	46,259	2,91,006
China	1,40,79,952	3,35,75,047
Manilla	31,410	
Penang, Singapore, and the Straits	9,53,162	7,05,457
Calcutta	25,38,101	11,36,384
Coast of Coromandel	1,11,648	8,60,749
Ceylon	1,08,340	1,01,475
Arabian Gulf	17,53,684	12,65,130
Persian Gulf	35,59,589	35,06,241
Malabar and Canara	75,80,673	23,18,628
Cutch and Sinde	16,72,640	23,22,347
Goa, Demaun, and Diu*	3,95,030	2,28,369
Hamburgh		
St. Helena		
Total	4,72,45,571	5,99,05,978

Wages are higher here than in Bengal; palanquin bearers, for instance, receive seven and eight rupees each per month; but provisions are also much dearer. The markets are not equal to those of Calcutta, but superior to those of Madras: there are fewer Europeans at Bombay than at the other presids., neither are their salaries so high. The Bombay Native Education Society have their central schools here, which, in 1838, were attended by 1087 native pupils. Two English newspapers are published here on alternate days, and ten other periodicals. Several literary societies, and

* At this period called Goa and the Concan.

many charitable and religious institutions, have been established. Bombay is the seat of a Protestant bishop. Roman Catholics are numerous, and their religious establishments enjoy the support of the E. I. Comp.; one of the four vicars-apostolic of India, with direct authority from the pope, resides at Bombay, where the Catholic bishop has five different churches, all of which, except one at Colabba island, are endowed. Sir R. Rice, in his evidence before the lords, in 1830, says, that among a pop. of 150,000 in this city, there was but one execution in three years, which was that of an English serjeant; so that, if the police be not very bad, it may be fairly concluded that crimes of violence are very rare. The jurisdiction of the supreme court is confined to the island of Bombay, and to Europeans in the rest of the presid.: the civil and criminal laws are those of England; but this court is not one of appeal from provincial courts, like the *sudder adawlut* at Calcutta. The garrison consists of 2000 troops, one fourth of whom are Europeans.

Bombay is, next to Madras, the oldest of our possessions in the East; it was founded soon after the cession of the isl. to the Portuguese, and was ceded to Charles II. as part of Queen Catharine's dowry, in 1661; but the Portuguese governor refused to deliver it up, and it was not until 1664 that it came into our hands. At this period it was extremely unhealthy, and subject to the depredations of the Mahratta pirates. In 1668 the city and island were transferred, by royal letters patent, to the E. I. Comp., at an annual rent of £10, and shortly after realized to the comp. a revenue of £2823 a year. The seat of government was removed thither from Surat in 1686, and two years afterward Bombay was closely besieged by the Moguls. These were ordered to withdraw by Aurungzebe, which they did in the succeeding year; but plague, piracy, and rebellion, continued for many years to devastate and disturb this colony. At present Bombay rules the whole N.W. coast of India, and its influence is felt along the shores also of Persia and Arabia. (*Hamilton's E. I. Gaz.*, i., 256–266; *Reports on E. I. Affairs*, 1830–1832; *Evid. of Sir R. Rice and Hon. Mr. Elphinstone; Dictionary of Commerce, &c.*, 1839, p. 135–138; *Med. Trav.*, x., 241–254; *Bombay Calendar and Directory*, 1838.)

BOMBAY, p. t., Franklin co., N.Y., 15 m. N.E. Malone, 232 m. N. Albany, 552 W. Drained by Little Salmon and St. Regis rivers. It contains the reservation and settlement of the St. Regis Indians, and has six stores, one fulling-mill, one woollen-factory, one grist-mill, five saw-mills, two tanneries, nine schools, 344 scholars. Pop. 1446. A village of whites near the post-office, contains one church, four stores, and twenty or thirty dwellings.

BOMST, a town of the Prussian states, prov. Posen, cap. circ., 10 m. N.E. Zullichau. Pop. 2000. The inhabitants are a motley breed of Germans, Poles, and Jews. There are some manufactures of coarse cloth.

BONA (an. *Appredisium*), called by the natives *Annabah*, i. e., place of jujubes, a marit. city of N. Africa, reg. *Algiers*, prov. Constantina, on a tongue of land projecting into a spacious bay (gulf of Bona), near the mouth of the Seibous, in a somewhat unhealthy country; lat. 36° 53′ 30″ N., long. 7° 48′ 20″ E. Pop. about 12,000. It is surrounded with walls (erected 1058) 30 ft. in height, and nearly 2 m. in circ., with four gates. The town and harbour are commanded by the citadel (*Kasba*), on a hill to the N. of the city, having thick walls and a circuit of about a quarter of a mile. This citadel was much injured in 1837 by an accidental explosion of gunpowder; but it has since been repaired, and made stronger than ever. Bona has been much improved since its occupation by the French. The streets are narrow and crooked, but there are several good houses, a good market, with shops, reading-rooms, coffee-houses, and even a theatre. The road of Bona is far from being safe, the N.E. and E. winds throwing in a heavy sea. The Seibous was navigable when the Romans possessed Bona; and it might be rendered so again by clearing away a bar which has accumulated at its mouth, where there are but 3 or 4 ft; whereas, within this, there are 13 ft. water. Bona is the seat of a French judicial court; has manufactures of *bernous* and other garments, tapestry, and saddles; exports corn, wool, ox hides, and wax. It was formerly the centre of the French trade on this coast, and is at present the principal seat of the coral fishery, (*See* ALGIERS.) The Kasba was taken March 25, 1832, by a few French soldiers and sailors; the Turks left in it, being dissatisfied with their leaders, having opened the gates to them. Bona was afterward pillaged and burned by the Arabs, but the French, having received reinforcements, took possession of it, and captured 115 pieces of cannon. About a mile to the S. are the remains of Hippo Regius, once a residence of the Numidian kings, and afterward the Episcopal see of St. Augustine. It was situated between the rivers Boojermah and Seibous, being about 2 m. in circ. Its chief relics are some large cisterns and part of the Roman walls. A swampy tract extends between it and Bona, probably its ancient haven. Hippo was taken by the Goths, and finally destroyed by Othman, the third caliph. Its materials served to build the modern town. (*Rozet*, iii., 195–208; *Shaw*, p. 47, 48; *Tab'eau de la Situation, &c.*, p. 93.)

BONAVISTA, one of the Cape de Verde islands, which see.

BOND, county, Ill., situated S. of the centre of the state, and contains 360 sq. m. Organized from Madison in 1817. Drained by Shoal and Sinking creeks, branches of Kaskaskia river. It contained in 1840, 7723 neat cattle, 5397 sheep, 15,998 swine; and produced 25,722 bushels of wheat, 1540 of rye, 299,130 of Indian corn, 23,450 of oats, 7486 of potatoes, 3065 pounds of tobacco. It contained ten stores, two woollen-factories, ten grist-mills, six saw-mills, two tanneries, two distilleries, twelve schools, 324 scholars. Pop. 5060. Capital, Greenville.

BONDENO (an. *Padinum*), a town of the States of the Church, deleg. Ferrara, at the confluence of the Panaro and and Po d'Argento. Pop. 2500. It lies at the mouth of a defile which leads across the Apennines.

BONEFRO, a town of Naples, prov. Sannio, cap. cant, on the declivity of a mountain, 6 m. S.S.E. Larino. Pop. 3000. It has a fine palace and a magnificent parish church, with four houses of refuge.

BONIFACCIO, a town and sea-port of the island of Corsica, cap. cant., on a small peninsula at the S. extremity of the island, on the strait which bears its name, 45 m. S.S.E. Ajaccio; lat. 41° 23′ 11″ N., long. 9° 9′ 16″ E. Pop. 3031. It is well built and fortified, but not strongly. Its port, which lies between the peninsula on which the town is built and the mainland, stretches nearly 1 m. inward, has deep water throughout, and is one of the best in the Mediterranean. Its entrance, however, is not more than from 80 to 90 yards broad, which renders it a little difficult of access. (*Hugo*, art. *Corse; Norris's Sailing Directions for the Mediterranean, &c.*)

BONIFATI, a town of Naples, prov. Calabria Citra, 4 m. S.E. Belvidere. Pop. 3000. It has several churches, and a convent; and a great number of silk-worms are raised in its environs.

BONDOU, a country of W. Africa, which, like most others in the same part of the world, has not had its astronomical position precisely ascertained. On Rennell's map to Park's First Journey, it is placed between the lats. of 13½° and 14½° N., and between long. 10° 10′ and 11° 20′ W. On the map to Park's Second Journey, the long. remains unaltered, but the lat. is removed one degree more to the N., with the whole of the traveller's route, in order to make that route agree with the few observations which were taken. Though powerful among its barbarous neighbours, it is a small state, not exceeding in length, from E. to W., 78 m., nor in width, from N. to S., 70; it is, however, very compact in form, and its area is probably not less than 5000 sq. m. Its pop. may amount to 1,500,000 or 2,000,000. It is bounded E. by Bambouk; S.E. and S. by Tenda and the Simbani wilderness (wooded, not desert); S.W. by the same wilderness and Woolli; W. by Foota Toria; and on the N. by Kujaaga. (*Park's Maps and First Journey*, 44–57.) Bondou is tolerably elevated among the Senegambian system of mountains, and some parts of its surface rise into considerable peaks. The land slopes towards the N. and W., as is shown by the direction of the rivers, the Fo-le-me holding a N. course to the Senegal, and the Nericho a S.W. one to the Gambia. The sub-tributaries of these affluents are so numerous, that though neither of the first-class rivers (Senegal and Gambia) pass through Bondou, there are few districts better or more abundantly watered. As a natural consequence, vegetation is of a most vigorous kind; the hills are covered with thick woods, and in native fertility the soil is not surpassed by any in the world. The productions are the same with those of the neighbouring countries. (*See* BAMBARRA, BAMBOUK, &c.); but a winter or dry season harvest, though not quite peculiar to this country, is sufficiently remarkable to attract the attention of travellers. The corn, called by botanists *Holcus cornuus*, from the depending position of its ear, is sowed about November, is in full vigour by the end of December, and is reaped in the early part of January. It is exceedingly prolific, and appears to bear a strong resemblance to the Arabic dhourrah. In climate and division of seasons, Bondou agrees also with the surrounding countries (see *as above*), but it appears to possess the advantage of being more healthy, and (probably from its comparative density of population) it seems to be rather less infested by ferocious animals. Though close to the richest gold districts of Africa, it appears to be poor in metals; gold dust, *in small quantities*, and iron being part of the imports. (*Park*, 51, 58, &c.) The inhabitants differ essentially in complexion and manners from their immediate neighbours. They belong to the great Foulah family, next to the Mandingoes, the most considerable of all the W. African nations. They have tawny or, rather, yellow skins, with small features, and soft, silky hair. They hold

the negroes to be their inferiors; and, when talking of different races, always class themselves among *white* people. They have, indeed, most of the distinctive marks of an Arab race; but, though many of them speak a little Arabic, their native tongue bears no resemblance to that language, nor have they any legends that trace their origin farther E. than Fooladoo (literally, "the country of the Foulahs"), near the sources of the Senegal. In industry, energy, and resources, they are superior to their negro neighbours; they are tolerably good agriculturists, and are said to be well versed in grazing and dairy husbandry, though they make no cheese. Cattle is their chief wealth, and they possess also a handsome breed of horses. There are, indeed, but few African countries where so many of the necessaries, and even conveniences, of life are enjoyed, and that not by the rich only, but by the greater part of the population.

Centrally situated between the Senegal and Gambia, Bondou has become a high road for traffic; the slave dealers from the coast usually pass through it, and by their means a considerable commerce is carried on with the neighbouring and even distant countries. The native exports consist of corn, cotton cloths, some sweet-smelling gums, and probably sometimes cattle. The transit trade consists of slaves, salt, iron, Shea butter, and gold dust. The government is monarchical, and the king is often at war with his Mandingoe neighbours, and generally to their loss. When Major Houghton was in the country, he had just stripped the king of Bambouk of a considerable part of his territory.

The Mohammedan religion is very generally professed, but not exclusively; the king himself is a kafir (infidel), and it does not appear that any intolerance is practised by either sect; but the uncharitable maxims of Islamism seem to have had some influence over the Bondou Foulahs, who are less hospitable than the poorer and more ignorant negroes.

Schools are established in the different towns, where children of all persuasions are taught to read and write. The character used is, of course, Arabic, and the instructers the Mohammedan priests; by this means Mohammedanism possesses a strong hold over the people, since the impression made on the pupils' minds in these schools are seldom eradicated.

Customs and duties on travellers are extremely high. An ass load of goods pays a bar (two shillings) at all places; and at Fathconda (the royal residence) a musket and six bottles of gunpowder, or the value of them, are exacted as the common tribute; besides which, neither the king nor any of his chief officers are delicate in requesting presents, which requests, under the circumstances, are, in fact, demands which cannot be evaded. (*Park*, p. 44–62; *Houghton's Afr. Assoc.*, cap. xiii., 8, 11, &c.)

BONN, a very ancient handsome town of the Prussian states, cap. circ., prov. Rhine, on the left bank of that river, about 15 m. S. Cologne. Pop. 13,000. The principal celebrity of Bonn is derived from its university, founded in 1818, and intended to replace that of Cologne, suppressed by the French. Niebuhr, the historian of Rome, was one of its professors; and it has still to boast of some very distinguished names. In 1836 it had 686 students. The electors of Cologne formerly resided here; and their castle, a building of immense extent, is now the university. The library that belonged to the university of Cologne, comprising from 80,000 to 100,000 vols., has been removed thither. In the museum of Rhenish antiquities, in the university, is an ancient monument, inscribed *Deæ Victoriæ Sacrum*, supposed by some to be the identical *Ara Ubierum* mentioned by Tacitus. (*Annal.*, lib. i., § 39.) This, however, is doubtful. The cathedral, or metropolitan church, in the older Gothic style, with a high tower, has a statue of the Empress Helena, and is said to be built on the site of a church she had founded. There is also a good town-hall, theatre, &c. A fine avenue of chestnuts conducts to the *Chateau of Poppelsdorff*, appropriated to the use of the university, containing the museum of natural history, and having attached to it a spacious and well-kept botanical garden. The situation of Bonn is delightful. It is one of the most desirable towns on the Rhine as a place of residence. Beethoven, the musician, was born here on the 17th December, 1770. (*Cellarii, Notit. Orbis Antiqui*, i., p. 330; *Schreiber, &c.*)

BONNAT, a town of France, dep. Creuse, cap. cant., on a hill not far from the little Creuse. Pop. 2738. It is distinguished by the old castle of Beauvais.

BONNE FEMME, t., Howard co., Mo. It contains one school, 25 scholars. Pop. 988.

BONNE HOMME, t., St. Louis co., Mo. It contains one academy, 40 students, three schools, 92 scholars. Pop. 2516.

BONNET-LE-CHATEAU (ST.), a town of France, dep. Loire, cap. cant., 17 m. S. Montbrison. Pop. 2156. This is a place of great antiquity; it is situated on a Roman road, constructed by Agrippa, and occupies a picturesque position on the summit of a hill, surmounted by a fortress, said to be of the age of the Romans. Part of the ancient walls and towers, by which the town was formerly surrounded, still exist. It has a handsome Gothic church. Locks of various sorts are made here, and some lace; and the place has a considerable trade in timber, forwarded to the building-yards at St. Rambert. (*Hugo*, art. *Loire.*)

BONNETABLE, a town of France, dep. Sarthe, cap. cant., on the Dive, 16 m. N.E. Mans. Pop. 5746. It has a castle, constructed in the 15th century. The inhabitants are principally engaged in the cotton manufacture.

BONNEVAL, a town of France, dep. Eure et Loir, cap cant., on the Loire, in a fertile valley, 19 m. S.S.W. Chartres. Pop. 2560. Streets broad and well laid out. It was formerly fortified, and had an abbey. The church is surmounted by a very high steeple. It has a cotton-mill, with manufactures of calicoes, carpets, coverlets, &c., and some considerable tanneries.

BONNORVA, a town of Sardinia, doc. Sassari, 18 m. E.N.E. Bosa, in a healthy situation, on the declivity of a mountain. Pop. 4000. It has two convents, one of them for Jesuits. A harna, or *dépôt d'étalons*, was established here in 1803. (*Smyth's Sardinia*, p. 330, and *Dict. Géog.*)

BOODROOM, or BODRUN, a sea-port town of Asiatic Turkey, in Natolia, coast of the Archipelago, opposite the island of Cos, 100 m. S. Smyrna; lat. 37° 1′ 21″ N., long. 27° 25′ 18″ E. Pop. 11,000? It is beautifully and conveniently situated on a rising ground, at the bottom of a deep bay, commanding a view of the island of Cos, and the southern shore of the Ceraunic gulf, as far as Cape Kria. It has a small but well-sheltered harbour, with from two to three fathoms water, resorted to by Turkish cruisers, and having generally a ship of war on the stocks. In the bay outside the harbour there are from 10 to 20 fathoms. Houses of stone, and irregularly scattered along the shore of the bay, being interspersed with gardens, tombs, and cultivated fields. Streets narrow and dirty, and the bazars wretched. The castle or fortress, situated on a projecting rock on the E. side of the harbour, was built by the Knights of Rhodes in 1402; it is still in tolerably good repair, and and mounts 30 pieces of cannon. The seral, or palace of the mouselim or governor, and some small mosques, stand along the western margin of the harbour.

It is supposed that Boodroom occupies the site of the ancient *Halicarnassus*, the country of Herodotus, and of Dionysius the historian. Above the town are the remains of a theatre, 280 ft. in diameter, and which seems to have had 36 rows of marble seats. Old walls, exquisite sculptures, fragments of columns, and other relics, evincing its ancient splendour and importance, abound in the town and its vicinity. (*Beaufort's Karamania*, p. 95; *Turner's Tour in the Levant.*)

BOONDEE (BUNDI), a rajahship of Hindostan, prov. Rajpootana, distr. Harootee, under protection of the British; area (*Sutherland*), 2291 sq. m. It was formerly much more extensive, but Kotah and its territory have been separated from it: in 1817 more than half the revenues were usurped by Scindia and Holkar, and the peasantry impoverished by endless exactions; but in 1818 the rajah received a considerable accession of dominion, and the town of Patun, from the hands of the British. Although small, this state is important, as it contains the principal passes from the S. into Upper Hindostan. The natives are of the Hara tribe, which has produced many celebrated men, and among others one of Aurungzebe's best generals.

BOONDEE, a town of Hindostan, prov. Rajpootana, cap. of the above rajahship, and residence of its sov., on the S. declivity of a long range of hills, 90 m. S.E. Ajmeer, 200 m. S.W. Agra; lat. 25° 28′ N., long. 75° 30′ E. It is divided into New and Old Boondee; the former is surrounded by a high stone wall, which extends up the acclivity to some fortifications which crown the hill; the houses are mostly of stone, and two stories high. The palace is half way up the hill, and is a very striking stone edifice, supported partly by a perpendicular rock 400 feet high, but principally by solid piers of masonry. This city is also rendered picturesque by its numerous temples, magnificent fountains, and spacious main street opening to the palace, at the lower extremity of which stands a great temple, dedicated to Krishna, with many groups in bas-relief, and other sculptures. Old Boondee is W. of the former, covers a considerable surface, and contains some fine fountains and pagodas, but is in a state of general decay. The passes N. of Boondee are strongly defended, and abound in natural beauties, in royal and religious edifices, and other works. (*Hamilton's E. I. Gaz.*, i., 268, 269; *Mod. Trav.*, x., 82.)

BOONE, county, Ky. Situated in the extreme N. part of the state, and contains 300 sq. m. Bounded N. and W. by the Ohio river. Drained by Gunpowder creek. It contained, in 1840, 8843 neat cattle, 15,619 sheep, 34,382 swine; and produced 101,502 bushels of wheat, 7977 of rye, 555,370 of Indian corn, 59,423 of oats, 13,310 of potatoes, and

1,429,947 pounds of tobacco. It contained thirty stores, four flouring-mills, nineteen grist-mills, ten saw-mills, two tanneries, four distilleries, three academies, four schools, 65 scholars. Pop.: whites, 7894; slaves, 2183; free coloured, 27; total, 10,034. Capital, Burlington.

BOONE, county, Ia. Situated in the central part of the state, and contains 408 sq. m. Drained by branches of Sugar and Raccoon creeks. It contained, in 1840, 10,381 neat cattle, 6945 sheep, 20,109 swine; and produced 35,017 bushels of wheat, 1256 of rye, 247,752 of Indian corn, 40,017 of oats, 14,865 of potatoes, 4097 pounds of tobacco, 92,135 of sugar, 360 tons of hemp and flax. It had twelve stores, two flouring mills, nine grist-mills, seven saw-mills, five tanneries, thirteen schools, 298 scholars. Pop. 8121. Capital, Lebanon.

BOONE, county, Ill. Situated in the N. part of the state, and contains 400 square m. Drained by Kishwaukee or Sycamore creek, a branch of Rock river. It contained, in 1840, 1684 neat cattle, 589 sheep, 5091 swine; and produced 19,873 bushels of wheat, 30,792 of Indian corn, 23,318 of oats, 49,816 of potatoes, 1148 pounds of tobacco. It had two stores, one grist-mill, four saw-mills, nine schools, 153 scholars. Pop. 1705. Capital, Belvidere.

BOONE, county, Mo. Situated in the central part of the state, and contains 690 sq. m. Bounded S.W. by Missouri river, E. by Cedar creek. Drained by Bonne or Roche Perce river and Petite Bonne Femme river, which afford water-power. It contained, in 1840, 12,915 neat cattle, 18,166 sheep, 37,900 swine; and produced 44,411 bushels of wheat, 8894 of rye, 506,672 of Indian corn, 74,945 of oats, 19,514 of potatoes, 72 tons of hemp and flax, 1,714,663 pounds of tobacco, 54,442 of sugar. It had twenty-seven stores, forty-six grist-mills, seventeen saw-mills, eleven tanneries, twenty distilleries, one printing-office, one weekly newspaper, one college, 15 students, three academies, 114 students, thirty-two schools, 1033 scholars. Pop.; whites, 10,529; slaves, 3008; free coloured, 24; total, 13,561. Capital, Columbia.

BOONE, t., Warwick co., Ia. It contains four schools, 120 scholars. Pop. 1722.

BOONE, t., Harrison co., Ia. It contains two grist-mills, four saw-mills, three tanneries, two distilleries, two schools, 58 scholars. Pop. 2058.

BOONESBOROUGH, p. v., Madison co., Ky., 53 m. S.S.W. Frankfort, 534 W. Situated on the S. side of Kentucky river.

BOONE'S LICK, t., Howard co., Mo. Pop. 1005.

BOONEVILLE, p. t., Oneida co., N. Y., 28 m. N. Utica, 114 m. W.N.W. Albany, 419 W. Drained by Black river and the head waters of the Mohawk river. Pop. 5516. The village is on the Black river canal, 31 m. N. of Utica, and contains two churches, five stores, one grist-mill, one saw-mill, one clothiers' works, eighty dwellings, and about 600 inhabitants.

BOONEVILLE, p. v., capital of Scott co., Ark., 120 m. W. by N. Little Rock, 1185 W. Situated on the N. side of Petite Jean river.

BOONEVILLE, p. v., capital of Warrick co., Ia., 173 m. S.S.W. Indianopolis, 707 W. It contains one school, 40 scholars. Pop. 240.

BOONEVILLE, city, p. v., and capital of Cooper co., Mo., 50 m. N.W. Jefferson city, 964 W. Situated on the S. bank of Missouri river. It contains a neat court-house, jail, and county clerk's office, a Methodist church, fifteen stores, two rope-walks, two academies, 108 students, two schools, 60 scholars. Pop. 2581.

BOORHANPOOR (*Burhanpura*), a town of the Deccan India, prov. Candeish, of which it was the ancient cap., in the dom. of Scindia; built in a plain, on the N.W. bank of the Tuptee, 135 m. S.S.E. Oojein and 215 m. E. Surat; lat. 21° 19' N., long. 76° 18' E. This is one of the largest and best-built cities in the Deccan, though, as a whole, devoid of architectural beauty. Most of the houses are of brick, many three stories high, with neat façades, framed in wood, as at Oojein, and universally roofed with tiles; but the fort and palace of its ancient sovereigns, and many Mohammedan mosques, chapels, and tombs, are heaps of ruins. Some of the streets are wide, regular, and paved with stone; and there is a square of considerable extent: the finest building is a mosque, called Jumma Musjud, a pile of gray stone, with a handsome façade, and octagonal minarets, but destitute of a cupola, the usual appendage to Mohammedan structures. The Tuptee is a clear and beautiful stream, but here of no great breadth, and easily fordable in the dry season. Boorhanpoor is supplied with water by aqueducts, which bring it a distance of 4 m., and distribute it through every street below the pavement, whence it is drawn up by leathern buckets: 500 of the best houses are occupied by Bokrahs, a Mohammedan sect, who are the great merchants in this part of Hindostan, wear the Arabian costume, and call themselves Arabs by descent. This city was conquered by the Mahrattas in 1760, since which it has progressively decayed. It was captured by the British in 1803, but afterward restored to Scindia. The grapes grown in its vicinity are said to be the best in India. (*Hamilton*, i., 269, 270.)

BOORO, an isl. of the E. Archipelago, 4th divis. (*Crawfurd*), between lat. 3° and 4° S., and long. 126° and 127° E., 50 m. W. Ceram; length, E. to W., 75 m., breadth 38 m. Rice, sago, a profusion of aromatic and other woods, tropical fruits, and the best cajeput oil, are found here; the interior is peopled by Horafooras, who subsist on sago and the chase. Some of the other inhabitants are Mohammedans. Chinese junks and S. Sea whalers visit it, and the Dutch have a settlement on the island.

BOOROOGIRD, a town of Persia, prov. Irak-Kermanshaw, cap. govern., in a fine and fruitful valley, 190 m. N.W. Ispahan. Pop. 12,000 (*Kinneir*). It has a fine castle and several mosques. The town and dist. attached to it belong to the tribe of *Lack*, who do not wander far from the spots to which they are partial, but settle in villages, and employ themselves in the improvement of their estates.

BOOTAN, or BHOTAN, an indep. state of N. Hindostan, between lat. 26° 30' and 28° 30' N., and long. 88° 30' and 94° E., having N. the Himalaya, which divides it from Tibet; E. and S. Assam and Bengal; and W. the river Teesta, which separates it from Sikkim: length, E. to W., about 350 m., by from 90 to 100 in width; but its limits would greatly exceed this estimate were it described as comprising all the country immediately adjoining the Himalaya, on both sides, from Cashmere to China, which is termed by the Hindoos *Bhote*, and its inhabitants *Bhotyas*. Assuming it to include the districts now referred to, its area has been estimated at about 64,500 sq. m., and its pop. at 1,500,000. The external appearance of Bootan is the very reverse of that of Tibet, which is a level table-land, whereas it is almost entirely mountainous or hilly.

Mountains.—Its N. portion, which is the S. declivity of the Himalaya, constitutes an almost impassable frontier, consisting of lofty mountains, either covered with snow, or black and destitute of all verdure excepting towards their base, where short and scanty herbage, a few bushes of holly, and occasionally a stunted pine, are all the signs of vegetation existing in this region.

About 10 m. from this boundary, the aspect of the country changes, becoming, although still bold and lofty, more picturesque and smiling: the hills are cultivated to a considerable height, or covered with verdure often to their summits, having on their slopes luxuriant forests. The valleys are mere wedge-shaped intervals, or water-courses, between the hills, and their vegetation is similar to that of the temperate parts of Europe. The country continues of this character for about 50 m. from N. to S., gradually becoming less striking in its features as it approaches the *terriane*, which divides it from Bengal. This is a tract of marsh land, 25 m. in width, and covered with jungle, being the only plain belonging to Bootan: its climate is most pestilential.

The principal river is the Tchinchien, which intersects the country N. to S., passing through the valley of Tassisudon, receiving the waters of the Patchien and Hatchien, and after a turbulent course of about 150 m., during which it forms several cataracts, and rushes over vast masses of rock, falls into the Brahmaputra, a few miles below Rangamatty, where it is called the Gadawhar. There are several rivers of less consideration, supposed tributaries of the Brahmaputra; but the violence of their course prevents the simplest form of navigation being practicable.

The primary rocks in the mountains are chiefly granite and an imperfect quartz, having the appearance of marble, but employed in the manufacture of a species of porcelain; good limestone is abundant, but not used either for agricultural or other purposes. It is conjectured that the mountain ranges contain much mineral wealth, but they remain almost wholly unexplored. Iron and copper are the only metals hitherto discovered, and the former alone is applied to any purpose by the natives.

The climate exhibits every variety, according to elevation, and summer heats and winter cold are severally felt in places within sight of each other. In the mountainous regions it is not unhealthy, and resembles the climate of the S. of Europe, not being subjected either to the burning suns or periodical rains of Bengal. Snow prevails during a great part of the winter, except in some few districts; showers are frequent in summer, and in consequence of the exhalations arising from the numerous springs and cataracts, a certain humidity pervades the atmosphere, even at this season. Panukka, although but a few miles distant from Tassisudon, has a climate so much milder than the latter, that it has been chosen as the winter residence of the sovereign.

The mountain forests abound with beech, ash, maple, birch, yew, pine, fir, cypress, &c., but contain no oaks. Numerous fruits common to Europe flourish; as apples

(though of an inferior quality), pears, apricots, peaches, walnuts, melons, mulberries, strawberries, raspberries (the two latter fruits growing wild), oranges, and pomegranates, which are excellent. In the colder districts the cinnamon-tree, and a species of rhubarb, are found.

The marshes of the S. abound with elephants, rhinoceroses, tigers, buffaloes, and other formidable wild animals; but, excepting in these parts, they are not abundant. Captain Turner speaks only of a kind of monkey, which inhabits its vicinity, and the yaik, or grunting ox, which is found among the mountains of the N. boundary, but descends into the lower country for pasture during the winter months. The Tangun horse, a species peculiar to Bootan, about 13 hands high, well formed, short bodied, clean limbed, deep in the chest, extremely active, and well suited to mountainous countries, is an object of considerable traffic with Bengal. These have a tendency to become piebald; those of one colour among them, although rare, and less valued by the natives, are much more esteemed by the British merchants.

People.—The Booteas have been already noticed (see p. 192). In physical formation they differ greatly from the Bengalese, being hardy, robust, strong, and occasionally, in the mountain districts, attaining a height of more than 6 ft. Their skins are smooth, and often not darker than those of the inhabitants of the S. of Europe; faces broad, and cheek-bones high, from which point the face rapidly narrows downwards; the eye is small and black, with long, pointed corners, looking as if extended in width by artificial means; they have scarcely any eye-lashes, beard, or whiskers. They are often greatly afflicted with goitre, especially those who live near rivers subject to inundation. Though not deficient in courage, they are peaceably inclined and inexpert in the arts of war: the bow and arrow (in the use of which they are skilful), sword, and falchion are their chief weapons. No military discipline whatever is maintained, and ambush is more frequently resorted to than open conflict. They dress in woollen cloth; use animal food and spirits. Tea is the usual beverage, but so prepared as to suit few palates but their own. Their dwellings seldom exceed one story in height; the palace of the rajah, at Tassisudon, consists of several, and is magnificent, as compared with the other edifices. Much ingenuity is displayed in the construction of their bridges, which are composed either of timber or chains of iron: there is one of the latter kind across the Tchinchien, at Chuka, deserving of admiration, the founder of which is unknown. Their aqueducts are formed of the trunks of trees hollowed for the purpose. Both polygamy and polyandry are in practice; marriage is not ratified by any religious form, and it frequently happens that one female becomes the joint property of several members of a family; the dead are burned, and their ashes plunged into a river, on which occasion certain ceremonies are performed by the Gylongs, a numerous sect of recluses, who apply themselves exclusively to administering the duties of religion. There are two annual festivals; one in the spring, called the *hooli*, consisting of different sports, in which those of all ranks, sex, and age, mix with unrestrained freedom; and an autumnal festival, called *mullaum*, embracing a multitude of Hindoo allegories.

Agriculture.—In the culture of the land the natives display industry and care. Rice, wheat, barley, and a species of triangular seed bearing an affinity to the polygonum of Linnæus, are the chief agricultural products. The valley of Tassisudon, and some of the lands skirting the river, yield two crops annually; the ground on the slopes of the hills is levelled by cutting it into shelves, to enable it to be irrigated by the mountain streams. The most laborious offices of husbandry fall to the lot of the females. Notwithstanding the climate affords great advantages for the production of culinary vegetables, the turnip is the only one cultivated with much success; cucumbers, shallots, melons, &c., are grown; but potatoes have failed, and are now totally neglected.

The trade with the surrounding countries is a monopoly in the hands of the government. Coarse woollen cloths, horses, wax, ivory, gold-dust, silver ingots, musk, the various fruits of Bootan, and Chinese manufactures, form the chief articles of export to Bengal; and the same articles, with the addition of rock salt, leather, tobacco, paper, rice, &c., to Tibet. An annual caravan is sent by the deb-rajah into the Bengal presid., which returns laden with indigo (composing half the cargo), English woollens, linen cloths, cottons, sandal wood, spices, assafœtida, sheet copper, tin, gunpowder, otter skins, horns, hides, &c., the whole usually amounting in value to about 30,000 rupees. A small traffic with the E. division of the Rungpoor district is also maintained. A base silver coin, worth about 10*d.*, struck in Cooch Behar, is current throughout Bootan, where there is no mint.

Manufactures.—The principal is paper, made from the bark of a tree, from which material a kind of silk and satin is also made. Paro is the only market in Bootan, and here are manufactured idols, swords, daggers, and the barbs of arrows; the latter are dipped in a poison procured from a tree unknown to Europeans, which, however, seldom proves mortal.

Religion.—Buddhism, of the Lama sect, is the prevalent religion; but a difference of opinion exists on certain points, one sect permitting the use of food considered impure by the Brahmins. No interruption whatever, of a diplomatic or other character, is allowed to interfere during the period of the celebration of sacred rites: there are many similarities in religious customs here with those of Tibet.

Government.—The sovereign power, though vested in the hands of the dharma-rajah, who is regarded as possessing divine attributes, is exercised only by the deb-rajah, who resides at Tassisudon. The several passes into the country are under the jurisdiction of officers called *subdis*, who usually inhabit the fortresses of their peculiar districts, except in winter, when they visit the lower country, to escape from the rigour of the season, and for the purpose of establishing their authority, which is uncertain in its extent.

The interior and S. parts of the country are divided into different domains, each controlled by a resident functionary, whose duty consists in the exaction of the gov. dues, and general administration of his distr. The most subordinate of the public officers are called *mookas*, which situation, however, affords an opportunity for considerable preferment. The revenues of the rajah are paid mostly in articles of produce and merchandise. Tassisudon, Wandipoor, Tamnukka, Ghassa, and Murichom, are the chief towns; but, with the exception of the first two, they are no better than small villages.

History.—Of this country, called by the ancient Brahmins Madra, no early record has been transmitted, nor was public attention much directed towards it until the deb-rajah's invasion of the neighbouring territory of Cooch Behar, in 1772, which the British government opposed; but, through the intervention of the lama of Tibet, a peace was effected; the disputed district being awarded to the Bootanese.

It is extremely difficult, and in some parts impossible, to determine the exact boundary of the country; a regular system of encroachment on the surrounding states having been long practised by the Bootanese, who have at different periods appropriated to themselves considerable possessions belonging to Bengal and Assam. Great alarm was created in 1816 by a supposed threatened invasion of the Chinese, who had entered Nepaul; and the deb-rajah was excited by his fears to declare himself amicably towards the British, in the hope of gaining assistance, if required. A treaty was concluded in 1775, for carrying on the traffic of the E. I. Company with Tibet, through Bootan, by means of the native merchants, no other mode of communication being allowed. (*Hamilton's E. I. Gaz.*, 1., 270–276; *Turner's Embassy to Tibet, passim.*)

BOOTHBAY, p. t., Lincoln co., Me., 40 m. S. by E. Augusta, 601 W. It has the Atlantic ocean on the S., Damariscotta river on the E., and Sheepscot river on the W., which are here but arms of the ocean. It has an excellent harbour, and being surrounded on three sides by navigable waters, it possesses great facilities for navigation. It contains eighteen stores, one fulling-mill, two grist-mills, three saw-mills, nine schools, 1111 scholars. The fisheries employ 457 persons, and a capital of $79,015. Pop. 2631.

BOOTON, an isl. of the E. Archipelago, 2d division; lying off the S.E. extremity of Celebes; length, N. to S., 85 m.; average breadth about 20 m.; between lat. 4° and 6° S., long. 123° E. It is high and woody, but well cultivated, yielding rice, maize, an abundance of tropical fruits, poultry, &c. The Dutch had formerly a settlement here, and sent an officer annually to destroy all the clove-trees on the island. (*Hamilton's E. I. Gaz.*)

BOPPART (an. *Baudobriga*), a town of the Prussian States, prov. Rhine, on the left bank of that river, 9 m. S. Coblentz. Pop. 3800. This is a very ancient town, its walls appearing to be built on the foundations of a fort constructed by Drusus. In the middle ages it was an imperial city, and several councils have been held in it. The houses are mostly of wood and plaster, with projecting upper stories; and the streets are narrow, ill-paved, and filthy. The large convent of Marienburg, founded in 1123, and some similar establishments, have been converted into the more useful purpose of cotton-factories. The parish church and the old church of the Carmelites are worth notice. (*Schreiber; Barrow's Tour, &c.*)

BORDEAUX, or BOURDEAUX (an. *Burdigala*), an important commercial city and sea-port of France; cap. dép. Gironde, in the centre of an extensive plain, on the left or W. bank of the Garonne, 55 m. S. E. from its embouchure, 102 m. N. N. E. Bayonne, or 1 307 m. S. W. Paris;

lat. 44° 50′ 25″ N., long. 0° 33′ 35″ W. (Pop. ex com.) 95,114. The Garonne here describes a semicircle, along the outer side of which the city extends for about 2¼ m., with a breadth of about 1 m. in its greatest diameter. The city is divided into the old and new quarters: the former, or southern portion, which includes the ancient Roman town, contains only narrow, crooked, and dirty streets, with ill-built stone houses; while the latter, comprising the N. part of the city, has mostly risen up since 1743, when the Intendant, M. de Tourny, commenced his enlightened administration. It is extremely handsome, and deservedly celebrated. The Rue du Chapeau Rouge, which, with its continuations, divides the city into two nearly equal parts, is, in breadth, length, and appearance, not dissimilar to Portland Place, and has many elegant shops, and some noble edifices, as the Bourse, and Grand Theatre. The Allées and Cours de Tourny, the Cours du Jardin Public, the Cours d'Albret, and several other streets; and the *Places*, or squares, entitled Louis Philippe 1er, Royale, Dauphine, &c., may be particularized for their beauty or size. The Faubourg des Chartrions, which contains the Jardin Public, was spoken of as perhaps the finest suburb in Europe, till the extension of building made it part of the city. The approach to Bordeaux by water is very striking. The river, in its narrowest part, opposite the Place Royale, is 720 yards across, with a depth of 16 ft. at low, and nearly 5 fathoms at high water; the length of the port, from one end to the other of the city, is reckoned at upwards of a league; it is capable of accommodating 1200 ships; and such as do not exceed 500 or 600 tons may enter it at all times of the tide. The Garonne is skirted along the city by a succession of superb quays, which descend, by a gentle inclination, to the water's edge, and, besides their utility, are among the principal ornaments of the town, being lined with handsome buildings, whose façades have an imposing effect. "On viewing," says Mr. Inglis, "this magnificent crescent from any opposite point from which the eye may embrace its whole extent, one cannot hesitate in ascribing to it a decided superiority over any *coup-d'œil* presented to us either in the French or English metropolis." (*Switzerland, &c.*, p. 315.) On the opposite side of the river there is only the small suburb of La Bastide. The communication between the city and its suburb is maintained by the famous bridge of Bordeaux, one of the noblest structures of the kind that is anywhere to be met with. It is 532¼ yards in length (or 120¼ yards longer than Waterloo Bridge), by 48 ft. broad; has 17 arches, the piers being of stone, and the upper parts partly of stone and partly of brick. It was commenced in 1810, and completed in 1821, at a cost of £260,000. Owing to the depth and strength of the current, it was a most laborious undertaking. The road to Paris passes over this bridge. The public buildings most worthy of notice are the cathedral, the churches of St. Michel, St. Croix, St. Seurin, Paul, Bruno, and others; the Bourse (Exchange), Custom House, Grand Theatre, Hall of Justice, Palais Royal, Fort de Ha, synagogue, public baths, &c. The cathedral is a fine, but unfinished Gothic edifice, commenced, according to Hugo, in the 11th, and continued, by several different architects, in that and the succeeding centuries, from which circumstance, although beautiful in parts, it wants harmony and regularity. It is 413¼ ft. in length; the height of its nave is 85 ft.; that arm of the cross in which its grand entrance is placed is adorned with two spires, each nearly 160 ft. in height. At a short distance from it stands the ancient belfry, formerly nearly 320 ft. high; but having been much dilapidated during the Revolution, it is now reduced to little more than 100 ft. high, and serves as a shot tower. The church of St. Michel, built in the 12th century, is in a more perfect architectural style than the cathedral; but, like other churches in Bordeaux, it is dark and gloomy. It also has an isolated belfry, which was 320 ft. high until mutilated, and in part destroyed, by a tempest in 1768. On its summit is now a telegraph, forming part of the line between Paris and Bayonne; and beneath it is a cavern in which dead bodies have been preserved for a lengthened period. The church of St. Croix is the most ancient of all, having been built before the middle of the 7th century, and restored by Charlemagne. The churches of Notre Dame, St. Paul, and the College Royal, are of much later date. The synagogue is a handsome building, erected in the time of Napoleon. There are two Protestant churches, but they present nothing worthy of remark. The Bourse is a large edifice, with a splendid staircase, and a hall in its centre, 98¼ ft. in length, by 65¼ ft. broad, lighted by a large glazed dome, 78¼ ft. high, and adorned with a gallery supported by a double rank of arcades. In the upper part of the building are the Council Chamber, Tribunal of Commerce, and rooms used for other public purposes. The Custom House, built on the corresponding side of the Place Royale, is, externally, like the Bourse. The Grand Theatre, built in the reign of Louis XVI., at an expense of £170,000, has, without exception, the handsomest exterior in France, and perhaps in Europe. It will accommodate 4000 persons, and has a fine concert-room, a spacious hall, cafés, and other apartments. There are several other theatres, but none is particularly distinguished. The Palais, or Château Royal, built in 1778, and formerly the residence of the archbishop, is an extensive and fine structure, with a large quadrilateral court in its centre. Napoleon made it an imperial palace. The Palais de Justice, the seat of the royal court and civil tribunal, has a marble statue of Montesquieu. The modern town-hall is of Gothic architecture; of the ancient one, built in the 13th century, nothing at present remains but an oval tower, surmounted by a dome, flanked by two turrets, called the *Tour de l'Horloge.*

Bordeaux was for a long period fortified; but the new streets planned by M. de Tourny for the most part occupy the sites of the former works: the Fort de Ha, constructed by Charles VII., is now converted into the prison: the Château Trompette, built by the same sovereign in 1453, was demolished in 1817; and its site, which now forms the Place Louis Philippe, laid out as a promenade, and planted with trees. There are some remains of antiquity in Bordeaux: the principal is what is called the "Palace of Gallienus," a vast amphitheatre of brick and stone, believed to have been erected about A.D. 260, but now much dilapidated. It stands in the N. half of the city, about ¾ m. from the ancient Roman town. It appears to have been of an elliptic form, 144½ yds. long, by nearly 115 yds. wide, and capable of accommodating 15,000 spectators; it suffered greatly during the revolutionary phrenzy in 1792 (when the Palais d'Ombrière, or Castrum Umbrariæ, another Roman edifice, was also, for the most part, destroyed); but its two principal entrances 28¾ ft. high, by 19¼ ft. wide, and a part of its circumference, are still nearly perfect. Most other relics of the Roman dominion have disappeared. The Temple of *Tutella*, supposed to have been dedicated to the tutelary divinity of the place, and to have been erected early in the first century, was 88 ft. in length on each side, and contained 24 enormous columns, 17 of which were standing towards the end of the 17th century. It was much mutilated in 1649, and totally demolished under Louis XIV., in 1677, to make room for the glacis, constructed by Vauban, round the Château Trompette. No trace is found of the Temple of Diana and Fountain of Divona; and the stream *Divitia*, now La Devise, mentioned by Ausonius (*Claræ Urbes*, xiv. B.),

> Per mediumque urbis fontani fluminis alveum;
> Quem pater Oceanus refluo cum impleverit æstu,
> Adlabi totum spectabis classibus æquor—

instead of supporting fleets, is now arched over, and no vestiges are extant of its dock.

Bordeaux has many structures, &c., devoted to trade, arts, and manufactures. There are several building-docks, in which brigs, frigates, &c., and even ships of the line are constructed, though not so many of either as formerly. The *Abatoir Général* (slaughterhouse), commenced in 1827, is, like the Entrepôt for Colonial produce near it, a large building well adapted for its purpose. There is a very extensive snuff manufactory near the Fort de Ha, employing from 400 to 500 hands, and containing a warehouse capable of holding 30,130 cwt. of tobacco. There are numerous brandy distilleries, sugar refineries, vinegar, glass-bottle, shot, and cordage factories, iron and steel forges, potteries and tanneries, with manufactures of cotton, woollens, kid gloves, bonnets, corks, playing-cards, liqueurs, musical instruments, barrels, turpentine and other drugs, soda, alum, vitriol, mineral waters and other chemical preparations; and in the neighbourhood of Bordeaux some gunpowder fabrics.

The trade of the port is considerable in the produce of these manufactures, and in grain, cattle, and timber; but the chief articles of export are the famous red wines of the Gironde and brandy. A large portion of the inhabitants of the Quartier de Chartrons are wine merchants, and a great part also of that quarter is occupied with cellars, some of which are capable of containing 1000 tuns of wine. The exports of wine from Bordeaux amount at present to from 50,000 to 60,000 tuns a year, and would doubtless be much greater were it not for the heavy duties imposed on most foreign articles. The trade of the port has also suffered severely from the depressed state of the French colonies, owing to the preference given to the growers of beet-root sugar. Besides wines and brandies, which are furnished to every country with which Bordeaux has any trade, the chief exports are liqueurs, walnuts, chestnuts, dried fruits, vinegar, tartar, skins, flour, cork, and various drugs to England. Spirit of wine, tartar, molasses, and colonial produce to the N. of Europe; fruits, verdigris, and a few manufactured articles to the U. States; to Spanish America and the W. India colonies of France, French manufactures, furniture, cattle, and flour; to the S. Seas, the E. Indies, and China, all sorts of manufactures, furniture, silver, &c. Bordeaux is the chief port of Southern France for colonial pro-

duce; it receives from America, India, and Africa, coffee, sugar, pepper, segars, canella bark, indigo, quinquina, tea, rice, cocoa, skins, dye-woods, &c.; iron, lead, and other metals are imported, especially from England; fish, glue, and tallow from Russia; timber from the Baltic; metals, oil, liquorice, saffron, &c., from Spain; zinc and steel from Germany; cheese and stock-fish from Holland; linens from England, and the two last-named countries, &c. In 1836, 2535 vessels, including their repeated voyages, arrived at Bordeaux; of which 688 were from foreign ports, and 2867 from French ports. Of the foreign vessels entering the port, 94 were English. There belonged to the city, on the 1st of January, 1837, 357 vessels, of the burden of 66,355 tons: of these 230 vessels, of the burden of 57,500 tons, were employed in foreign trade, and the others in coasting trade and river navigation. The trade with the interior, is greatly facilitated by the Canal du Midi. (*See* FRANCE.) The custom duties at Bordeaux, in 1831, amounted to £550,478.

Bordeaux possesses several charitable institutions. "The New Hospital, erected to replace that of St. André (built in 1390), is," says Mr. Inglis, "upon a scale of magnificence and comfort beyond what is to be found in any other town in Europe. I dedicated the second of my days at Bordeaux to a visit to this hospital and was equally surprised at its extent, and delighted with the admirable arrangements that pervade every part of it. There is nothing that this hospital does not contain. It includes 710 beds for sick persons, and 18 chambers for the accommodation of persons who pay for the attentions they receive. It contains baths, bakehouses, courts, an apothecary's shop, water-reservoirs, gardens, and accommodation for medical men. There are also in the hospital 34 reservoirs for water, as a provision against fire, containing 1410 hhds. I need scarcely add, that, in the cleanliness of every department, the hospital is perfect; and that in the smallest minutiæ, everything is found that can contribute either to health or to comfort. The Bordelais are justly proud of this noble institution." (*Switzerland, &c.*, p. 318.) There are, also, hospitals for aliens, foundlings, the aged, insane, &c., *bureaux de charité*, a *dépôt de mendicité*, and other similar establishments. There are two buildings near the river, each 36 yards square, devoted to public baths; their exterior is crowned with an agreeable terrace, and the interior of both is fitted up with all the various kinds of baths, medicinal and otherwise. The vineyards of the former monastery of the Carthusians is now converted into a public cemetery: there are three others in Bordeaux, two belonging to the Protestants, and one to the Jews.

Bordeaux is the seat of an archbishopric, of a royal court and court of assize, and tribunals of primary jurisdiction and of commerce. It has numerous scientific and scholastic institutions. The Museum occupies a large extent of ground, and comprises the public library, cabinet of natural history and antiques, a picture-gallery, schools of design and painting, observatory, &c. The public library contains 110,000 volumes, among which are some rare works, and several valuable MSS.; the other departments are not very rich; the picture gallery, however, boasts of some good paintings of the French, Italian, and Flemish schools. There is a botanic garden, at which a course of lectures, recognised by the University of France, is annually delivered; a university academy, royal academy of arts, sciences, and belles-lettres, a royal college, a faculty of theology, with schools of navigation and medicine, a normal school, a school for deaf and dumb, &c.; an Athenæum; Linnean, philomathic, and medico-chirurgical societies; a royal society of medicine; a society of commercial emulation, &c. In the vicinity of the city is an experimental farm, and a race-course or hippodrome: the country round is chiefly appropriated to the culture of the vine, but, from its flatness, is devoid of much picturesque beauty. There is a joint-stock bank with a capital of 3,000,000 francs, and a *mont-de-piété*, in Bordeaux. Since 1825, this city has been lighted with gas. The inhabitants are generally opulent, and live in a style superior to that common in any other French city, Paris excepted. The jurisdiction of the royal court of Bordeaux extends over the dépa. Gironde, Charente, and Dordogne; its archbishopric, which originated in the third century, has for suffragans the bishops of Agen, Angoulême, Poictiers, Perigueux, La Rochelle, and Luçon. Bordeaux sends 4 deputies to the chamber, 3 for the city, and 1 for the arrondissement.

History, &c.—The epoch of the foundation of Bordeaux is unknown. It was the capital of the *Bituriges Vivisci*, a Celtic nation of Gaul, and a celebrated commercial city in the time of Strabo. It was taken by the Romans in the reign of Augustus; and Hadrian made it the metropolis of the second Aquitaine. In the reign of Gallienus, Tetricus, the governor of this prov., one of the so-called thirty tyrants, assumed the purple here, and it is most probable (*Hugo*) that it was he who built the celebrated amphitheatre. In 417 the Visigoths, in 509 Clovis, and in 729 the Saracens, possessed themselves of it; under Charlemagne, it was governed by a count of its own; in the ninth century it was ruined by the Normans. It subsequently became the cap. of Guienne, and fell, with the rest of that duchy, under the kings of England, to whom it almost uninterruptedly belonged till the English were finally expelled from France in the reign of Henry VI. Generally speaking, this city has in later times been attached to the interests of the Bourbon family; but in 1830, on the publication of the *ordonnances* of Charles X., the standard of revolt was hoisted here before news arrived of the same occurrence in Paris. Bordeaux and its vicinity have, in all ages, produced celebrated men: among others, Montesquieu and Montaigne; the Latin poet Ausonius, in the fourth century; Chaptal de Buch, Edward the Black Prince, Jay, Desèze, &c.; Pope Clement V. and Richard II. of England, were also natives of this city. (*Hugo, France Pittoresque*, ii., 63–72; *Guide du Voyageur, &c.*, 1837, p. 156–162.)

BORDENTOWN, p. b., Chesterfield t., Burlington co., N.J., situated on a high bank, on the E. side of Delaware river, which prevents it from being seen to advantage from the river. The Delaware and Raritan canal has its western termination here, and the Camden and Amboy rail-road passes through the place by a viaduct beneath its principal streets. It contains three churches, one Methodist, one Baptist, and one Friends'; five stores, 200 dwellings, and about 1800 inhabitants. Incorporated in 1825. Joseph Bonaparte here fixed his residence when in the United States, and erected a splendid mansion and other buildings, and expended several hundred thousand dollars in ornamenting his grounds, consisting of 1500 acres. The splendid mansion, with some of its rare pictures, was consumed by fire, and the present buildings are plain, but commodious. Bordentown is a favourite resort of the inhabitants of Philadelphia in the summer season.

BORGIA, a town of Naples, prov. Calabria Ultra, cap. cant., in a plain 6 m. W. Catanzaro. Pop. 3000. Having been almost totally destroyed by an earthquake in 1783, it was rebuilt by Ferdinand IV. Its environs produce highly-esteemed wines, and large quantities of silk-worms.

BORGO, a sea-port town of Russia, in Europe, princip. Finland, gov. Nyland, at the bottom of a bay of the gulf of Finland, 35 m. E.N.E. Helsingfors; lat. 60° 22′ N., long. 25° 45′ E. It is the seat of a bishopric, and has a gymnasium. The harbour is indifferent, and it has but little trade. It was here that the emperor Alexander received the oath of fidelity tendered by the states of the principality.

BORGOMANERO, a town of the Sardinian states, prov. Novara, cap. arrond., on the Gogna, 18 m. N.N.W. Novara. Pop. 6000. It is surrounded by walls, and is well built; has a fine square, several convents, a hospital, and a *mont-de-piété*.

BORGO-SAN-DONINO, a town of the duchy of Parma, cap. distr., on the Stirone, 22 m. S.E. Piacenza. Pop. 4000. It is surrounded by walls, has a ducal palace, a cathedral, four parish churches, a college, a seminary, a work-house, and some fabrics of silk and linen. It owes its name to St. Donino, who was beheaded here in 304.

Borgo is prefixed to the name of various small towns in different parts of Italy.

BORISOFF, a town of Russia, in Europe, gov. Minsk, on the left bank of the Bérézina, 45 m. N.E. Minsk. Pop. 1000. Borissof would be unworthy of notice in a work of this sort, but for the celebrity it has acquired from the disastrous passage of the Bérézina, effected near it, by the remains of the French army under Napoleon, on its retreat from Moscow, in 1812.

BORISSOGLEBSK, a town of European Russia, gov. Jaroslavl, on the right bank of the Wolga, opposite to Romanof. Pop. 4000. It is picturesquely situated on a hill declining towards the Wolga, and surrounded with dense forests. It is also the name of another small Russian town, gov. Tambof, on the left bank of the Voronga.

BORKHUM, a small isl. in the North sea, belonging to Hanover, off the mouth of the Ems, about 9 m. from the nearest point of the mainland. It is included in the bailliwick of Pewsum, is about 13 m. in circ., and has about 500 inhabitants. It is so low that at high water it is divided by the sea into two pretty equal parts. The inhabitants are mostly seamen, several of them being employed as harpooners in the ships engaged in the northern whale-fishery. They also raise corn, fruits, and cattle. It is an established custom, that a third part of all articles saved from shipwreck goes to the individual on whose land the disaster took place. Borkhum is a par., with a church and a school. The spire of the church serves also as a lighthouse. The lantern, which is furnished with reflecting lamps, is 150 ft. above the level of the sea, and is in lat. 53° 35′ 20″ N., long. 6° 40′ 26″ E. (*Dict. Géographique, &c.; Coulier, sur les Phares*, 2d edit., p. 61.)

BORMIO, a town of Austrian Italy, prov. Valteline, at the confluence of the Fredosso with the Adda, 30 m. N.E.

Sondrio. Pop. 5500. A large cattle fair is annually held here, from the 22d to the 25th of October; and in its vicinity, on the declivity of mount Braglio, are celebrated mineral springs, much frequented by patients from the Valteline and the Grisons. This town was formerly much more considerable; but, being sacked, burned, and its inhab. put to the sword, in 1621, it has never recovered from the disaster. (*Rampoldi.*)

BORNEO (called by the natives *Tanna Klemantan*), the largest island in the world, Australia being reckoned a continent, occupying nearly the centre of the E. archipelago; between lat. 4° 10′ S., and 7° N., and long. 109° and 119° 20′ E.; having N. and W. the China sea; E. the Celebes sea and straits of Macassar; and S. the sea of Java: form compact; length, N.E. to S.W., 750 m., breadth 350 m.; area, 260,000 sq. m. Pop. probably from three to four millions. The coasts are less indented by deep bays, or creeks, than those of most islands of the archip.; notwithstanding which, it has several fine and spacious harbours. The shores consist usually of mud banks, with numbers of minute and rocky islets around them; the land for several miles towards the interior continuing marshy and alluvial, interspersed with gentle acclivities, covered with underwood. In the maps a chain of mountains, running N.E. to S.W., have been represented as passing through the centre of the island; but Mr. Earl, who visited the interior in 1834, saw no traces of these, nor does he believe in their existence. Excepting the volcanic chain of mountains passing through Java, and the S. parts of the archipelago, to the E., all the hill ranges of those islands run N.W. and S.E., and seem to be continuations of the great ranges which run in that direction through the ultra-Gangetic peninsula, and of which the rocky island Pulo Condor and the Natunas seem to be connecting links. They are all of the same geological character—granitic; and in Borneo probably terminate in a range which lines the S.E. shore for 90 m., called the Hundred mountains. There are many isolated hills in Borneo, and a range stretching along the N.W. coast, of about 3000 ft. in height. (See *Earl's Map, &c.*) There are numerous and extensive plains, especially in the N.; but the most important yet known to Europeans is that of Montradok, near the W. coast. There are said to be upwards of 100 rivers, many being navigable, and some of considerable size. The principal is the Banjarmassin, which has a S. course nearly throughout the whole island, and falls into the sea not far from the town of the same name on the S. coast. The Passir, Coti, and many others, are met with on the E. coast; on the W. the Sambas, Pontiana, Landak, Succadan, &c., are the principal; the first is 1 m. wide at its mouth, and much more a little farther inland. It has been ascended in small vessels by the Dutch for 80 m., and beyond that is said to be available for canoes to within two days' walk of Borneo Proper. The larger rivers, which come from the centre of the island, appear not to have their origin in any mountainous region, as they rise no higher during the rainy season: they seldom contain any sand banks or rapids.

Nothing satisfactory has been communicated respecting the geology of Borneo, except the granitic character of its primary mountains; its soil, in the neighbourhood of the European settlements vies in richness with that of any other island of the archip. In the N.E. it is said to be superior to all other parts. Borneo is rich in valuable minerals: it is the only island of the archip. where diamonds are found; the chief of which are from Landak, in the Chinese territory: one, in the rough state weighing 367 carats, and worth, according to the common but absurd method of estimating such articles, £269,378, has been found there, and was, in 1815, the property of a petty chief. Diamonds are most numerous in the alluvial soils, in which gold is also found; and are of good water, though usually small. The plain of Montradok is said to have formerly yielded 88,362 ounces annually of pure metal (*Hamilton*); the soil in which it is found is stiff, and the veins lie from 8 to 15 ft. below the surface. It is met with chiefly in small particles, nearly as fine as sand, although sometimes in irregular pieces of the size of a sixpence. There are inexhaustible mines of ore of antimony, of very superior quality, at Serawak; 1400 tons of which, at 16*s.* to 20*s.* per ton, are annually exported to Singapore: tin is plentiful in some parts, and a little iron is procured from the interior.

Climate.—The climate of the N. is similar to that of Ceylon, and not subject to the hot land winds that prevail on the coast of Coromandel: the W. coast has no rainy season in particular, but is refreshed by showers all the year round. Europeans have had but little intercourse with the eastern parts, and little respecting them is known.

Borneo is generally very fertile; but, except in Borneo Proper, the grain produced is not sufficient for home consumption. Timber is often very large, but not generally of the kinds suited for ship-building. No teak has been yet discovered: mangrove and rattans are plentiful on the banks of the rivers: iron-wood, ebony, camphor, dammer, and *tankamem* trees (from the latter of which wood-oil is obtained), cocoa-palm, betel, cinnamon, sago, &c., are among the principal trees. The camphor-tree grows to 15 or 16 ft. in circ., and proportionally high: it is cut down, split into pieces, and the produce (which is probably the best) found in the fissures: none of either the Borneo or Sumatra camphor is imported into England, which is supplied with that article from China only. Rice is excellent; but the Dutch are very jealous of its exportation, except through themselves. Maize and the sugar-cane are cultivated, as well as the plantain and many other tropical fruits.

Animals.—The elephant, rhinoceros, and leopard are confined to the N.E. corner of the island; the ox and wild hog are natives of the forests; and the jungles furnish an endless variety of the ape and monkey tribes, among which are the ourang-outang, and a species of baboon, thought by Mr. Earl to be hitherto undescribed, 3 ft. in height, tailless, with short, glossy, brown hair, and an aquiline nose projecting 1½ in. from the face. The tapir, numbers of deer, and small bears, no larger than badgers, but with shaggy hair, inhabit Borneo.

Mr. Earl saw a small amphibious animal from 2 to 8 in. in length, with large pectoral extremities, leaping about in vast numbers on the mud of the W. coast, which very rapidly buried itself on the approach of an enemy: these are thought great delicacies, and caught in a singular manner by the Malays, who obtain a thin plank several feet long by about one foot broad, with spikes projecting from the end, and then, with the right knee resting on the plank, they push it rapidly forward, by means of the left foot, against the mud, and transfix the little animals before they have time to escape. The Sooloo sea is much frequented by English whalers for the spermaceti whale. The seas abound with turtle, and plenty of fish, oysters, and other *testacea*, *holothuria*, &c.

People.—The interior and part of the N.W. coast are peopled by Dyaks, and, it is said, by a race with woolly hair, like the Papuan negroes; the W. coast by Malays, Chinese, and Dutch colonists; the N.W. by half-caste descendants of the Moors of W. Hindostan; the N. by Anamese (Cochin China); N.E. by Suluks; E. and S. coasts by Bugis, of Celebes. Besides these, three tribes live in small craft, in a wandering manner, about the shores; viz., the Lanuna, from Magindanoa; the Orang-Badju, and Orang-Tidong; source unknown.

Dyaks.—The Dyaks (Orang-Benua), a savage race, believed to be the aborigines, are scattered all over the island in different small tribes. They are of a middle size, and, except when cramped up by being constantly in a canoe, are invariably straight-limbed and well-formed, muscular, though inferior to the Chinese in ability to carry burdens; feet short and broad; toes turned rather inwards; cheek-bones high; forehead broad and flat; eyes rather long, and the outer higher than the inner angle; faces prominent, with a pleasant expression, and more like that of the Anamese than other Asiatic nations; hair straight and black; no beard. The women are interesting, often good-looking, and sometimes even fair: many are married to Chinese, and make unexceptionable wives and mothers. Their manners are mild and prepossessing, but as they dread the Malays, from whom they have suffered formerly, they commonly avoid strangers; yet it is said that there is no Eastern people more apt to make progress in arts. (*Earl.*)

In the N.E. and near Banjarmassin, their condition is the most ameliorated. At the latter place, and on the S. coast, they are said to possess a written character, and they are there ashamed to avow certain of their usages; such as that of seeking for and preserving human heads, &c. Rice is their chief food, with pork, fish, deer, and other wild animals, which they shoot by means of arrows blown through a tube. This is their general weapon, but they sometimes use crooked bows and arrows, the latter of which are dipped in poison. They spend much time in ill-built, shallow canoes, about 10 ft. long, and made by hollowing out a single tree; but on shore inhabit thatched bamboo houses, elevated on posts, and entered by a ladder, which is always drawn up at night: these habitations are often collected in small villages, and defended by stockades. The men wear but little clothing; the women much more, and are bashful and modest: both sexes love finery, especially beads and feathers. Tattooing is in use among some of the tribes.

Upon the banks of the larger rivers many tribes often unite together, under the rule of one stronger than the rest; but in the forests they keep separate, and speak dialects so different as to be often unintelligible to each other. The more civilized have adopted Mohammedanism; others less civilized believe in a Supreme Being and a future state, but suppose that, in the latter, the owner of a human head will have the former wearer of it as his slave! a belief which has naturally led to a widely-extended system of

human sacrifice. No one can marry without the head of some one having been first obtained by himself or his friends; and at the funerals of persons of consequence, or treaties of peace between chiefs, slaves or prisoners are decapitated to obtain these trophies; the heads are dried and hung up in the houses; and piratical expeditions are often undertaken with no other object than to obtain them. Some Dyaks are occupied in washing gold, and dispose of the gold-dust to the Malays for red and blue cotton cloths, beads, brass wire, salt, and other necessaries of life, and tobacco, of which they are extravagantly fond. To avoid more intercourse than necessary with the Malays, they oblige them always to dispose of their merchandise at the nearest Dyak town. Next to human heads, which appear to them the most valuable of all articles, China jars are valued, and from some superstitious motives are so highly prized, that they have been known to fetch £300 or more. A circumstance, stated by Mr. Earl, which may be of use to individuals trading with Borneo, is, that if any one drink the smallest quantity of the blood of a Bornese in a cup of water, he, by doing so, binds him by ties closer than those of consanguinity. The Lanuns are a piratical people, who infest the N.W. coast for 300 m., and cruise in other parts of the archipelago, plundering villages, and often carrying off their whole population into slavery. Sometimes the Dyaks join with them in these predatory expeditions, and bring away the iron and human heads, while the Lanuns appropriate the rest of the spoil. The Orang-Badju are a kind of sea gipsies, in person like the Malays; living at the mouths of most rivers on the E. border, in families of about a dozen or fifteen, in boats of from 8 to 10 tons each, covered, when in harbour, with a roof of matting. They are employed chiefly in fishing, taking tripang, and making salt from burned sea-weed. They are generally Mohammedans, but by no means rigid in their tenets. The Orang-Tidong live to the N. of the latter, and cruise among the Philippines and Sooloo isles, where they dispose of sago, on which they chiefly subsist. They are a hardy race, and are said to be occasionally cannibals.

The Dutch have two small stations on the W. coast, Sambas and Pontiana, about 90 m. apart. The town of Sambas is meanly built, and contains no habitation of stone, or other substantial material: the houses of the government officers are low, wooden, thatched buildings; the huts of the natives are chiefly raised on posts, ascended by ladders, but many are built on floats on the river, as in Siam. The Chinese *campong* is the only street; the fort is a mere embankment, surrounded by a stockade of poles, and mounted with a few nine-pounders; it contains the barracks, with a garrison of 40 men, half of whom are Europeans. Before the Dutch settled here, the place was a nest of pirates, destroyed by the British in 1812; the climate is not unhealthy, though the coast is covered with swamps and jungle. Sambas has the better river, but Pontiana is the better town. Between the two are the Chinese settlements of Montradok, Landak, &c. The gold mines near the former place are generally worked by companies of merchants clubbing together. Spades and mattocks are the only mining instruments in use: the ore is brought up in baskets, then washed (for the Chinese have no other method of treating it), and the gold-dust made into little packets, each weighing two Spanish dollars. About 3800 oz. troy a year are sent to Singapore, which Mr. Earl thinks may be about 1-10th of the present produce of the island. The Chinese appear to be of a class like the lowest at Canton: previously to the Dutch settlement here in 1823, 3000 of them arrived annually as settlers; but emigration has now ceased, owing to the treatment they have received from the Dutch. Mr. Earl reports that, in 1834, the Chinese expressed a great desire to trade with the British at Singapore, but the Dutch have interdicted all communication between them and foreign nations except through the medium of Sambas and Pontiana; and, being in possession of the coast line, they are enabled to prevent it. The consequence is, that the Chinese refuse to hold communication with the Dutch, and the whole trade of the W. coast has been much diminished through their illiberality. The W. coast was ceded to the Dutch by the king of Bantam in 1780: but the cession, for some time afterward, was resisted by the sultan of Succadan. In 1823, the Dutch settled at Pontiana, and purchased the monopoly of some diamond mines from the Malay sultan. Finding these unprofitable, they endeavoured next to take forcible possession of the Chinese mines, but being repulsed, they blockaded the Chinese between their two settlements, obliging them to trade by their ports, and guarding the coast by several vessels. The Dutch revenues are chiefly derived from monopolies of salt and opium, the former of which is imported from Java, &c., in vessels chartered by government, and sold at seven times the import price, the interior being entirely dependent on the coast for its supply: other resources are from capitation taxes on the Chinese, and imposts on their entering or leaving the Dutch settlement. The pop. (1834) of the Chinese and Dutch territories was estimated by Mr. Earl as follows:

Chinese (90,000 in the Dutch settlement.)	150,000
Malays	50,000
Bugis	10,000
Arabs	400
Javanese and Amboynese soldiers	150
Dutch	89
Dyaks	250,000
Total	460,639

Exports.—The principal exports of the W. coast are gold, diamonds, antimony, camphor, bees' wax, deers' horns, *dammer*, ebony, wood-oil, rattans, pepper, bezoar-stones, and iron, to Java, for the manufacture of *krises*. The iron of the interior is either exceedingly good, or the Dyaks are able to temper it astonishingly well, for their steel cimeters are capable of cutting through an iron nail or wire without difficulty. (*Earl.*)

Borneo Proper.—The state next in importance to the colonies is Borneo Proper, a Malay sovereignty in the N.W., probably the most ancient of all in the island, and from which the latter has derived its name: it is bounded N.E. by the Sooloo, and S.W. by the Dutch territory, and extends from 100 to 150 m. inland. The Malays here are distinguished for their haughtiness and indolence; and the sultan, who enjoys a high veneration, maintains more state and dignity than most Malay princes. The chief town has been much reduced by piracy and intestine commotion, which have driven away foreign settlers: it is on a river, and in appearance like other Malay towns, but not so large as either of the Dutch settlements: the inhab. are chiefly Mohammedans. The exports are camphor, sea-slug, tortoise shell, birds' nests, clove bark, pepper, gold dust, sandal wood, rattans, &c.; there is much fine timber on the banks of the rivers. There was formerly an extensive trade between Borneo Proper and China, as well as some commerce with the English in piece goods. Since the establishment of the Singapore colony, the British trade has recommenced; and if cultivated, Mr. Earl says, affords a fair prospect of a large consumption of our manufactures. The Malays are not destitute of some arts, among which is that of casting cannon: in this they are skilful, and arms and ammunition would be good articles for the British export trade.

Pappal, Malluda, Mangedara, Paitan, Tirun, &c., in the N.E., are mostly Suluk settlements. The country here abounds in forests of lofty trees, extensive plains covered with herds of large cattle, from breeds introduced by the Spaniards two centuries ago; many rivers, and much mineral wealth. Gold and diamonds are collected with little trouble; tin ore is sometimes picked up on the surface. Sago, rice, betel nut, cocoa-nut oil, camphor, wax, a little pepper and cinnamon, pearls, rattans, clove bark, and grain, from Malluda; birds' nests, lacka wood, and tortoise shell, in Mangedara; timber, lime, stone, eagle wood, and sea-slug, in Paitan, are the chief products. Tirun yields more birds' nests than any other region of the East: its coast is generally a low swamp overgrown with mangroves; its rivers are numerous, large, and often navigable; its interior is covered with sago-trees, which form the chief subsistence of the people; and yields, besides, canes, rattans, wax, honey, bezoar, gold, and, it is said, saltpetre. Many Anamese have settled on the N.E. coast; emigration from Cochin China, in consequence of national disturbances, having prevailed lately to a great extent. Voyages hence, to and from Anam, may be made at any time of the year.

The chief state on the E. coast is that of Coti, or Coti-Lama, belonging to Bugis, from Celebes. Coti town stands 50 m. up the river of that name, the banks of which are inhabited by nearly 300,000 people. It is the chief place on this coast: its people are commercial, and many annually visit Singapore in their *prahns* or trading vessels. Passir stands on a large river a little S. of the former: it is a den of pirates. Banjarmassim, on the banks of the river of that name, is surrounded by a territory producing rattans of the best description in abundance, as well as gold, diamonds, and pepper. The pop. are mostly Bugis, who occupy nearly every river and creek on the E. and S. coasts. They have had some trade with Singapore, but which is discountenanced by the Dutch authorities; all the S. coast being claimed by the latter, who, in 1747, established a factory at Banjarmassim. On this coast there are said to exist the remains of temples, images, &c., relics of a more civilized people formerly inhabiting it, but no detailed history of these has been given. (*Earl's Eastern Seas, &c.*, in 1839-3-4, p. 252-342; *Leyden's Sketch of Borneo; Crawfurd's Indian Archipelago; Hamilton's E. I. Gazetteer*, i., 278-285.)

BORNHOLM, an isl. belonging to Denmark, in the Baltic, about 24 m. E. by S. from the nearest point of Sweden,

and 90 E. from Zealand. It is of a rhomboidal shape, being about 20 m. in length by 14 in breadth. Pop., in 1834, 24,645. Bornholm differs considerably from the other Danish islands: it rises high above the level of the sea. Its shores are formed, for the most part, of steep, lofty rocks, surrounded by reefs, which render their approach not a little dangerous. It is well supplied with freestone, which is largely exported to Copenhagen and other places; and with limestone, blue marble, various species of clay, ochres, and coal. The clay is suitable for the making of coarse and fine pottery, and is used in the China factory at Copenhagen. Hitherto the coal has not been profitably wrought. Climate drier and more salubrious than that of Zealand. The centre of the island is occupied by an extensive heath; but elsewhere the soil is moderately fertile, producing all sorts of grain, but especially oats, with flax, hemp, &c. Cattle inferior to those of the other Danish islands, but the horses are strong and active. Timber is scarce; large trees being, however, frequently found in a state of perfect preservation imbedded in moss. There are a great many rivulets well stocked with fish, which are also very abundant round the coast. Exclusive of agriculture and fishing, brewing and distillation, tile and brick making, the manufacture of coarse and fine earthenware, &c. are carried on to a considerable extent. An ingenious native of the island having accidentally taken to pieces a wooden clock imported from abroad, took it for a model, and set about making another. His example was followed by others; and such was their success, that wooden clocks soon began, and still continue to be a principal article of export! Linens, spun and prepared in the houses of the peasantry, are also exported. Coffee, sugar, tobacco, and spices are the principal articles of import. Roenne, the capital, and the residence of the governor, is situated at its S.W. angle. It is defended by batteries, has a considerable trade, and a number of vessels and boats engaged in the fishing; but its harbour is shallow, having only 6 or 7 ft. water. Nexø, on the S.E. shore, is famous for its beer. A lighthouse, having the lantern elevated 272 ft. above the level of the sea, has been erected on cape Hammerson, the most N. point in this island. The feudal system never obtained any considerable footing in Bornholm. Persons accused of political offences used to be banished thither. (*Catteaux, Tableau de la Mer Baltique*, i., p. 277–284.)

BORNOU, a kingdom of Central Africa, in from 10° to 15° N. lat., and from 12° to 18° E. long.; it is bounded on the N. by Kanem and the S.E. corner of the desert; on the E. by Begharmi; on the S. by Mandara; and on the W. by various small tribes extending to Houssa and the Fellata country. Bornou appears to have been formerly more extensive, both in lat. and long.; at present it may, perhaps, be about 400 m. in length, from E. to W., the same in extreme width, from N. to S., and its area is probably not less than 120,000 sq. m., of which, however, certainly more than 20,000 are covered by the waters of lake Tchad. (*Denham and Clapperton*, p. 314, &c.; *Lucas, Afric. Assoc.*, i., 131, &c.) The surface of Bornou is an immense plain, the greater portion of which is subject to annual overflow, from which circumstance, joined to the great heat of the climate, the soil has every capability of abundant production; owing, however, partly to the want of industry in the people, and partly to the state of warfare in which the internal countries of Africa seem constantly to live, little advantage is taken of this favourable state of things, and the Bornouese are not much superior as agriculturists to other negroes. Clapperton (*Journey from Kouka to Sokkatoo*, p. 19) found the natives of Houssa raising a second crop of wheat by irrigation; but such instances, while they prove the natural fertility of the land, are extremely rare in Bornou. The principal rivers are the Shary and the Yeou; the former apparently rising in the mountains of Mandara, the latter in those of Houssa. The smaller streams are very numerous, but all are received into lake Tchad, and unless that lake have an outlet on its E. shore, which, if not impossible, is very improbable, the whole water-system of Bornou yields no supply whatever to the ocean. (*See* LAKE TCHAD.) Upon this point, however, it must be observed that something more than a suspicion is entertained of an *indirect* communication between the Sharg and the Niger. The Tchadda, which falls into the latter river between 7° and 8° of N. lat., and between 8° and 9° of E. long., is positively affirmed by the natives to be connected with the lake of the same name. Lander, in his last expedition, sailed up this stream to 150 m. from its mouth, and found its upward bed constantly bearing towards the Mandana mountains. (*Travels of R. and J. Lander*, p. 769.) Major Denham also received information, on the Mandara frontier, of a river running W. through a country which his informant called Adomowa. (*Trav.*, p. 144.) In addition, likewise, to its identity of name with the distant lake, the Tchadda (river) has the second name of Shary given to it by the natives; and Capt. Allen, who ascended its stream in 1833, has given many reasons for supposing that it is connected also with the Yeou, the other great river of Bornou. (*Geog. Journ.*, vol. viii.) From all these circumstances, the asserted communication appears to be highly probable, and, indeed, it is not easy, on any supposition, except that of its truth, to account for the prevalent belief on the banks of the Niger. The very considerable space of intervening country (600 m. direct distance) being considered, it is not very likely that the natives of that district should have even *heard* of the Tchad, unless its connexion with their river had really existed;* but, at the same time, it is certain that the Bornouese waters and the affluent of the Niger flow in different directions (*Denham*, p. 236, &c.; *Lander*, p. 769), so that the possibility of a passage from the one system to the other implies the common origin of some of their branches to lie among lakes on elevated plains, from which the streams descend on different sides with a very gradual fall, and in considerable volume. Such a communication between independent basins was first established by Humboldt and Bonpland, with regard to the rivers of S. America. It will form an interesting feature in physical geography, should it be found existing also in interior Africa. (*See* NIGER.)

The climate of Bornou is one of very great but not uniform heat. In summer, that is, from March to June, the thermometer stands at 105° to 107° at noon, and even at night is rarely lower than 100°, except before sun-rise, when it sinks to 86° or 88°. The winter temperature is, however, lower than the lat. would warrant the expectation of, rarely higher than 74° or 75°: it frequently falls in a morning as low as 58° or 60°. The N.W. wind is cold, the S. and S.E. hot and suffocating; which, considering that the first blows over the Sahara, and the others over the high mountains of Kong, is a remarkable fact, which seems to require explanation. The seasons may be divided into *wet* and dry, but the first can scarcely be denominated *rainy*, in a tropical sense. About April or May, indeed, a short period, varying from three to nine days, is marked by violent tempests, rain, thunder, lightning, and wind; but the remainder of this wet period, extending to October, by no means interferes with out-door labour, except in June, when there is another burst of falling weather, attended with a most oppressively sultry atmosphere. At this time it is that the lakes and rivers overflow their banks, flooding the land in their neighbourhood for many miles. The dry and cold season usually commences in October. (*Denham*, p. 181–225, 314; *Lucas*, p. 131.)

In a country devoid of mountains there are, of course, no minerals. Iron is procured from the neighbouring state of Mandara, in the hills of which it is very abundant, and gold dust is a principal article in Bornouese trade; but whether the last be brought down by the rivers, or procured from a distance, does not appear. (*Denham*, p. 146, 317; *Lucas*, p. 153.) Trees are extremely scarce throughout the country, except here and there upon the banks of rivers; though the neighbouring states, Kanem, Mandara, Houssa, &c., appear to be well wooded. The soil, which is chiefly alluvial, is highly productive, but its productions are by no means varied, consisting chiefly of millet, barley, beans, Indian corn, cotton, and indigo. The flooded lands on the shores of lake Tchad are peculiarly well adapted for the growth of rice, but none is cultivated; and there is no tropical country *nor desert* so destitute of fruits and edible roots. (*Lucas*, p. 134; *Denham*, p. 50, 102, 316, &c.; *Clapperton*, p. 6, 15, &c.)

The wild animals of tropical Africa are all common in Bornou; and the ferocious kinds, lions, panthers, jackals, &c., which in the wet season approach the walls of the towns, are particularly dangerous. The buffalo, giraffe, elephant, hippopotamus, and crocodile, are animals of chase; the flesh of all of them is eaten, and that of the last three accounted a great delicacy. The civet cat is common, and the animal itself, as well as its secretion, is an important article of trade. Of domestic animals the number is immense: cattle and horses are of fine breeds, and plentiful; camels are rare, and sheep have a hairy instead of a woolly covering. Pelicans, spoonbills, cranes, snipes, ducks, geese, and, in short, almost every species of water fowl, are abundant in the extensive marshes: the ostrich traverses the plains, and partridges, grouse, guinea fowl, and other game are also very numerous, as are the domestic fowls, which constitute the cheapest kind of animal food that can be purchased. Reptiles are numerous, consisting, besides crocodiles, of scorpions, centipedes, enormous toads, and many varieties of serpents, one of which, measuring 14 or 16 feet in length, though said to be harmless, is probably of the boa or python species. In such a climate insect life is naturally abundant: bees are so numerous, that Lucas (p. 138) af-

* In an Arabic MS. geography of interior Africa, composed by Sultan Bello, of Houssa, Bornou is described as "a country which contains rivers," but no mention is made of the lake. (*Denham and Clapperton, Appendix*, xii., 159.)

firms the wax is often thrown away, as an article of no value in the market; and Denham remarks (p. 320) that the honey is only partially collected. The curse of tropical countries, the locust, is a frequent visiter; and though a favourite article of food, is regarded with dread, since desolation always follows in its train. The rivers and lakes abound in fish, of many different species, most of them peculiar. (*Lucas*, p. 137; *Denham*, 229, 284, 319, 321, &c.)

The inhabitants of Bornou consist of two classes—the Shouas, descendants of Arab settlers from the N.; and Kanowry, as the native race is called, who are true negroes. The former, as in all similar conjunctions, are the dominant people; they have fine, open, aquiline countenances, large eyes, a light copper complexion, and bear a strong personal resemblance to the best specimens of English gypsies. They are divided into tribes, and still bear the names of some of the most powerful Bedouin hordes. Their language is Arabic, and to them is owing the introduction of the arts of writing and reading. They are shrewd, active, and courageous, but these are almost the only good traits in their character. Deceitful, arrogant, cunning, and dishonest, their superior attainments are used by them only as a means to rob and oppress their black neighbours. These last present, in their physical appearance, all the usual negro peculiarities—flat noses, large mouths, and inexpressive countenances. They are peaceable and orderly, but destitute of energy, cowardly, and appear to regard the Shouas as a superior race of beings. Nine different languages, or dialects (ten with the Arabic), are spoken in Bornou: Lucas says thirty (p. 132); but as he makes the limits of the country much larger than Denham, it is probable he included those spoken in some of the surrounding states.* No estimate can be made of the population of this kingdom; but as towns possessing 30,000 inhabitants are met with, and markets are said to be sometimes attended by 80,000 or 100,000 persons, and the Shouah population alone can raise an army of 15,000 men, the number of inhabitants must be very considerable. (*Denham*, p. 79, 89, 329, &c.) The religion of the court is, of course, Mohammedanism; but no disabilities appear to attend the profession of fêticism, which is the faith of the bulk of the negroes. The government is absolute, and till lately was elective. The laws are arbitrary, and punishment summary, but usually administered with justice; and there is a kind of insolvent act, which relieves a man from his debts on proof of his poverty, leaving any future property he may acquire at the mercy of his creditor, without farther process. In other respects the Bornouese resemble the negroes generally; their arts are few, and apparently introduced, in most cases, by the Arabs. But the Arabs also introduced the slave-trade, which was unknown before their arrival, and is said to be reluctantly submitted to. The moors of Barbary, however, prefer slaves to anything else; and as Bornou is dependant upon them for all the comforts, and many of the necessaries, of life, the slave-trade is carried on to a great extent. It is said that the natives are very anxious for a direct trade with England; but considering that their country is situated full 600 m. from the coast, and in a climate destructive to Europeans, we confess we are not of the number of those who entertain a sanguine expectation that any such trade will ever be carried on to any extent or to any profit. (*Denham*, p. 321–335 *et pass.*; *Lucas*, p. 146–159, &c.) The name Bornou is Arabic. It is literally *Barr-Noa*, "the Land of Noah," the Arabs believing that the mountains in its neighbourhood received the ark after the deluge, and that the patriarch first established himself in its extensive plains. (*Lucas*, p. 131.) The negro name appears to be *Kanowra*. (*Denham*, p. 316.)

BORODINO, a village of Russia in Europe, gov. Moscow, on the Kologa, 10 m. W. Mojaïsk. This village will be forever memorable from its being the scene of the most sanguinary conflict, perhaps, that has taken place in modern times. On the 7th September, 1812, the French army under Napoleon, in its advance upon Moscow, attacked at this point the entrenchments of the grand Russian army, 120,000 strong, under Kuttousoff. The Russians made a desperate resistance, but in the end their position was carried. The slaughter was immense; the Russians having lost above 40,000 men killed and wounded, and the French nearly 30,000! Few prisoners were made on either side.

* Mr. Lucas's account of Bornou was derived from the reports of Sheriff Imhammed of Fezzan, confirmed by the governor of Mesurata, and remarkably corroborated by the independent statements of Ben Ali, a Morocco merchant, to the African Association, about 1789. These are, therefore, the Arab descriptions of Bornou; and it is gratifying to remark how closely they agree, in general, with those of Denham and Clapperton. It is singular, however, that none of them mention the great lake Tchad, nor either of the great rivers which fall into it; though to the natives of a dry climate these would be supposed to form the most interesting features of the country. This is the more remarkable, since, from the notices of Beghurmi, it is clear that the Arab merchants must have reached the E. shore of the lake, and consequently been acquainted with its extent both in lat. and long. (*Afric. Assoc.*, p. 78, 80, 142, 146, &c.)

BOROFSK, a town of Russia in Europe, gov. Kaloga, cap. distr., on the Prorva, 55 m. S.W. Moscow; lat. 55° 16′ 30″ N., long., 36° 32′ 15″ E. Pop. 5000. It is an old town, celebrated in Russian history for its defence by Prince Volkonski, in 1610, against the pretender Dimitri. It has four churches, a manufacture of sail-cloth, and its environs produce excellent onions and garlic. At a short distance is the convent Pæsnoutief-Borofski, founded in 1444, containing five churches and a considerable treasure. (*Schnitzler*, *La Russie*, &c., p. 139.)

BOROUGH-BRIDGE, a bor., market-town, and township of England, W.R. co. York, Claro wapentake, par. Aldborough, on the S. bank of the Ure, 17 m. S.E. York. Pop. 950. It has some good houses and inns, its consequence being principally derived from its situation on the great road from York to Edinburgh. It enjoyed the privilege of sending two mem. to the H. of C. from 1553 down to the passing of the Reform Act, by which it was disfranchised. It has several fairs; of these the most important is held in June, for the sale of hardware, and, though much fallen off, is still attended by dealers from Sheffield, Birmingham, &c. The others are principally cattle fairs. Many remains of British and Roman antiquities are found in this town and its immediate vicinity. Of these, the most celebrated are the obelisks, called the Arrows, about ½ m. S. from the town. A beautiful tesselated pavement was discovered in 1831, a little to the W. of the town. At this town, on the 16th of March, 1322, the army of the rebel barons, under the Earl of Lancaster, was defeated by the troops of Edward II., in an attempt to cross the river; and their leader, being taken prisoner, was immediately beheaded.

BOROVITCHI, a town of Russia in Europe, gov. Novgorod, cap. distr., on the Msta, 100 m. E.S.E. Novgorod; lat. 58° 16′ N., long. 33° 30′ E. Pop. 3000. It has four churches, a convent, and a good deal of trade. In the neighbourhood are cataracts that interrupt the course of the river; but the obstacles to its navigation, thence arising, have been successfully obviated by works undertaken for that purpose.

BORROMEAN ISLANDS, a group of small islands in the Lago Maggiore, Continental Sardinia, which see.

BORROWSTONNESS, or BO'NESS, a burgh of barony and sea-port of Scotland, co. Linlithgow, on the S. side of the Frith of Forth, 17 m. W. by N. Edinburgh. Pop. 2808. It is one of the oldest Scottish sea-port towns, and its name often occurs in history. The harbour is safe and commodious; but the revenue which it yields is insufficient to keep it in repair, even though an impost of 2*d*. Scotch has been levied for the purpose for nearly a century (17 George II.) on every Scotch pint of ale or beer brought into the town. Bo'ness carries on ship-building to a small extent, and has some little trade with the Baltic. It engages pretty extensively in the herring fishery, and has not unfrequently, of late years, sent one, two, or more vessels to the N. whale fishery. The town is the seat of the most extensive salt works on the Frith of Forth; and it exports about 30,000 bushels or salt a year. Here are two distilleries, an earthenware manufactory, and vitriol and soap works. Productive collieries abound in the immediate neighbourhood, and have been wrought for centuries. The mines extend nearly a mile below the bed of the frith, so as almost to meet those of Culross on the opposite side, which run in a S. direction to the distance of 2 m. Near Bo'ness is Kinneil House, a seat of the Duke of Hamilton, and long the residence of Dugald Stewart.

BOSA, a sea-port town on the W. coast of Sardinia, div. Sassari, near the mouth of the Termo: immediately opposite to the latter is the islet of Bosa, lat. 40° 16′ 46″ N., long. 8° 25′ 31″ E., between which and the shore small vessels lie in tolerable security. Pop. 3500. It is beautifully situated in a fine valley between two hills; is tolerably clean, and has several paved streets; but in summer it is ill supplied with water, and is then, also, very unhealthy. It is a bishop's see: has nine churches, a convent of Capuchins and one of Carmelites, with a seminary for the study of philosophy and theology. On a hill immediately above the town are the remains of a castle or acropolis, where the principal families used formerly to reside. The natives are very active, carrying their produce all over the island: and most part also of the travelling pedlars belong to the town. (*Smyth's Sardinia*, p. 287.)

BOSCAWEN, p. t., Merrimac co., N.H., 9 m. N.W. Concord, 490 W. Bounded E. by Merrimac river; Blackwater river, a branch of Contoocook river, affords water-power. Incorporated in 1760. It contains five stores, one fulling-mill, three grist-mills, seven saw-mills, three tanneries, sixteen schools, 514 scholars. Pop. 1965.

BOSCO-TRE-CASE, a village of Naples, prov. Naples, cap. cant., at the foot of Vesuvius, 12 m. E.S.E. Naples. Pop. 5000. It is one of four villages situated at a little distance from each other, comprised under the general term *Bosco*; has several churches and convents, a royal mann-

factory of arms, a powder-mill, and an extensive fabric of *pâte d'Italie*.

BOSNA-SERAI, or SERAJEVO (an. *Tiberiopolis*), a city of Turkey in Europe, cap. prov. Bosnia, on the N. bank of the Migliazza, 246 m. S. Buda, and 575 m. N.W. Constantinople; lat. 43° 54′ N., long. 18° 26′ E. Pop. 60,000? It is well built, and has an agreeable appearance owing to the number of minarets, towers, and gardens which it encloses. It contains a *serai*, or palace, built by Mohammed II., to which the city owes its name; about 100 mosques, some of which are elegant structures; several Greek and Roman Catholic churches, with colleges, bazars, &c. Most of the houses are of wood; the Migliazza is here crossed by a massive stone bridge. The city was formerly encompassed with walls, but these are now decayed, and its only defence consists in a large citadel, built on a rocky height at its E. extremity, and mounting 80 cannon. The inhabitants are industrious, and employed in the manufacture of arms, iron, and copper articles, horse-hair bags, morocco, and other kinds of leather, and cotton and woollen stuffs. Near Bosna-Serai are the principal iron mines in Bosnia. It is the chief mart in the prov., the centre of the commercial relations between Turkey and Dalmatia, Croatia, and S. Germany, and has considerable trade with the cities of Saloniki and Yanina. The most wealthy families in Bosnia reside in this city; two thirds of the pop. are said to be Turks, but the Jews monopolize the chief part of the trade. (*Cunnabich, Ritter, Malte-Brun, &c.*)

BOSNIA, or BOSNA, the most westerly pachalic or eyalet of Turkey in Europe, comprising Bosnia Proper, Turkish Croatia, and Herzegovina. It lies between lat. 42° 30′ and 45° 15′ N., and long. 15° 40′ and 21° 2′ E.; having N.W. and N. the Austrian prov. of Croatia and Slavonia; E. Servia, and S. and W. Albania and Austrian Dalmatia, the latter separating it from the Adriatic, to which, however, it approaches in certain parts very closely, if it do not actually come in contact with it. Area variously estimated at from 16,000 to 22,000 sq. m. Pop. from 800,000 to 1,000,000. It is almost entirely occupied by the Dinaric and Julian Alps, which, with their offsets, separate it into several well-marked divisions. Principal river the Save, forming the N. boundary of Bosnia, with its affluents the Uma, which in part separates Turkish from Austrian Croatia, Verbaz, Drin, and Ibar forming its E. boundaries. The Bosna traverses Bosnia Proper, the Sanna, Croatia, and the Narenta, Herzegovina. It has numerous fertile valleys, but no lakes of importance, and only one plain of any size, that of Livno in Herzegovina. This country is supposed to be rich in minerals; but the Turks permit only the iron mines and a lead mine near Zvornik to be wrought. The former employ about 2,000 individuals. Gold and silver are said to exist in various places, and mines of the first of these metals were worked under the Romans: most of the large affluents of the Save bring down gold-dust; but its collection by the inhabitants is prohibited. Quicksilver is also found; and there are quarries of millstone, freestone, alabaster, and marble; coal mines, and numerous mineral springs, some of which furnish salt, though not in sufficient quantity for the supply of the country. The climate is generally cold, but not unhealthy; the winter snows lie on the ground for a long time, and the spring is short. In the S. violent winds prevail in winter, and the summer is extremely hot. The mountain chains, especially in the N., are covered with dense forests of pine, oak, beech, linden, chestnut, &c.; but the S. branches of the Dinaric Alps present a remarkable deficiency of vegetation. The best soil in the valleys is devoted to pasture; and Bosnia is generally better adapted for the feeding of cattle than for agriculture. The Bosniaks, however, seem to prefer the chase to more settled pastoral occupations; and as the woods abound with wild animals, as deer, wild boars, bears, wolves, foxes, &c., they have every facility for carrying it on. The inhab. consist of several races distributed, perhaps, nearly as follows:

Nation.		Religion.	
Turks	246,000	Mohammedans	450,000
Bosniaks	350,000	Greek Church	230,000
Servians	120,000		
Morlachians	75,000	Roman Catholics	151,000
Croats	40,000		
Gipsies	16,000	Gipsies	16,000
Jews	2,000	Jews	2,000
Armenians	1,000	Armenians	1,000
Total	850,000	Total	850,000

It is only in the valleys that any cultivation is carried on. Wheat, barley, maize, and legumes are grown in sufficient quantity for home consumption; and flax and tobacco near Zvornik and Novibazar. A great variety of fruit is met with. A liqueur is made from plums, and a sweet drink called *pekmes* from pears. The olive and vine are both cultivated; but the wines are strong and fiery, and in order to be relished should be drunk while young. Bosnia has a breed of strong horses, but it is much neglected, except by the Turks: there are large herds of fine cattle, and flocks of sheep, the wool of which is greatly esteemed in the markets of the Levant. Goats, hogs, and poultry are everywhere plentiful; and in Croatia many bees are kept, which yield good honey, but inferior wax. The manufactures of Bosnia are limited to iron articles of common use, leather, coarse woollen stuffs, saltpetre at Jaicza, cannon balls at Kamengrad; gunpowder, fire-arms, and other weapons. The principal exports are leather, hides, wool, goats' hair, honey, cattle, dried fish, timber, mineral waters, &c.; the chief imports, linens, woollens, silks, lace, glass, and metallic wares; paper, colonial produce, salt, oil, dried fruits, and silver coin from Dalmatia. The transit-trade in Levant produce is not inconsiderable; the chief seats of commerce are the towns of Bosna-Serai, Novibazar, Zvornik, Bagna, Louka, Mostar, and Gradiska. The roads are generally very bad, and impracticable for wheel-carriages. The total government revenue derived from this prov. is estimated at £700,000 or £800,000 a year, but not half this sum is said to reach the treasury of the sultan.

Bosnia is under the government of a pacha of three tails; it is divided into six sanjiaks or circles, and again into forty-eight subdivisions, each of which is subordinate to a military governor and a *cadi*, or judicial officer. Bosna-Serai is the capital of the prov.; but Trawnik is the residence of the pacha. This officer is changed every three years; he has under his orders a military force of from 3000 to 4000 men. The Bosniaks are of Slavonic origin; though mostly Mohammedans, they yield but an unwilling obedience to the Porte, and differ from the Turks in many usages—having but one wife, and treating their women with consideration.

Bosnia was anciently included in Lower Pannonia. In the middle ages it first belonged to the Eastern empire, and afterward became a separate kingdom, dependant upon Hungary. The Turks conquered it in 1480, after a war of 17 years; but it was not till 1592 that Solyman the Magnificent finally annexed it to the Turkish dominions. (*Cunnabich, Lehrbuch der Geog.*, p. 745, 746; *Von Zedlitz, Brief Survey of Bosnia, &c.*)

BOSPHORUS (more properly BOSPORUS) OF THRACE, or CHANNEL OF CONSTANTINOPLE, the strait which connects the Black sea with the sea of Marmara, and separates the E. corner of Thrace from Asia Minor. The length of this remarkable channel is about 17 m.; its width varying from ½ m. to 2 m.; its course slightly winding; its direction very little W. of S., and its embouchure in the sea of Marmara is in 41° N. lat., 29° E. long.

A current sets constantly from the Black sea through the Bosphorus, but, though generally very strong, it is subject to considerable modifications; a long-continued wind from the S.W. renders it sometimes almost imperceptible; while, on the other hand, a breeze from the N.E. so adds to its force, that it is almost impossible, for a vessel under such circumstances, to make head against it. The inequalities of coast cause several changes of direction in the set, as the water is thrown from side to side by the numerous bold promontories that project from both shores; but these do not affect the general course, except by making it more tortuous; that course tending constantly towards the S. and the sea of Marmara. The depth of water is considerable; there is but one bank in the channel; consequently there is no danger in its navigation, nor any difficulty, except in an upward passage against its current; this is, however, sufficiently baffling to the unskilled Orientals. At its N. mouth, on the Black sea, are two groups of islets, one on the European, the other on the Asiatic shore; these are the famous Cyanean Isles or Symplegades of the ancients, which it was once believed no vessel ever passed in safety, except by miracle. (*Apoll. Rhod.*, ii., v. 435, &c.) They are now quite harmless, being, in fact, nothing but low continuations of the respective shores; they are in a continual state of decay, and might easily be overlooked, did not their ancient celebrity induce the modern navigator to search for them. In its freedom from all danger, its narrow channel, the strength and constant set of its current, and, in short, in most of its characteristics, the Bosphorus resembles a magnificent river more than an arm of the sea; and this resemblance is by no means impaired by the branch which it gives off at its S. end, and which, enclosing Constantinople on the N., forms what is justly called the Golden Horn, one of the finest harbours in the world. The country through which the Bosphorus flows is unrivalled for beauty; animals and vegetables of almost every variety abound, and the geology is peculiarly interesting, from the unequivocal evidences it exhibits of igneous action. The cliffs, which are stately and abrupt, consist of jasper, agate, cornaline, calcedoine, porphyry, trap, and calcareous spath, in very great but picturesque confusion. They are all more or less in a state of decomposition, and traces of metals are seen in the colouring of the various stones. Appearances seem to warrant the conclusion that this strait was opened by a con-

vulsion of nature, and this belief was very generally entertained by the ancients. (*See* BLACK SEA.) At about half way between the two seas, or rather nearer to that of Marmara, at the narrowest part of the channel, stand two castles, one on each bank, named, from the Turkish provinces, Anadoli and Rumeli (Asia Minor and Thrace). They form almost the only defence to Constantinople on the N., and, if well manned, would be very difficult to pass. These appear to be almost the only *public* buildings, but private houses and gardens extend along nearly the whole length of the strait, especially on the European side. (*Chevalier, Voy. de la Prop.*, p. 43–49; *Olivier, Voy. dans l'Empire Oth.*, i., 120–124; *Jones's Trav.*, ii., 444–451.)

The name Bosporus (Βοσπορος), which has been improperly corrupted by modern orthography to Bosphorus (Βοσφορος), is indicative of the narrowness of this channel, and comes from βος, an ox, and πορος, a ford. The passage across it of Europa, borne by Jupiter in the form of a bull, is a well-known Greek legend, and thence the ancients called those channels Bospori which were narrow enough to allow of kine swimming across them. Two especially were so distinguished, namely, the strait now under consideration, and the Cimmerian Bosporus (Strait of Yenicalé), between the Euxine and the Palus Mœotis. Over the Thracian Bosporus, Darius Hystaspes threw a bridge of boats when he passed from Asia to his disastrous war with the Scythians; and the pillars of marble which he erected to commemorate that event are supposed, with great reason, to have stood upon the spots now occupied by the Turkish castles. (*Herodotus, Melpom.*, p. 85–88; *Strabo*, vii., 320; *Ptolemy*, iii., 11; *Pliny*, vi., 1, &c.)

BOSSINEY-WITH-TREVENA, a bor. of England, co. Cornwall, hund. Lesnewth, par. Tintagel, 208 m. W. by S. London. Its area is 350 acres; its pop. is returned with that of the par., which, in 1831, was 1006: houses, 210. It is on a rugged exposed part of the N. coast of the country, and consists of two small villages ¼ m. apart. There is a town-hall, now occupied as a charity school: an annual fair is held the first Monday after 19th Oct. It claimed to be a bor. by prescription, and returned 2 mem. to the H. of C., under a charter of 7 Edw. VI., till disfranchised by the Reform Act: the elective right was in burgesses holding freehold property in the bor.; of whom there were 24. The area of the whole parish is 3960 acres: annual value of property, in 1815, £3674. The remains of King Arthur's Castle are on the table summit of a huge rock, protruding into the sea, and connected, by a narrow isthmus, with the rest of the parish.

BOSTAN (EL) (an. *Comana*), a town of Turkey in Asia, Natolia, pach. Marasch, at the N. foot of Mount Taurus, in a fine plain, on the Syhoun (an. *Sarus*), 80 m. N. from the bottom of the bay of Iskenderoon, and 115 m. S. by W. Sivas, lat. 38° N., long. 36° 26′ E. Pop. 8000 or 9000. Mr. Bruce (*Appendix to Kinneir's Travels*, p. 560) says of El Bostan, that "it has 40 dependent villages in the adjacent plain, surrounded with fine trees and cultivated fields and meadows. Few spots in Asia Minor offer a sight more agreeable. There is a great trade in wheat, sold to the Turkmans, who carry it even as far as Aleppo. When fearful of being attacked, the inhab. lay the environs of the town under water. It has four mosques, one of which is supposed to be very ancient."

In antiquity Comana was famous for the worship of Mâ, the Cappadocian Bellona. The population consisted, in a great degree, of soothsayers, priests, and slaves belonging to the high-priest, and employed in the service of the temple. The latter, in the time of Strabo, are said to have exceeded 6000 of both sexes. It received a Roman colony in the reign of Antoninus Pius, and perhaps, also, in that of Caracalla. (*Cramer's Asia Minor*, ii., 139.)

BOSTON, a sea-port, mar.-to., and bor. of England, co. Lincoln, on the Witham, 90 m. N. London, and 28 m. S.E. Lincoln; lat. 53° 10′ N., long. 0° 25′ W. Pop. 1801, 5926; 1841, 34,680. The town is supposed by some, from antiquities found in its neighbourhood, to have been a Roman station, and to have taken its name from a monastery built by St. Botolph, A.D. 654, destroyed by the Danes in 870. That it became a place of considerable mercantile importance, after the Norman conquest, appears from the fact that, in 1204, its assessment towards a tax of a fifteenth, imposed on the ports, amounted to £780, while that of London, the only port taxed higher than it, was but £836. In 1281 it suffered by fire, and in 1286 by an inundation. Under an act of 27 Edw. III., it became a staple for wool, woolfells, leather, and lead. About the same time its mercantile prosperity was much increased by several Hanseatic merchants settling in it, who, however, emigrated about a century after, in consequence of a quarrel with the townsmen, which terminated in bloodshed. During the intermediate period its shipping was so considerable that it furnished 17 ships, and 360 men, towards an armament for the invasion of Brittany, and ranked the twelfth, as to number of vessels, among the 83 ports which were assessed; but it fell off rapidly after the departure of the Hanseatic merchants. The dissolution of the monasteries by Hen. VIII., injured the town, though compensation, in some degree, was made to it by a grant of 511 acres of the sequestered lands. It afterward suffered by the plague, and by inundations, to which this flat country was particularly liable. During the civil wars, it was for some time the head-quarters of Cromwell's army.

The town, situate on the Witham, called by Leland the *Lindis*, about 5 m. from its mouth, and divided by it into two nearly equal parts, connected together by an iron bridge, of a single arch of 86½ ft. span, opened in 1807, consists of two long streets, one on each side the stream, from each of which others diverge. It is well built, contains many good dwelling-houses and shops, and extensive granaries and warehouses: the part within the borough is well paved and lighted under the provisions of a local act; but these advantages are not enjoyed by a small part, which has extended itself into the neighbouring parish of Skirbeck. It suffers much from the want of good water, that used being rain-water, collected in cisterns, or water raised from pits, or the river. The attempts made to procure spring-water have been unsuccessful, though borings have been carried to a depth of more than 600 ft. Its most remarkable building is the parish church of St. Botolph, erected in 1309. It is the largest church without aisles in the kingdom, being 245 ft. by 98 ft. within the walls. Its tower, 300 ft. high, built on the same plan as that of Antwerp, is capped with an octagonal transparent lantern, of very beautiful construction, and forms a remarkable landmark on this low coast, being visible at 40 m. distance. A chapel of ease was erected in 1822. The only traces of St. John's Church, taken down about two centuries ago, are found in its cemetery, still used as a place of burial. The other places of worship are those of the Unitarians, Wesleyan New Connexion, and Primitive Methodists, General and Particular Baptists, Independents, and Catholics. Each has a chapel, to most of which a Sunday school is attached. A free grammar school was founded in 1544; Laughton's, for the sons of poor freemen, in 1707; a blue-coat school in 1713, for 30 boys and 25 girls; and a national British and infant school, together educating about 500 pupils of both sexes: there is also a dispensary and a very handsome Union house, this being a "union" under the new Poor Law. The other public places are—three subscription libraries, assembly-rooms in the market-house, a theatre, and a public promenade at Vauxhall gardens. A weekly newspaper is also published. The new municipal borough contains about 1100 acres, 2780 houses, and a pop. of 12,183. Since the passing of the Municipal Reform Act the town has been divided into 2 wards, and is governed by a mayor, 6 aldermen, and 18 councillors. It has returned 2 mem. to the H. of C. since the reign of Edward VI. Previously to the Reform Act the franchise was vested in the members of the corporation, and in the freemen who resided in and paid scot and lot in the bor. The number of houses charged with house-duty in 1833 was, of £10 and under £20, 310; of £20 and under £40, 161; of £40 and upward, 79; total annual value of houses, £36,188. For electoral purposes it includes the whole parishes of Boston and Skirbeck, and the hamlet and fen allotment of Skirbeck quarter, extending in all over 7923 acres. Registered electors, 1837–38, 749. It is a polling place for the co. There were several guilds, both religious and civil, all of which have fallen into desuetude; the hall of that of the Blessed Virgin Mary, which was one of the most important, is used by the corporation for their municipal meetings. Petty sessions are held on Friday. A court leet for the borough sits annually: its principal duty is to present nuisances. A court of record, which decides pleas in all actions, real, mixed, and personal, sits on Wednesdays and Saturdays. A court of pie-poudre is held at each of the fairs; a court of the clerk of the market has jurisdiction similar to that in London; and a court of requests sits for the recovery of debts under £5. The police consists of a chief and 11 petty constables, wearing a uniform similar to the London police. The jail, though sufficiently spacious, is ill arranged for classification; all the female prisoners, except debtors, being confined in the same ward.

The corporation has no concern in the management of the poor.

The assessments to which the inhabitants are liable are, 1, borough rates; 2, paving; 3, lighting and watching; 4, assessed taxes; and, 5, parochial taxes. The following statement gives the amount of each for three years; the first includes fines on convictions:

Years.	Borough Rates.	Paving.	Lighting & Watching.	Assessed Taxes.	Parochial Taxes.	Total.
	L.	L.	L.	L.	L.	L.
1830	574	883	882	2979	8811	14,129
1831	1254	899	902	2953	8451	14,449
1832	1079	1203	923	3005	9082	15,289

The parochial assessments increased from £4197, in 1825, to £8579, in 1833. The ann. val. of real prop. in the borough in 1815, was £30,403; and in 1833, £40,774. Its manufactures are mostly confined to sailcloth, canvass, and sacking; there are two iron and brass foundries, and three ship-yards, with patent slips, where vessels of 200 tons are built. Markets, well supplied with poultry and sea and river fish, are held on Wednesdays and Saturdays, in the new market-house, to which a corn-market is attached; fairs for cattle and sheep are on May 4 and 5; for fat cattle, on Aug. 11; for horses about Nov. 18, and three days after; and for horned cattle only on Dec. 11. Immense numbers of the finest cattle and sheep are sold at these fairs, the town being in the centre of one of the richest grazing districts in the kingdom. The banking establishments are—the National and Provincial Bank of England; a branch of the Stamford, Spalding, and Boston Bank; with two private banking houses. The principal drainages in the vicinity are those of the Holland fens made by a cut of 12 m. from the town to Dogdyke, near Tattersall, by which 22,000 acres were reclaimed; and the Wildmore fens, 41,000 acres, drained in a similar manner. Owing to the neglect of keeping the river clear, the trade fell off so as to be almost extinct. In 1721 vessels of 250 tons could discharge at the town; in 1751 sloops of 6 ft. draught could not come up, except at springs. The drainages, already mentioned, revived attention to the state of the river, and under special acts of parliament, have improved it so far that vessels of 120 tons come up to town, whence the navigation is continued to Lincoln by small steamers and barges. A sluice was also erected to retain the water above the town; but, owing to the scanty supply in the upper part, it can seldom be opened for scouring and deepening the river, as was intended. The navigation to Lincoln is extended by the Fossdyke Canal to the Trent, at Torksey, and thence, either by still water or river navigation, to Gainsborough, Nottingham, and Derby, thus opening a vent for the export of the manufactures of the midland counties. The foreign trade is chiefly confined to the importation from the Baltic of timber, hemp, tar, pitch, and iron. The coasting trade is chiefly in the export of oats, wool, and woad, of which large quantities are grown in the neighbourhood, the return cargoes consisting of coal and manufactured goods. There is a good custom-house, and a pilot establishment of a master and 12 pilots. Extensive powers are vested in the mayor and burgesses by two local acts for improving the port and harbour, under which they are empowered to collect tonnage, wharfage, and lastage, from vessels that enter; the receipts to be applied to its improvement. They are also empowered to make bye-laws, to which all vessels are to be subject. The expenditure, under these acts, for 21 years, commencing 1812–13, was £88,450. The fund was involved in a considerable debt, now in process of liquidation, a considerable portion of which was contracted on account of the works planned and carried on under the direction of the late Mr. Rennie, and his son, Sir John Rennie, chiefly consisting of a cut, commenced in 1828, about 1 m. long, and 3 m. from Boston. Its execution was extremely difficult, as it was carried through a shifting sand; but it has proved very beneficial both in deepening the harbour and draining the country. Another cut at the town, with a wall from the bridge to the quay, has since been executed on an effective plan by the corporation. Part of the port dues are collected at Spalding and at Wainfleet, to each of which the jurisdiction of the corporation extends. The former, a river port, is situate on the Welland, which unites with the æstuary of the Witham, at the Scalp. Its inhabitants complain of the heavy duties imposed on them, for no advantage but that of the beacons and buoys below the Scalp. The following table shows the state of the shipping trade during a period of 7 years.

	No. and Tonnage of Foreign Trading Vessels.				No. and Tonnage of Coasting Vessels, including Irish.				Total No. of Vessels belonging to the Port.	Receipts.
	Outwards.		Inwards.		Outwards.		Inwards.			
Years.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.		
1826	—	—	68	6270	663	33,596	596	51,504	145	17,781
1827	2	124	66	6464	818	36,136	828	46,256	149	26,461
1828	2	137	64	5806	719	36,665	767	43,489	148	17,609
1829	2	275	39	5367	645	34,395	834	46,399	152	21,841
1830	—	—	36	4300	633	33,256	925	46,061	156	17 612
1831	—	—	38	5184	733	36,368	1064	58,049	165	12,508
1832	1	89	29	4686	804	40,008	1608	79,096	174	8,866

(*Dugdale's Hist. of Embanking and Draining; Nobles's Gazetteer of Lincoln; Thompson's History of Boston; Britton's Beauties of Eng.; Municipal Rep.; Boundary Rep.; Sessional Papers.*)

BOSTON, city, capital of Massachusetts, the principal city of New England, the second city in commerce and the fifth in population in the United States, constitutes, with the town of Chelsea, the county of Suffolk, Mass.; and is pleasantly situated, chiefly on a peninsula, three miles long and little over one broad, at the head of Massachusetts bay. It lies in 42° 21′ 23″ N. lat. and 71° 4′ 9″ E. from Greenwich, and 5° 55′ 15″ E. long. from Washington. It is 115 m. S.S.W. from Portland, Me., 163 m. S.S.W. Augusta, Me.; 63 m. S.S.E. Concord, N. H.; 158 m. E. by S. Albany, N. Y.; 40 m. N.N.E. Providence, R. I.; 97 m. E.N.E. Hartford, Ct.; 207 m. E. by N. New York; 440 N.E. Washington. The population in 1790 was 18,038; in 1800, 24,937; in 1810, 33,250; in 1820, 43,298; in 1830; 61,391; in 1840, 93,383. Of these there were employed in commerce, 2040; in manufactures and trades, 5333; in navigating the ocean, 10,813; do. canals and rivers, 19; in the learned professions and engineers, 586.

Boston consists of three parts, Old Boston on the peninsula; South Boston, formerly a part of Dorchester, from which it was separated, and united to Boston in 1804; and East Boston, formerly Noddle's Island. The "Neck" or isthmus, which, in early times, formed the only connexion of the peninsula with the main land, is over a mile in length, and was originally, in some parts, very narrow. At the commencement of the Revolutionary war, the British fortified this Neck, and were thus able, in a great measure, to control the communication of the inhabitants with the adjacent country, as there were then no bridges. This Neck, which connects Boston with Roxbury, still constitutes the main avenue to the city from the south; but by a number of extensive bridges and artificial avenues, it is connected, in various directions, with the surrounding country. The first bridge erected was that over Charles river, connecting Boston with Charlestown on the N., and was completed in 1786, and then considered the greatest work of the kind ever undertaken in the United States. It is 1503 feet long with its abutments, 42 feet wide, with a draw 30 feet wide for the admission of vessels, rests on 75 piers of timber, and cost $50,000. There are four strong stone wharves, connected with three piers each, sunk in various parts of the river. The floor of the bridge is four feet above the highest tides, which rise 12 or 14 feet, and 64½ feet above the bed of the river, in the middle. It is lighted by 40 elegant lamps at suitable distances. West Boston bridge, built in 1793, connects the city with Cambridgeport on the west, and is 2758 feet long, with a causeway 3344 feet long, and an abutment on the Boston side of 87½ feet, making its whole length with the causeway 6190 feet. It rests on 180 piers, and cost $76,667. South Boston bridge, completed in 1805, is 1551 feet long and 40 wide, connects the Neck with South Boston, and cost $56,000. The proprietors sold it to the city in 1832, and after thorough repairs, it was made a free highway. Canal or Craigie's bridge connects Boston on the N.W., with Lechmere's Point, in Cambridge, and is 2796 feet long and 40 feet wide, and was completed in 1809. A lateral bridge extends from this bridge to Prisonpoint, in Charlestown, 1821 feet long and 35 feet wide, having but one side railed in for foot passengers. The Boston and Lowell rail-road runs parallel with, and about 100 feet north of Craigie's bridge. Boston free bridge forms a more ready communication between Boston and South Boston than that by the Neck, and was completed in 1826, by a company of proprietors of lands in S. Boston, and by them presented to the city. It is 500 feet long and 38 feet wide. Warren bridge is the most elegant structure of the kind in Boston. It leads to Charlestown, is 1390 feet long and 44 feet wide, and the floor is Macadamized to the thickness of eight inches, making the whole thickness of the bridge 30 inches. In addition to these bridges, Boston is connected with Brookline on the west by a splendid avenue or mill-dam, a mile and a half long, and from 60 to 100 feet wide, composed of solid materials, and water-tight. It cuts off and encloses 601 acres of the southerly part of the back of Charles river bay, over which the tide formerly flowed to the depth of from seven to ten feet. From the main dam a lateral dam extends to a point in Roxbury, forming a full basin on the west and an empty or receiving basin on the east, creating an extensive water-power, between high and low tides. It was completed in 1821, and cost $700,000. These dams constitute important avenues to the city on the west. All the bridges and avenues are lighted by lamps at convenient distances, and present an imposing appearance. No other city in the United States has an equally splendid collection of bridges; but happily no other city equally needs them.

Boston exhibits a picturesque and beautiful appearance when approached from the sea; and in surveying its several parts, the traveller finds much to admire. The peninsula had originally an uneven surface, and the place early received the name of Trimountain, from its three hills, and three principal eminences on Beacon hill. These eminences, though somewhat lowered, continue to adorn the city. Beacon hill, in the W. part, is 110 feet above high water mark, but was originally 30 feet higher. Fort

hill, on the E. side, fronting the harbour, is 80 feet high; and Copp's hill, in the N. part, is 50 feet above high water. On this hill the British had a battery in 1775, from which, during the memorable battle of Bunker hill, they bombarded and burned Charlestown.

South Boston constituted a part of Dorchester until 1804, when, by an act of the Legislature, it was united to the city, and has since been an integral part of it. It extends about two miles along the south side of the harbour. It contains nearly 600 acres, and is regularly laid out into streets and squares. Nearly in the middle of this tract are Dorchester heights or Mount Washington, 130 feet above the sea, which furnishes many fine sites for buildings, and presents a beautiful view of the city and its harbour. On these heights the Americans, under Washington, erected a fortification in 1775, which soon compelled the British to evacuate Boston.

East Boston is built on Noddle's Island, containing 660 acres of land, and a large body of flats. It is connected with Old Boston by a steam ferry, the boats of which start from each side every five minutes, and occupy about three minutes in crossing. It is connected to Chelsea, on the main land, by a bridge 600 feet long. The eastern rail-road commences here. A wharf 1000 feet long, called Cunard's wharf, has been liberally granted, free of charge for 20 years, for the use of the Liverpool line of steam-ships. East Boston has wholly grown up since 1833, and already constitutes an important part of the city.

The principal public ground in the city is the spacious Common on the west side, which contains 75 acres. It occupies the declivity of Beacon hill, and has a pleasantly diversified surface; and an eminence near the centre, still bears the marks of a British fortification, thrown up in 1775. North of this eminence is a beautiful sheet of water, called Crescent-pond, bordered with young and thrifty elms. The Common contains about 600 trees of different sizes, some of them 100 years old, which add much to its pleasantness.

The Common is surrounded by an iron fence, about a mile in length, on the outside of which is a broad street; and on three sides of it are rows of splendid edifices. A botanic garden, containing 25 acres, is separated from its W. part. The State-house, the most commanding building in the city, occupies its N. part. No other city in the United States has an equally splendid public ground. From the day when the peninsula was purchased of an Indian sachem, it has never been the property of any individual; it was early reserved by the citizens "for a training field and other public purposes," and by a clause in the city charter, the city council are forbidden to sell the Common or Faneuil Hall.

The city contains 585 streets and avenues. It was originally laid upon no regular plan, and the streets are often crooked and narrow; but these inconveniences have been avoided in the newer parts, and extensively remedied by improvements in the older parts. Boston is generally well built, mostly of brick, and many of its private residences are unsurpassed in elegance by those of any other city in the Union. Many of its public buildings are of a commanding character.

Among the public buildings of Boston, the State-house is the principal. It occupies a commanding situation near the summit of Beacon hill, 110 feet above the level of the sea, and fronts on the spacious Common. Few public buildings in the United States have so commanding a site. The edifice is 173 feet long and 61 wide. It consists externally of a basement story, and above it a principal story, 30 feet high. This, in the centre of the front, is covered with an attic 60 feet wide and 20 feet high, supporting a pediment. Immediately above this rises the dome, 50 feet in diameter and 20 feet high; and the whole terminates with a lantern, crowned with an elegant pine-cone. The basement story is finished plainly on the wings with square windows. The centre is 94 feet in length, and formed of arches, which project 14 feet, forming a covered walk below, which supports a colonnade of Corinthian columns of the same extent above. The walls are of brick, painted externally to resemble Portland stone, and the dome is of a bronze color. The lower story is divided into a large hall or public walk in the centre, 50 feet square and 20 feet high, supported by Doric columns. In the middle of the south side of this story is a beautiful statue of Washington, by Chantry, in a neat temple, erected for the purpose of containing it. The rooms above are, the Representatives' room in the centre, 55 feet square. It is finished with Doric columns on two sides, forming, at 12 feet from the floor, galleries; the whole supporting a bold and well-proportioned dome, the centre of which is 50 feet above the level of the floor. The Senate-chamber is 55 feet long, 33 feet wide, and 30 feet high, with two screens of Ionic columns supporting, with their entablature, a richly-decorated arched ceiling. In another part of the building is the Council-chamber, 27 feet square and 20 feet high, which is a handsomely finished room. The dome is ascended by a spiral stairway on the inside; and from its top is presented the finest view in the United States, and which is probably unsurpassed in the world. Elevated 230 feet above the level of the harbour, the spectator looks down upon the city as on a map, and is able to trace its streets and to survey its buildings. Before him stretches the harbour and the extensive bay on the east, sprinkled over with its hundred islands; and in other directions numerous beautiful villages, with their numerous spires; and a highly cultivated country, with many elegant country seats, embowered in trees, fill up the beautiful scene. A few lofty mountains might add to its grandeur, but could scarcely enhance its beauty, to which nature and art have given their highest embellishment. Faneuil Hall was erected in 1742, by a gentleman whose name it bears, and was by him presented to the city. It is 100 feet long, 80 feet wide, and three stories high. The lower story is occupied by stores. The great hall in the second story is 76 feet square and 28 high, with galleries on three sides, supported by Doric columns, and the ceiling is supported by two ranges of Ionic columns. The west end is ornamented by a full length portrait of Washington by Stuart; and another, copied from an original picture, of Peter Faneuil, Esq., the donor of the building. Above the great hall is another in the third story, 78 feet long and 30 feet wide, devoted to military exercises, with apartments on each side for the deposit of arms and military equipments. This venerable building has been appropriately called "the cradle of American liberty;" for here the orators of the Revolution stimulated the people, by their exciting eloquence, to resist British oppression. It is the property of the city, and secured by its charter from ever being devoted to any but public purposes. The City Hall, or old State House, at the head of State street, is 110 feet long, 38 feet wide, and three stories high, and contains the offices of the city government, the Post-office, the Merchants' Exchange, and a well-furnished news-room. It was built in 1658, has been twice destroyed by fire, and was the last time rebuilt in 1747. It was formerly occupied by the State Legislature. An elegant Merchants' Exchange, with a fine reading-room, has been recently erected in State street. Faneuil Hall market is a splendid edifice, 585 feet long and 50 feet wide, having a centre building 47½ by 55 feet, projecting 24 feet on the N. and S. fronts. It is directly E. of Faneuil Hall, between N. and S. Market streets, which are lined with splendid rows of stores and warehouses. The wings are two stories high, and at the E. and W. ends are fine porticoes of four Grecian Doric columns 20 feet 9 inches high, which support a tympanum, with a circular window for ventilation. On the centre building is a beautiful dome, which rises 77 feet from the ground. The lower story is occupied as a market for meat, fish, and vegetables; and the country does not furnish a more splendid market-house. The upper room of the centre building is denominated Quincy Hall, from the Hon. Josiah Quincy, now president of Harvard University, who was mayor of the city when the building was erected. It is 70 feet long and 50 feet wide. Each wing is divided into two halls by brick partitions, one room 44 by 47 feet, and the other 143 by 47, used as warerooms and for large sales. This building, exclusive of the ground, cost $150,000, and is an ornament to the city. The new Court-house is constructed of hewn Quincy granite, is 176 feet long, 54 feet wide, and 57 feet high; and the N. and S. fronts are adorned with Grecian Doric porticoes of four columns, which weigh 25 tons each. The interior has four court rooms, each 50 by 40 feet, besides various public offices. A new Custom-house is erecting, which has an elegant Doric portico its whole length, and a fine dome in the centre, adapted to the wants of this commercial metropolis. The Houses of Industry, Correction, and Reformation, are pleasantly situated in South Boston, near the brow of Dorchester heights, having a fine view of Boston and its harbour, and surrounded by 61 acres of ground. Tremont-house is one of the finest hotels in the United States, and little inferior to the celebrated Astor-house in N. York. It has a granite front 160 feet long and three stories high, and has two wings, one 84 by 34 feet, the other 110 by 40 feet, and each four stories high. The building contains 180 rooms, and cost $68,000, exclusive of the ground. Many of the churches possess considerable architectural beauty, among which Trinity church, St. Paul's church, Grace church, and the lofty and elegant steeple of Park-street church, 218 feet high, deserve particular notice.

Boston is the second commercial city in the Union, and possesses one of the best harbours in the United States. Including the outer harbour, it extends from Nantasket to the city, and spreads from Nahant to Hingham, containing 75 square miles. It contains a hundred islands or rocks above water, and receives Mystic, Charles, and Neponset rivers. The principal islands are Governor's island, containing fort Warren, and Castle island, containing fort

Independence. They lie 2½ miles E. of the city and about a mile distant from each other, and the only channel for large ships passes between them. They divide the inner from the outer harbour. Deer island and Long island command the outer harbour. There is a light-house on Light-house island, 8¾ miles E. 21° S. of the city. Northwardly from the light-house there is a chain of islands, rocks and ledges, about three miles to the Graves rocks, between which no ships attempt to pass. The inner harbor has a depth of water sufficient for 500 vessels of the largest class to ride at anchor in safety, while the entrance is so narrow as scarcely to admit two ships abreast. Although no large navigable river flows into Boston harbour, yet, by means of the Middlesex canal, and locks and canals around the falls in Merrimac river, a boatable communication has been opened to Concord, New Hampshire; and recently the railroad to Albany not only brings to it the trade of the central and western portions of the State, but will cause it to share in the trade of the vast western country. The capital of Boston has also been largely invested in the manufacturing establishments of Lowell and Waltham, which are the most extensive in the State, and among the largest in the United States. Boston has over 90 wharves, many of which are lined with large and splendid stores and warehouses. The principal are India wharf, which is 980 feet long and from 246 to 280 feet wide, in the middle of which is an extensive row of stores four stories high. It was constructed in 1805. Central wharf is 1379 feet long and 150 feet wide. In the centre is a fine range of stores, and over the central hall, in the middle, is an astronomical observatory, with a telegraph, communicating, through an intermediate one, with another on Point Alderston hill, at Nantasket. It was built in 1816. Long wharf, at the foot of State street, is 1809 feet long and 200 wide, on which are 76 spacious warehouses. A well of fresh water, 90 feet deep in the centre of this wharf, extensively supplies the shipping with pure and wholesome water. This wharf was constructed in 1710, but has since been greatly improved. Other wharves are of great extent, and well furnished with stores and warehouses. The tonnage of the port, in 1840, was 290,243, which is exceeded by no other port in the United States but that of New York. The foreign imports are about $16,000,000 annually, and the exports about $10,000,000, and yet the balance of trade is greatly in favor of the city. The amount of trade coastwise is three or four times as much as the foreign trade.

There were, in 1840, 142 commercial houses and 89 commission houses engaged in foreign trade, with a capital of $11,676,000; 572 retail stores, with a capital of $4,184,290; 31 lumber yards, with a capital of $371,610; the fisheries employed a capital of $25,000; machinery was manufactured to the amount of $135,900; articles of the precious metals to the amount of $96,650; of various metals to the amount of $284,400; there were six furnaces, employing a capital of $20,000; three glass factories, with a capital of $37,000; 17 distilleries and two breweries employed a capital of $680,000; two sugar refineries and three ropewalks, a capital of $101,500; one grist-mill, a capital of $50,000; furniture was manufactured to the amount of $320,000; ships were built to the amount of $37,000; there were built, in 1840, 217 brick and stone, and 148 wooden houses, which cost $1,081,100; 24 printing-offices, 28 binderies, 17 daily, seven semi-weekly, and 11 weekly newspapers and seven periodicals, employed 437 persons, and a capital of $236,450. The total amount of capital employed in manufactures was $2,770,250. There were fifteen academies or grammar schools, with 2629 students, and 137 common and primary schools, with 14,003 scholars. The foregoing will evince that the manufactures of Boston, though not equal to its commerce, are highly respectable; and that in the means of ordinary education, it is pre-eminent. The city contains 25 banks, with an aggregate capital of $17,300,000; and 25 insurance companies, with a total capital of $6,080,000, and two safety-fund insurance companies, without a definite capital.

From its first settlement by the Puritans, the cause of education has received great attention by the citizens of Boston, as it has everywhere among their descendants. The public schools of Boston are of a higher character, are better organized, and more liberally supported than in any other city or considerable town in the Union. It is estimated that about one fourth part of the entire population are kept at school during the year, at an expense of $200,000. Of the public free schools, the Latin grammar school occupies the highest place. Its substantial commencement dates back to 1635. It is under the direction of a principal, vice-principal, and four assistants. For admission to it a boy must be at least nine years old; be able to read fluently, to write a running-hand, and grammatically to parse common sentences in prose. The regular course of instruction embraces five years. The next in order is the English High School, in which the mathematics and the higher branches of an English education, together with the French language, are taught. It was organized in 1821. Next come the grammar and writing schools, ten in number. These schools are kept in commodious buildings, each having two departments; and they are under the direction of large and respectable school committees. And last, though not least in importance, are 75 primary schools and one African school. These schools are under the management of a board, consisting of one member for each school, and a standing committee of seven. Each school is visited once a month by at least one member of its district committee. They consist chiefly of children from four to seven years of age, after which, if they can read and spell the English language correctly, they are advanced to the grammar schools; and if they have made sufficient progress, they are admitted to the Latin school at nine, and the English high school at 12 years of age. Some of the brightest scholars at Harvard University have been received from the public schools of Boston. Besides the above, there are infant schools for teaching very young children, and Sabbath schools, in which nearly 3000 children are taught.

The Medical Institution of Harvard University is located in Boston, where its professors reside. It was founded in 1782, has six professors, 86 students, and over 5000 vols. in its library. The lectures commence on the first Wednesday of November, annually. The Institution for the Blind has been liberally patronized, has a splendid edifice on Mount Washington, South Boston, has 70 pupils, and is highly respectable and prosperous. Music, both vocal and instrumental, and the mechanic arts are taught in connexion with their studies, and printing in embossed letters is successfully practised. One of its pupils is now a member of the junior class in Harvard University.

Boston has 106 literary and charitable societies. Among the literary societies of a high order is the American Academy of Arts and Sciences, founded in 1780, which has published four quarto volumes of its transactions, and has a library of over 2000 volumes. It has numbered among its members many distinguished persons. The Massachusetts Historical Society was incorporated in 1794; and its object is to collect the materials of a complete history of the state and of the country. Its collections have been published in in 20 volumes octavo, in which are many valuable papers. Its library, consisting of books and manuscripts, amounts to over 6000 articles, many of them rare and valuable, besides some paintings, ancient and modern, of some distinguished characters. The Boston Atheneum was incorporated in 1837, has an edifice worth $30,000, a library of over 30,000 volumes, a collection of over 2000 coins and medals, ancient and modern, and a reading-room well furnished with American and foreign newspapers. It has an edifice in the rear of the main building called Atheneum Hall, 60 by 50 feet, and three stories high, containing a large lecture-room, a complete apparatus for the illustration of scientific lectures, and a gallery of a fine collection of statuary and paintings, besides accommodations for several literary and scientific associations. The Boston Society of Natural History was instituted in 1830, and has a cabinet and a museum, which are an ornament to the city. The New England Museum occupies an extensive block of buildings in Court street, has two spacious halls, was opened in 1818; and by adding to its contents several other establishments of the same kind, it possesses a rare and valuable collection of curiosities. Among the charitable institutions of Boston, the Massachusetts Hospital deserves notice. It is built on Charles river, in the western part of the city. It has a beautiful edifice built of granite, 168 feet long and 54 wide, with a fine portico of eight Ionic columns, and it has a dome in the centre. It is surrounded by four acres of ground, which is highly ornamented with trees and shrubbery. Among the religious charitable societies are the Board of Commissioners for Foreign Missions, which has an agency, and holds its anniversaries in the city of New York; the Baptist Board of Commissioners for Foreign Missions; the American Education Society; the American Tract Society; the American Unitarian Association; the American Peace Society; the Seamen's Friend Society; the Massachusetts Bible Society; the Prison Discipline Society; the Massachusetts Missionary Society, and many others.

There were, in 1843, 36 newspapers, of which 12 were daily, some of which were also semi-weekly and weekly, and the others were weekly. Besides newspapers, there are a number of magazines and reviews, the most distinguished of which is the North American Review, which has contributed much to raise the character of American literature, not only in the United States, but also in Great Britain and other parts of Europe.

There are 75 churches in Boston, of which 15 are Unitarian, 12 Congregational, nine Baptist, three Free-will Baptist, two Christian and one African Baptist, eight Methodist, one Reformed Methodist, one Christian Methodist, four Universalist, one New Jerusalem, one Friends;

one German Protestant, four Roman Catholic, and some others.

There are two principal theatres in Boston, the Tremont Theatre, on Tremont street, is 135 feet long, 79 feet wide, and was completed in 1827, at a cost of about $190,000. The National Theatre, at the junction of Portland and Traverse streets, was built in 1831, and at first used as a circus. The Odeon, 159 feet long, 61 wide, and 40 feet high, was formerly the Boston Theatre, built in 1794; burned and rebuilt in 1798; and is now used as a place for concerts, lectures, and for public worship; and its interior has received such alterations as are suited to this design. So well are public lectures adapted to the taste of this literary emporium, that among its respectable citizens they are extensively superseding the entertainments of the theatre.

Boston is supplied with pure and wholesome water by the Aqueduct Corporation, formed in 1795. The water is brought in logs from Jamaica pond in Roxbury, four miles from the city. The logs are laid in the city for the total distance of eight miles, and are capable of supplying 50,000 gallons daily, which can be raised to the height of 49 feet above tide water. This supply is inadequate to the wants of the city. But within eight miles are several ponds and the water of Charles river, which might be brought to the city, and afford an abundant supply at a much less expense than is incurred by some other cities for the same purpose.

Boston, with the small but ancient town of Chelsea on the N.E. of it, constitutes the county of Suffolk. Chelsea is allowed to enjoy all the privileges relating to the administration of justice, but is exempted from all taxation for county purposes. For the county statistics, see Suffolk county.

Boston continued a town, and was governed by a body of select men, according to the common custom of the towns in the State, until 1822. Before this the people could not be brought to consent to the adoption of a city government. But the vote was at length carried by a majority of 916, and Boston received a city charter, dated February 23d, 1822. The city is divided into 12 wards, and is governed by a mayor, eight aldermen, and four common council-men, to represent each ward, making 48 members of the common council in the whole. Besides these, each ward chooses one warden to preside over its public meetings and to superintend its concerns; one overseer of the poor; one clerk; five inspectors of elections, and two school committee-men. The school committee-men, two from each ward, making 24 in the whole, with the mayor and the president of the common council, constitute the school committee of the city of Boston. The overseers of the poor, 12 in number, one from each ward, constitute the overseers of the poor in the city. Every male citizen, 21 years of age, who has resided in the State for one year and in the city for six months next preceding an election, or who has paid any state or county tax within two years next preceding an election, in any town in the commonwealth, or who is by law exempt from taxation, is entitled to vote for the municipal officers of the city. The mayor and aldermen constitute one board, and the common council another; and they hold their sessions separately, excepting when they meet in joint ballot. A city clerk is elected by the joint ballot of both boards.

The first European inhabitant of Boston was the Rev. William Blackstone, an Episcopalian, who, in 1626, built a cottage in what is now called Spring street. The original appearance of Boston was that of three hills, of which the western, afterward called Beacon hill, was the largest, and terminated in three summits. The Indian name was *Shawmut*, but it was called by the English *Tremountain*, from its three hills, and perhaps from the three summits of Beacon hill. By the intersection of three small streams, the peninsula, containing about 600 acres, thinly wooded, was divided into three islands. The first substantial foundation of Boston was in 1630, when a large number of emigrants arrived in Massachusetts, under Mr. John Winthrop, the first governor, who made his residence at Charlestown, but soon removed to Boston with a number of the principal settlers. The first Court of Assistants was held on board of the Arabella, one of the vessels which brought over the emigrants. The Rev. John Wilson was chosen minister of the church at Charlestown, including the people of Shawmut. Shortly after, at a second meeting of the court of assistants, it was ordered that Tremountain should be called Boston, from a town of the same name in England, whence several of the settlers came, and where the Rev. John Cotton, whom they expected among them, was a minister. The church was removed to Boston, where a large number of the members had fixed their residence. The first General Court was held at Boston, October 19th, when 108 persons were made freemen. A vessel was sent to Narraganset to trade, and brought home 100 bushels of Indian corn. In 1631 the ship Lion arrived with provisions. The Rev. Roger Williams, afterward well known for his banishment, and as the first settler of Rhode Island, arrived.

The first fire happened March 16th, when a house took fire from the chimney, composed of sticks of wood plastered with clay, and the fire soon communicated to the thatched roof, and extended to a neighbouring house, both of which were consumed, and some valuable furniture was destroyed. They were among the best houses of the place. March 23d, the court of assistants ordered that all persons having cards, dice, or gaming tables, should put them away, before the next meeting of the court, evincing a strict supervision over the morals of their infant community. April 12th, the court ordered that the military captains should train their companies every Saturday. April 15th, Chickatabut, a chief sachem of the vicinity came to Boston, and the governor gave him an entire new suit of clothes, with which he was much delighted; and when meat was set before him, he refused to eat until the governor had first asked a blessing, and after the repast, he requested him to give thanks. Thus early did the colonists begin to exercise a religious influence over the natives. This chief, on the 23d of March previous, had visited the Governor, and presented him with a hogshead of Indian corn. This early exchange of kind offices deserves a commemoration. May 18th, Thomas Williams was allowed by the Court to commence the first ferry from Winnesimit to Boston, and to have 4*d.* for each person; and June 14th, Edward Converse had liberty to commence a ferry to Charlestown, and to have 3*d.* for each person. July 26th, a night watch of six persons was established, of which Boston, Charlestown, and Roxbury furnished two men each. This was, doubtless, chiefly as a security against fires. November 4th, the ship Lion arrived with more provisions, to the great joy of the inhabitants. It is difficult in these days of plenty to enter into the feelings of the early colonists, in view of such an event. May 4th, 1633, a fortification was begun on Corn hill, now Fort hill, and the inhabitants of Charlestown, Roxbury, and Dorchester, assisted in erecting it. This precaution was necessary, though their early intercourse with the Indians was of a friendly character. In August, the first meeting-house was begun, at the corner of what are now State and Devonshire streets. The windmill was removed from Cambridge to Boston, and located on Copp's hill. Oct. 3d, the court ordered that no person should take any tobacco publicly, under a penalty of one penny. March 4th, 1633, Boston was rated at £5 in a tax on the colony of £30. April 1st, 1634, the court ordered that Mr. Blackstone should have 50 acres of land, which was about one twelfth part of the peninsula, he being "the first European inhabitant." July 20th, the Governor and others met at Castle island, and agreed to build a new fortification, now Fort Independence. The fortification on Fort Hill was already in a state of defence. September 1st, the first volume of the Town Records commences. November 10th, the town purchased all Mr. Blackstone's "right and title to the peninsula of Shawmut" for £30, each freeholder paying six shillings, and some of them more; such was the fairly estimated value of one twelfth part of Boston at this period. March 4th, 1635, the court ordered that brass farthings should be discontinued, and that musket balls should pass for farthings—a kind of Spartan money. March 23d, the town voted that any persons making any hindrance in town meeting by private conference, should pay 12*d.* each. The pilgrims were characterized by a regard to order. In 1636, the Pequod war commenced, and in 1637, a considerable number of soldiers were sent against them; and on the 15th of June, and the 12th of October following, thanksgivings were kept for victories over them. Mrs. Ann Hutchinson, who for several years had preached her peculiar doctrines, which produced much disturbance, was banished from the colony in March, 1638. June 1st, 1638, the Ancient and Honorable Artillery Company was formed, which has been continued, with much reputation, to the present time. In September 15th, a training of 1200 men took place, and continued at Boston for two days, yet no one was drunk, nor an oath sworn. That was a period of strict morality. In October, 1645, the town made an allowance of £30 and a house for a schoolmaster, and £30 for an usher of a free school. This was the commencement of the free-school system, by which Boston has ever since been eminently distinguished. In 1646, the Liberty Tree, afterward so celebrated, was planted at the corner of the present Washington and Essex streets. It continued to flourish until the Revolution, when it was cut down by the British soldiers, and one of them (an ominous circumstance) was killed by its fall. October 17th, a ship of 300 tons was launched at Boston. March 26th, 1649, Governor Winthrop died, aged 63 years, and was buried in King's-chapel burying-ground, sincerely lamented by the colony, of which he had been a father. In 1651, the court ordered, that any person who was not worth £200, should not wear any gold or silver lace, or silk hoods or scarfs; so careful were they to repress luxury in dress. In 1656, the Quakers first came to Boston, and afterwards occasioned, often by improper conduct, great

disturbances in the colony, and experienced some severe and improper treatment. July 25th, 1664, the town voted to have the bell rung every day at 11 o'clock, to call the merchants together for one hour at the town-house. This was the first commencement of a Merchants' Exchange. In 1673, the first wharf at Boston was built. November 27th, 1674, a disastrous fire took place at North square, and consumed 45 dwelling-houses, and the North meeting-house. In May, 1677, the court appointed John Hayward, post-master, "to take in and convey letters according to direction," the first commencement of the post-office system. August 8th, 1679, a fire broke out in the night, near the town dock, and burned 80 houses, 70 stores, and several ships, at a total loss of £200,000; a great sum for that day. In 1681, the general court granted to Samuel Sewall the liberty to set up a printing press, and no one to set up another without license. In 1684, Massachusetts was deprived of its charter. April 19th, 1689, Sir Edmond Andros, the English governor, was seized by the people and put in prison. In 1690, the first paper money was issued. In 1694, the general court required the selectmen to post in all taverns in town the names of drunkards. In 1700, Boston contained 1000 houses and 7000 inhabitants. In 1701, the representatives of Boston were instructed by the town to endeavour to obtain the abolition of slavery; one of the earliest movements in the world on the subject. In 1702, the small-pox raged in Boston, and 313 persons died. In 1704, the *Boston News Letter*, the first newspaper, was published by John Campbell, post-master. In 1705, the western post went only once a fortnight. January 6th, 1706, Benjamin Franklin, the American philosopher, and an honour to his native town, was born, in a house which stood opposite to the old South church, in Milk street. May 18th, 1707, two vessels were launched in Boston. In 1708, Ezekiel Chesver, for 38 years a schoolmaster, who wore his beard, died, aged 93. He is called in the Boston News Letter, of October 18th, "the ancient and honourable master of the free school in Boston." In 1710, a fortification was built across the Neck, between Boston and Roxbury, and the wharf at the foot of State street was constructed. In 1711, a fire burned 100 dwellings, the Town house, and the First meeting-house. In 1721, 844 persons died of the small-pox. Dr. Zabdiel Boylston introduced the practice of innoculation, for which he was greatly persecuted, even by the faculty. In May, 1722, "a curious engraved Map of Boston" was published by Capt. John Bonner; probably the first map of Boston ever issued. June 4th, 1734, three markets were opened, a bell was rung at sunrise, and market hours were continued until one o'clock. September 18th, 1740, the Rev. George Whitfield arrived in Boston. Faneuil Hall was built by Peter Faneuil, Esq., and presented to the town for a market-house, and is secured by the recent city charter from ever being sold. In 1749, money arrived from England to the amount of $816,918 in silver and copper coin, to defray the expense of the capture of Louisburg. March 20th, 1760, a fire in Washington, State, and Water streets destroyed 174 houses, and 175 stores and shops, which was nearly one tenth part of the town. The stamp act was passed in the British parliament on the 22d of March, 1765; and August 14th, the effigy of the distributor of stamps was hung upon Liberty tree, and his office was assaulted and plundered by a mob. November 1st, the day on which the stamp act took effect, was ushered in by the tolling of bells and other demonstrations of dissatisfaction. June 29th, an act was passed by Parliament for imposing a duty on paper, glass, paints, and teas, which produced great dissatisfaction. October 1st, 1768, two regiments of British troops, consisting of 700 soldiers, were landed in Boston, and quartered in the state-house, now the city hall. March 5th, 1770, the Boston massacre occurred, in which the soldiers, after some provocation, fired on the inhabitants, killing three persons and mortally wounding three others. This caused the inhabitants to demand the removal of the soldiers from the town. March 31st, 1774, the Boston Port bill passed the British parliament, shutting the port of Boston, which produced great excitement and distress among the citizens. May 14th, the town voted to discontinue all commerce with Great Britain. September 4th, lamps were first lighted in the streets of Boston. Seventeen persons, disguised as Indians, and armed, went on board some India ships in the harbour, and emptied overboard 342 chests of tea, in testimony of their indignation against the conduct of the British. April 19th, 1775, occurred the celebrated battle of Bunker hill. The American loss was 145 killed and missing, and 304 wounded, and the British loss was 226 killed, including 19 officers, and 828 were wounded, including 70 officers; and Charlestown was burned. July 2d, Gen. Washington arrived at Cambridge, and took the command of the provincial troops. In February, 1776, the Americans, under Washington, took possession of Dorchester heights, and compelled the British, March 17th, to evacuate Boston, and the Americans entered it in triumph. March 25th, Congress presented a vote of thanks and a gold medal to General Washington, for his spirited conduct at Boston. April 11th, 1783, peace with Great Britain was proclaimed by the American Congress, after having established their independence. April 4th, 1787, a fire began in Beach street, which consumed 60 dwelling-houses and 40 other buildings, and the meeting house in Hollis street. The marquis La Fayette contributed over $1500 to the sufferers. April 17th, 1790, Dr. Franklin died at Philadelphia, aged 84 years, bequeathing to Boston, his native town, $4444 for the benefit of young married artificers. In June, 1794, at the close of the embargo, Boston contained 23 ships, 56 brigs, 106 schooners, and 69 sloops. February 2d, 1798, the new state-house was first occupied. In 1800, the municipal court was established. In 1804, Dorchester Neck was set off from Dorchester, and called South Boston. Beacon hill was levelled. December 22d, 1807, the Boston Athenæum was incorporated. June 1st, 1813, the American frigate Chesapeake, commanded by Capt. Lawrence, left Boston harbour on a challenge to meet the British frigate Shannon, commanded by Capt. Broke. The Chesapeake was captured, Lawrence killed, and Broke was knighted; the only instance of capture by an equal British force during the last war. In 1815, the North American Review, which has conferred great honour on American literature at home and in foreign countries, was established at Boston. November 3d, 1818, the Exchange Coffee house, in Congress street, which cost $500,000, was burned. February 23d, 1822, Boston was incorporated as a city, and on the 16th of April following, the Hon. John Phillips was chosen the first Mayor. May 1st, 1827, the statue of Washington, by Canova, arrived at Boston, and was placed in the State-house. September 24th, Tremont theatre was first opened. September 3d, 1829, Tremont-house, a splendid hotel in Tremont street, was opened. September 17th, 1830, the second centennial celebration of the settlement of Boston was observed with great parade. May 1st, 1833, a fair was held in Faneuil Hall by the ladies of Boston, for the benefit of the Asylum for the Blind, and continued for three days. The amount collected was $12,918. In 1836, an iron fence was built, over a mile in length, around the common, which, with the regulation of the walks, cost $100,000. It was commenced in July, and completed in December following. The number of deaths in Boston, in 1839 was 1812, of which 151 were in January, 159 in February, 168 in March, 145 in April, 129 in May, 126 in June, 148 in July, 117 in August, 183 in September, 186 in October, 141 in November, and 159 in December. June 5th, 1840, the city council gave a dinner to Mr. Edward Cunard, the son of the proprietor of the Liverpool line of steam-packets, and to Capt. Douglass, the captain of the Unicorn, of which 350 guests partook. The mayor presided, and many elegant speeches were delivered on the occasion. September 9th, a fair for the Bunker-hill monument was opened in Quincy hall, and continued through the week. The net proceeds of it were $32,000. February 1st, 1841, the Acadia steamer left Boston for Liverpool, with 65 passengers, about 30,000 letters, and wagon-loads of newspapers. September 20th, the steamer Caledonia arrived in 13 days 13 hours from Liverpool. January 14th, 1842, Governor Davis stated in his address, that in the last 16 years, the legislature had appropriated $116,000 to the lunatic hospital; $118,000 for the education of the deaf and dumb; $12,000 for the hospital on Rainsford island; $95,000 for agricultural societies and premiums; and $100,000 for revising the statutes. March 11th, the steamship Unicorn arrived, bringing 40,000 letters and 40 bags of newspapers; the largest mail which ever arrived in the United States. October 23d, Warren bridge, having been elegantly repaired, and paved with wooden blocks, was opened for travel, after having been closed nearly a year. Such is a summary view of the Annals of Boston, an "ancient and honourable" city, the parent of a large portion of New England, and even of the United States. For a more particular account, the reader is referred to Bowen's Picture of Boston, Snow's History of Boston, and the Boston Almanac.

BOSTON, p. t., Erie co., N.Y., 18 m. S.W. Buffalo, 362 m. W. Albany, 299 W. Drained by Cauquaga creek. It contains two stores, four fulling-mills, four grist-mills, four saw-mills, twelve schools, 496 scholars. Pop. 1745. The village on Canquaga creek has two churches, one Baptist and one Presbyterian, two stores, two grist-mills, two saw-mills, one carding-machine and clothier's works, and about 500 inhabitants.

BOSTON, p. t., Summit co., O., 24 m. S. Cleveland, 139 m. N.E. Columbus, 243 W. The Cuyahoga river passes through it, and affords water-power. The Ohio canal passes along the river, and, at Peninsula or Boston Centre, crosses it in an aqueduct. It contains three stores, one flouring-mill, one grist-mill, three saw-mills, five schools, 165 scholars. Pop. 845. The village at the Centre contains one Episcopal

church, and one Presbyterian and one Methodist congregation, and about 150 inhabitants.

BOSTON, p. t., Ionia co., Mich., 146 m. N.W. Detroit, 621 W. Watered by Grand river. It has one saw-mill. Pop. 83.

BOSTON, t., Franklin co., Ark. Pop. 224.

BOSTON, p. t., Wayne co., Ia., 78 m. E. by S. Indianapolis, 499 W. It has one school, 40 scholars. Pop. 656.

BOSWORTH (MARKET), a par. and town of England, co. Leicester, hund. Sparkenhoe. Area of par. 8040 acres. Pop. of par., 1821, 2677; 1841, 13,600; of the town only, 1049. This neat little town is on an eminence, in the centre of a fertile district, 95 m. N.W. by N. London. It has a well-endowed grammar school, in which Dr. Johnson was once an usher; but its property, above £700 a year, has been the subject of a long chancery suit. It has two fellowships and four scholarships in Emanuel, Cambr. There are two cattle fairs held annually, May 8, and July 10. The Ashby canal passes within a mile, and conveys coals, &c. The knitting of worsted stockings employs many persons in the town and neighbourhood. It is the central town of a poor-law union of 28 parishes; has two guardians, and its average annual poor rates are £765.

The decisive battle between Richard III. and the Earl of Richmond, afterward Henry VII., in which the former lost his crown and his life, and which terminated the long-continued struggle between the houses of York and Lancaster, takes its name from this town, in the vicinity of which it took place, on the 22d of August, 1485. In the battle-field is a well, named from Richard III., with an inscription by the late Dr. Parr; and an elevation, called Crown Hill, where Lord Stanley is said to have placed Richard's crown on the Earl of Richmond's head. (*Nichol's Leicestersh.; Hutton's Bosworth Field.*)

BOSZRA, a town of Syria, formerly the cap. of the Aurantes; 50 m. S. Damascus, 80 m. N.E. Jerusalem; lat. 32° 40′ N., long. 36° 30′ E. Though now almost deserted, the ruins are extensive and magnificent; the principal of these, or at least the most sacred, in Mohammedan estimation, is the Deir-Bohaira (House of Bohaira), so called from being consecrated to a monk of that name, who is said to have proclaimed the sacred character of Mohammed, when the prophet, in his 13th year, visited Syria with his uncle. The great mosque, a very ancient temple, a triumphal arch, a castle of great strength, remnants of the city walls, and a reservoir 500 ft. long, 300 wide, and 20 deep, are among the remains of ancient grandeur; in addition to which the whole town and its environs are covered with pillars and other ruins of the finest workmanship. Bosura is very ancient: it is mentioned in the Sacred Writings as one of the cities which the half tribe of Manasseh, beyond Jordan, gave to the Levites (Josh., xxi., 27). At this time, and for ages subsequently, it was celebrated for its vineyards, which are commemorated on the Greek medals of Κελονια Βοστρα, but of these no vestige now remains. After the establishment of Christianity, it was an archbishop's see, with nineteen bishoprics under its jurisdiction. Its strong castle was built by the Saracens, between whom and the Latin kings of Jerusalem it several times changed masters, and under Baldwin IV., A.D. 1180, it was entirely ruined and depopulated. (*Abul-Feda, Vit. Mah.*, c. 4; *Tab. Syr.*, p. 51, 99; *Adrichomius, Ter. Sanc.*, 79, 80; *Burckhardt, Trav. Syr.*, p. 234-236.)

BOTANY BAY. *See* AUSTRALIA and NEW SOUTH WALES.

BOTETOURT, county, Va. Situated S. by W. of the centre of the state, and W. of the Blue ridge, and contains 1000 sq. m. Drained by James river and its branches. It contained in 1840, 9231 neat cattle, 13,254 sheep, 20,458 swine; and produced 197,989 bushels of wheat, 21,970 of rye, 298,707 of Indian corn, 2921 of buckwheat, 183,016 of oats, 18,544 of potatoes, 707,885 pounds of tobacco. It had twenty-one stores, two furnaces, ten flouring-mills, twenty-six grist-mills, thirty-three saw-mills, three oil-mills, nine tanneries, seven distilleries, two printing-offices, two weekly newspapers. Pop., whites, 8357, slaves, 2925, free coloured, 377; total, 11,679. Capital, Fincastle.

BOTETOURT SPRINGS, p. v., Roanoke co., Va., 11 m. W. Fincastle, 186 m. W. by S. Richmond, 228 W.

BOTHNIA (GULF OF), the N. arm of the Baltic, which see.

BOTHWELL, a par. and village of Scotland, county Lanark, on the N. side of the Clyde. The village lies on the road from Glasgow to Hamilton, 8 m. E. of the former, and 3 m. N.W. of the latter. About 1 m. farther on towards the S.E., the road to Hamilton is carried over the Clyde by Bothwell-bridge, the scene of one of the most memorable events in Scottish history. The Covenanters, to the number of 4000 or 5000, having taken possession of the bridge, then much narrower than at present, were attacked, on the 22d of June, 1679, the bridge forced, and their army totally routed by the royal forces, under the Duke of Monmouth. (*Laing's Scotland*, iv., 104.) Near the village is the magnificent ruin of Bothwell Castle, once an important Scottish fortress. The par. is well wooded and well cultivated.

BOTTLE HILL, v., Chatham t., Morris co., N.J., 4½ m. S.E. Morristown, 57 m. N. by E. Trenton, 222 W. It contains one Presbyterian church, an academy, three stores, and over 40 dwellings.

BOTZEN, or BOLZANO (an. *Pons Drusi*), a town of the Austrian states, Tyrol, cap. circ., in a pleasant, well-sheltered valley, at the confluence of the Eisach and Talfer, a little above where their united waters fall into the Adige, 20 m. N.N.E. Trent. Pop. 9000. It is a thriving, well-built town, in the Italian style; has a castle, several convents, a college, and some manufactures of silk stockings, &c. A strong dyke of masonry, nearly 2 m. in length, and in parts 24 ft. thick, has been constructed to defend the town from the irruptions of a neighbouring mountain torrent. Being intersected by high roads leading to Switzerland, Austria, and Italy, Botzen has an extensive transit trade. It is also celebrated for its fairs, commencing the 18th March, 14th June, 9th September, and 30th November, continuing each fourteen days, which are attended by a great concourse of French, Germans, and Italians. "Though still in Germany, the approach to Italy has become perceptible, in the falling off of cleanliness, the use of the Italian language, which now begins to be spoken, the southern vegetation, and the change of the climate." (*Murray.*) The country round produces excellent wine, and fruits in abundance. Botzen is supposed to occupy the site of the ancient Roman citadel, *Pons Drusi*.

BOUCHAIN, a fortified town of France, dép. du Nord, cap. cant., on the Scheldt, by which it is intersected, 12 m. S.E. Douai. Pop. 1148. The fortifications are of very considerable strength, and the adjacent country may be laid under water. The Duke of Marlborough took it in 1711, after a memorable siege; but, being retaken by Marshal Villars in the following year, it was finally ceded to France at the treaty of Utrecht. It was one of the frontier fortresses occupied by the allies after the peace of 1815.

BOUCHES-DU-RHONE, a maritime dep. S. of France, situated, as its name implies, at the mouths of the Rhone. It is bounded E. by the dep. of the Var.; N. and W. by the Durance, Rhone, and the W. arm of the latter, which separates it from the deps. of Vaucluse and Gard; and S. by the Mediterranean. Area, 512,901 hectares. Pop. 262,285. Soil and surface very various, but the former is generally inferior. The last offsets from the maritime Alps occupy the E. parts of the dep.; but they are not remarkable either for their height or appearance. The highest summit, that of St. Victore, is 1049 mètres (3420 ft.) above the sea. The plain of Le Crau and the isle of Camargues, occupy a large portion of the surface. The first is of great extent, stretching from Arles to the lagoon of Berre. It has very little vegetable mould, and is formed principally of flints and other small stones; during winter it furnishes pasture to large flocks of sheep and goats; the former being driven in summer, when it is arid and waste, to the mountains. It is supposed by many that this plain was formerly a gulf of the sea, and various circumstances conspire to strengthen the supposition. The island of Camargues is the delta or alluvial land lying between the E. and W. arms of the Rhone, and is partly cultivated and in pasture, and partly occupied by marshes and lagoons. The latter, indeed, make one of the principal features of the dep. The principal are the lagoon of Vulcarès in the island of Camargues, and that of Berre or Martha, 12 m. N.W. Marseilles. They and the contiguous marshes occupy a great extent of land, and in summer are very unhealthy. Principal rivers, Rhone and Durance; the latter rushes along with great violence, frequently overflowing its banks, and causing great damage. There are also some smaller rivers, and the department is intersected by several canals. Climate generally hot and dry, and the country in summer has a barren, parched appearance. Agriculture bad, a consequence ascribable, partly to the minute division of property, and the attachment of the little proprietors to routine practices; but more, perhaps, to the unfavourable nature of the soil and climate. In the mountainous parts in the E. and N.E. there is a good deal of spade husbandry; in the S. and N.W., mules are employed in field labour; and horses in the W. and the island of Camargues. The produce of corn is insufficient for the consumption; but the produce of wine is estimated at about 880,600 hectolitres, leaving a large surplus for exportation. The produce of silk in 1835 was estimated at about 330,000 kilog. Olives are largely cultivated; and the gathering of kermes continues to be a good deal attended to. The dried fruits of the dep. are much esteemed. Horses and cattle are few in number, and not of good quality. The great wealth of the dep. consists in its sheep, of which it possesses about 800,000. From 400,000 to 500,000 of these sheep are annually driven, about the beginning of spring, to the mountains of the Drome, the Berre, and the high and low Alps, where

they are depastured during the summer. When the period for setting out arrives, several proprietors join their flocks together, to the number sometimes of 25,000! Previously to the Revolution, the migratory flocks enjoyed privileges somewhat similar to those of the *Mesta* in Spain, but they were then abolished. The lagoons are resorted to in winter by myriads of aquatic fowl; which, when the frost sets in, are taken in vast numbers. Minerals, of little importance. There are brine springs, and salt is made in several places. This is more of a commercial than of a manufacturing dep. With the exception, indeed, of fabrics of soap and *soude factice*, hosiery, sugar refineries, some establishments for the manufacture of cutlery, corsi-works, oil-mills, and silk filatures, with distilleries, tanneries, &c., manufactures are of little importance. The commerce of the dep. is, however, very extensive, Marseilles having been for several years past at the head of the commercial cities of France. (See MARSEILLES.) The herring and anchovy fisheries are extensively carried on. Principal towns, Marseilles, Arles, Aix, Tarrascon, Aubagne, &c. Public revenue in 1831, 39,262,854 fr., of which the customs produced 25,813,000 fr. The dep. sends six mem. to the Chamber of deputies, is divided into three arronds., and has above 2500 electors. (*French Official Tables; Hugo, France Pittoresque*, art. *Bouches-du-Rhone; Dic. Géographique, &c.*)

BOUIN, an island on the coast of France, between the departs. of Loire Inférieure and La Vendée, belonging to the latter, from which it is separated by a narrow channel. It is of a triangular shape, low and marshy. Area, 3 sq. leagues. Pop. 2700. It produces corn and cattle, but especially salt, obtained in large quantities from the salt marshes that surround the village of Bouin, in the centre of the island. According to some historians, it was here, in 820, that the Normans made their first descent on the coast of France. (*Hugo* art. *Vendée; Dict. Géographique.*)

BOULOGNE, or, as it is sometimes called, BOULOGNE-SUR-MER, a sea-port town of France, dép. Pas du Calais, cap. arrond., on the Liane, near where it falls into the English channel, 20 m. S.S.W. Calais; lat. 50° 43′ 31″ N., long. 1° 36′ 59″ E. Pop. 25,732. It is divided into the upper and lower towns. The former is pretty well built, but is irregularly laid out. It has two squares, ornamented with fountains, and contains the cathedral, the ancient episcopal palace, the Hôtel de Ville, and the courts of justice. It also contains the house where Le Sage, the immortal author of Gil Blas, lived and died. The fortifications, by which the upper town was formerly defended, have been mostly demolished, the old castle and the walls only remaining. The ramparts have been planted with trees, and afford a delightful promenade, commanding a view that extends to the coasts of England, which are distinctly visible. The lower or new town is situated at the bottom of the hill, and is intersected by the Liane: it is the most populous, most commercial, and best built. It is regularly laid out, and has several public buildings, among which may be specified the baths, the general hospital, founded in 1692, the barracks, a public library containing 22,000 volumes, a theatre, &c. A magnificent column, dedicated by the grand army collected here in 1805 to Napoleon, but not finished till 1821, stands on a hill nearly a mile from the town: it is crowned by a gallery surmounted by a dome, and is 164 ft. high. The harbour, which was formerly dry at low water, and nearly shut up by the bar at the river's mouth, has been vastly improved, though it still labours under a deficiency of water. It is formed of two large basins, connected by a quay. Ships may anchor at from ½ to ¾ m. off the harbour, in from 6 to 9 fathoms. Boulogne is the seat of tribunals of primary jurisdiction and commerce, and has societies of agriculture, commerce, arts, and sciences; a museum of antiquities and natural history; a free school for navigation, &c.; with manufactures of coarse woollen stuffs, sailcloth, earthenware, and bottle-glass; and tanneries, rope-works, tile-works, &c. A good deal of trade is carried on from the town, and the herring, mackerel, and cod fisheries, all vigorously prosecuted. Notwithstanding the large quantities of fish that are constantly being sent to Paris, the supply in the town is always abundant and cheap.

Boulogne has been much resorted to since the peace by English visiters and families, and many of the latter have made it a permanent residence. A constant communication is kept up with London, Brighton, and Dover, by means of steam-packets; and the route from London to Paris by Boulogne is now frequently preferred to that by Calais. In consequence of this influx of English visiters and residents, the population of the town has nearly doubled since 1815, and it has now much of the appearance of an English town. Numerous boarding-schools have been opened, and balls, horse-races, &c., have been established for the instruction and amusement of the English. In 1837, 26,592 passengers entered, and 30,217 left, Boulogne.

Boulogne is a place of great antiquity. During the dominion of the Romans it bore successively the names of *Gesoriacum Navale*, and *Bononia*, whence its modern name is derived. During the middle ages, and in more modern times, it has undergone many vicissitudes, having been frequently besieged and taken. In the early part of this century it rose into great celebrity, from Napoleon having collected a large flotilla in its port, and made it the head-quarters of the army avowedly intended to invade England. (*Hugo*, art. *Pas de Calais; Priv. Information.*)

BOULOGNE, a vil. of France, dép. Seine, between the Seine and the wood of Boulogne, 4 m. W. Paris. Pop. 6016. The vil. is handsome: the adjoining wood is, in the fine season, the favourite promenade of the Parisian fashionables. The *Château de Madrid*, in this wood, built by Francis I., was demolished in the reign of Louis XVI.; and only a small part now remains of the *Château de la Muette*, some time occupied by Louis XV.

BOUND BROOK, p. v. Bridgewater t., Somerset co., N. J., 7 m. N.W. New Brunswick, 33 N. by E. Trenton, 200 W. It contains one Presbyterian church, an academy, four stores, one grist-mill, and about fifty dwellings. The Delaware and Raritan canal passes along the opposite side of the river.

BOURBON (ISLE OF), an island belonging to France, in the Indian ocean, between lat. 20° 50′; and 21° 24′ S., being 90 m. W.S.W. the island of Mauritius, and 440 m. E. Madagascar. Shape oval; greatest length, N.W. to S.E., 40 m.; greatest breadth, 27 m.: area near 900 sq. m. (231,550 hectares). Pop. (1836) 106,099. It is geologically formed by two systems of volcanic mountains, one at either extremity: the central point of the most northerly system, the *Piton des Neiges*, the highest summit in the island, is 3150 metres, or 10,355 ft. above the level of the sea; the highest point of the southerly system is the *Piton de Fournaise*, an active volcano, 7218 ft. in height. These two volcanic centres are connected by a chain of mountains running N. and S., which divides the island into two parts, that on the E. side being called the windward, and that on the W. the leeward division (*Parties du Vent* and *sous le Vent*), in consequence of the prevailing winds in Bourbon being from E. to S. There are no plains of any size; although the island is watered by many small rivers, none of which are navigable: there are several lakes, one occupying an extent of about 40 acres. The shores are not generally high; but the Island has no safe roads, nor any harbour—circumstances which have always been felt as serious drawbacks. The climate is healthy and agreeable, especially that of the E. part: the air is pure, and the sky clear, though this tranquillity be sometimes broken by violent hurricanes. From Dec. to May is the hot and rainy season, when the mean temperature is 80° Fahr.; during the remaining or temperate months, the mean is 76° Fahr. The soil is very fertile, particularly in the vicinity of the shores, where there are extensive alluvial deposits, which, like the soils in other parts of the island, consist largely of volcanic matters. The surface in 1836, was supposed to be distributed as follows: cultivated land, 65,702 hectares; pasturage, 14,040 ditto; woods and forests, 55,921 ditto; waste lands, 95,887 ditto.—Total, 231,550 hectares.

The cultivated lands form a girdle round the island, and in some parts ascend the mountain slopes to considerably more than 3000 ft. above the level of the ocean: in 1836, they were estimated to be divided as follows:

Articles of Culture.	Hectares in Culture.	Product.	
Sugar-cane . . .	14,880	Raw sugar .	23,384,118 kilog.
		Molasses, &c. .	1,648,840
		Rum . .	535,842 litres.
Coffee . . .	4,179	Coffee . .	978,200 kilog.
Cloves . . .	2,280	Cloves . .	153,500
Cacao . . .	28	Cacao . .	10,000
Tobacco . . .	471	Tobacco . .	82,000
Grain, &c. . .	43,514	Grain (value) .	3,656,947 fr.
Total . .	65,702 hect.		

The sugar-cane is mostly of the Batavian variety; it was not very extensively cultivated before 1818; but is now largely grown, especially in the E. division of the island, where it has almost entirely superseded coffee. The coffee-plant was introduced from Mocha in 1717, and was subsequently much cultivated; but having been found to suffer severely from hurricanes and insects, its culture has been in great part discontinued: the best coffee is produced on the leeward side of the island. The cloves are chiefly sent to India, where they are exchanged for rice: the tobacco obtained is not enough for home consumption, and the wheat, rice, maize, and other grain raised in the island, does not exceed ⅓th part of the required supply. Potatoes, beans, and other leguminous plants, a great variety of fruits, &c., succeed remarkably well. The culture of cotton has been all but abandoned: manioc, introduced into the island by the celebrated M. de la Bourdonnais, forms the staple food of the blacks. In 1837, there were 32,240

hogs, 6500 deer and goats, 5250 horses; and mules, sheep, and oxen, nearly 5000 each. Pasturage being deficient, oxen are imported from Madagascar; a great number of the cattle are fed for six months of the year upon the leaves of the sugar-cane. At the period at which Bourbon was first occupied by the French, the sides of the mountains were covered with forests, which reached even to the shores; the whole of the lower lands have been cleared, but the centre of the island is still covered with its primitive vegetation, which affords forty-one different species of woods serviceable for arts and manufactures. The coasts abound with fish and large turtles, and furnish also coral and ambergris. The fisheries occupy about 460 individuals, who take about 150,000 kilog. of fish annually, ⅓ths of which are consumed by themselves and their families, and the other ⅔ths sold in the island realizing about 300,000 francs a year. The pop. in 1836, consisted of 36,803 free colonists, and 69,996 slaves, of whom 57,346 were employed in agricultural labour. The colonists are, in general, humane and kind to their slaves, who are mostly blacks, with only a few individuals of mixed blood. In 1829, about 2000 Hindoo emigrants from Orissa came thither to settle; but the majority of them have returned to their native country. The island is divided into two arrondissements, six cantons, and thirteen communes; and contains two towns, those of St. Denis and St. Paul, and eight market-towns, heads of cantons, most of which are built on the coasts. The chief manufacturing establishments are brick and lime-kilns, tanneries, forges and foundries, tin-ware factories, a brewery, and manufactories of bags of palm-leaf (*sacs de vacoua*). The annual value of the products of these establishments is estimated at £41,170. Most other European trades are pursued in the towns, the whole occupying about 200 masters, and 2,160 workmen. The following is a statement of the quantities and value of the principal articles of export in 1836:

Exports.	Quantities.	Value.
Sugar, Raw	18,173,091 kilog.	12,721,164 fr.
Coffee	990,013	1,386,018
Cloves	666,660	1,403,575
Dye Woods	105,308	21,061
Woods for Cabinet Work	112,511	39,486
Saltpetre	79,879	43,933

The chief imports are rice, wheat, oil, wines, cattle, timber, salt, glass, porcelain, &c., with cottons and other manufactured goods. The total value of the imports in 1836 was 13,769,541 fr. (£550,780); and that of articles exported of the growth and produce of the island, 16,743,899 fr. (£670,000 nearly). The government is similar to that of the other French colonies, and is administered by a governor, and a council of 30 members, elected by the domiciliated French colonists paying a direct contribution of 200 fr. annually, of whom, in 1837, there were 1145, composing eight electoral colleges. There is a royal court, with two courts of assize, two tribunals of primary jurisdiction, and a justice of the peace in each canton. The military force, in 1837, consisted of 6593 individuals, 378 of whom were officers. In the same year, the budget of the colony gave, as follows, the

Expenses in 1837 . .	2,932,498 fr. =	£117,297
Receipts ditto . .	2,149,563 fr. =	85,982
Deficit . .	782,865 fr. =	£31,315

Bourbon contains a college and numerous schools, sixteen churches, two hospitals, two establishments for the relief of the poor, and two prisons. Four newspapers are published in it, and there is a public library at St. Denis. This island was discovered in 1545 by Mascarenhas, a Portuguese navigator, whose name it bore, till the French took possession of it in the next century. The English took it in 1810; but it was restored to France in 1815. The principal towns are St. Denis, St. Paul, St. Benoit, &c. St. Denis, the cap., is situated on a plateau on the N. coast of the island, at the mouth of the river of the same name; lat. 20° 51′ 30″ S., long. 55° 30′ E. It has about 900 houses, and 12,000 inhab. (*Huge*, fil., 278.) It is mostly of wood, the *Hôtel du Gouvernement* being the only public building of any importance. It is the seat of a royal court, and of a court of primary jurisdiction, and has a college with about 160 pupils, a hospital, an arsenal, a celebrated botanical garden, &c. St. Paul, the second town in the island, on its W. coast, has 10,000 inhab., with a fine church, a tribunal of original jurisdiction, a hospital, &c. Neither St. Denis nor St. Paul have harbours, but only open and exposed roadsteads. (*Notices Statistiques sur les Colonies Françaises, &c.* p. 1—140; *Etats du Population des Colonies Françaises, &c.*, 1838.)

Bourbon county, Ky., situated centrally in the N.E. part of the state, and contains 225 sq. m. Drained by the S. fork of Licking river. It contained in 1840, 16,748 neat cattle, 23,719 sheep, 43,148 swine; and produced 90,099 bushels of wheat, 121,817 of rye, 1,256,436 of Indian corn, 157,822 of oats, 15,485 of potatoes, 4261 pounds of tobacco, 37,159 of sugar. It had thirty-four stores, one fulling-mill, three woollen-factories, one cotton-factory with 1320 spindles, one flouring-mill, eight grist-mills, seven saw-mills, six rope-factories, thirteen distilleries, one printing-office, one weekly newspaper, six academies, 201 students, twenty-six schools, 709 scholars. Pop.: whites, 7845; slaves 6325; free colored, 308; total, 14,478. Capital, Paris.

Bourbon, t., Calloway co., Mo. It has three schools, 65 scholars. Pop. 1100.

BOURBON-LANCY, a town of France, dép. Saone et Loire, cap. cant., on the declivity of a hill near the Loire, 27 m. W.N.W. Charolles. Pop. 2814. It is commanded by an old castle on the summit of a steep rock. This town is celebrated for its mineral springs, of which there are seven (some say nine), six cold and one hot. They are employed in nervous affections and rheumatisms. These springs were known to the Romans by the name of *Aquæ Nisiasi*; and remains of the baths they had erected are said still to exist, while numerous Roman medals and an entire and beautiful statue have been dug up. The present baths were begun by Hen. III. and finished by Hen. IV. and Louis XIII. (*Huge*, art. *Saone et Loire.*)

BOURBON-L'ARCHAMBAUD, a town of France, dép. Allier, cap. cant., 13 m. W. Moulins. Pop. 2017. It is situated at the bottom of a valley, in a rich and finely variegated country. The towers are all that now remain of the Château de Bourbon, rebuilt in the 13th century. The Holy Chapel, erected in the 15th century, by Anne of France, and so much admired, was destroyed at the Revolution. The town is now celebrated only for its mineral springs and baths, said to be of great efficacy in cases of paralysis, rheumatism, gun-shot wounds, &c. They are frequented from May to September. There is good accommodation for visiters, and a hospital for the indigent.

This town had for a lengthened period lords of its own, who bore the title of barons. Aimar, who lived in 991, in the reign of Charles the Simple, is the first of these barons of whom there is any authentic account. Having been succeeded by his third son Archambaud, his name became that of all his successors in the seignory. Archambaud IX., the last of the name, having accompanied St. Louis to the East, died in Cyprus. Beatrix of Burgundy, his grand-daughter, married Robert of France Count of Clermont, one of the sons of St. Louis, bringing to him in dowry the lordships of Bourbon, Charolais, and St. Just, in Champagne. Their posterity, according to the custom of the house, took the surname of Bourbon, and now fills the thrones of France, Spain, Naples, and Lucca! (*Dict. Géographique.*)

BOURBONNE-LES-BAINS, a town of France, dép. Haute Marne, cap. cant., at the confluence of the Borne and the Apance, 21 m. E.N.E. Langres. Pop. 3551. It is agreeably situated on the plateau and acclivity of a hill; and having been nearly burnt down in 1717, has been rebuilt on a regular plan, and has some fine promenades and fountains. It owes its entire celebrity to its hot baths, which occupy the site of a thermal establishment of the Romans. The modern buildings connected with the baths, including the Hôtel de Ville, a recent erection, most part of which is appropriated to the use of the company using the waters, are the finest of the kind in France. A hospital, founded here in 1732, for the use of the military attending the baths, has been much enlarged, particularly since 1815, and is now capable of accommodating 500 soldiers and 100 officers. The heat of the water varies from 40° to 52° Reaumur, or from about, 120° to 136° Fahrenheit. They are principally employed in cases of paralysis and rheumatism, spasms, ill-reduced fractures, &c. (*Huge*, art. *Haute Marne.*)

BOURBON-VENDE'E, a town of France, dép. Vendée, of which it is the capital, on the right bank of the Yon, nearly in the centre of the dep.; lat. 46° 41′ N., long. 1° 22′ W. Pop. 3257. This town occupies the site of Roche-sur-Yon, a strong feudal castle, having near it a miserable little town. The castle, after undergoing many vicissitudes, was dismantled by Louis XIII., and finally destroyed in 1793. After the establishment of the imperial government, and the pacification of Vendée, it became necessary to select a place for its capital, and Roche-sur-Yon was fixed upon. Napoleon gave the town, which had to be entirely created, his own name, which it bore till 1815. Large sums were expended in the construction of a prefecture and other public offices, an elegant parish church, &c. The most imposing, however, of the public buildings, is the barracks; a large and noble structure, occupying the hill on which the old castle formerly stood. Streets broad, and well laid out; but though the population has increased rapidly within the last half dozen years, still many of the streets are merely laid out, and exist only by name. The old town, which is small and *assez triste*, occupies the ravine between the barracks and the new town. The town has a tribunal of primary jurisdiction, a departmental college, a society of agriculture, sciences, and arts, a public library with 3000

volumes, a hospital, and a theatre "*fort laid et fort petit.*" (*Hugo*, art. *Vendée, &c.*)

BOURBOURG, a town of France, dep. du Nord, cap. cant., on the canal of Colme, communicating with Dunkirk, 9 m. S.W. Dunkirk. Pop. 2597. Its name is derived from the miry nature of the soil (bourbeux) on which it is built. It has fabrics of tobacco, potteries, and tile-works. Previously to the revolution there was here an abbacy for noble ladies, of which the unfortunate Marie Antoinette was patroness.

BOURG, or BOURG-EN-BRESSE, a town of France, dép. Ain, of which it is the cap., on the Reyssouse, 21 m. E.S.E. Mâcon; lat. 46° 12′ 31″ N., long. 5° 14′ 10″ E. Pop. (*ex* cant.) 8818. Situation pleasant; streets narrow and crooked: formerly almost all the houses were built of wood, and many of them are so still, but within the last half-century the use of stone has become more general. It is traversed by the little rivulet Cone, and has several fine fountains. The ditches by which it was surrounded, were dried in 1771, and have been converted into gardens. Principal public buildings—the cathedral or high church, the halle-au-blé or grenette, theatre, Hôtel de Ville, prefecture, a monument in honour of Gen. Joubert, &c. It has a court of primary jurisdiction, a departmental college, a primary normal school, a public library with 18,000 volumes, a society of emulation and agriculture, a departmental museum, a botanical garden, and several gratuitous courses of instruction in different departments of science and art. Six high roads meet here; but being situated in an agricultural district, it is not distinguished either for trade or manufactures. The celebrated astronomer Lalande was a native of Bourg.

Adjoining Bourg is the church of Brou, a vast edifice, begun in 1511, and containing some fine tombs. There is attached to it a diocesan seminary, with 140 scholars.

Bourg is very ancient, being supposed by De Thou to occupy the site of the *Forum Segusianorum* of the Romans; but according to D'Anville, Feurs on the Loire is identical with the *Forum Segusianorum*. After being long subject to the house of Savoy, Bourg was united to France in 1601. (*Hugo*, art. *Ain*; *Dict. Géographique, &c.*

BOURG, a town of France, dép. Gironde, cap. cant., on the Dordogne, near its confluence with the Garonne, 15 m. N. Bordeaux. Pop. 2466. It has a small port, where the corn, wine, and other products of the environs, are shipped.

BOURGANEUF, a town of France, dép. Creuse, cap. arrond., agreeably situated on the Thorion, 18 m. S.S.W. Guéret. Pop. 2940. It has two porcelain-works, and a paper manufactory. This town was, for a considerable period, the residence of Zizim, or Djem, the younger brother of Bayazid II., emperor of the Turks, who was confined in it and other places in France, in consequence of a dishonourable treaty negotiated in 1482 between Bayazid and Pierre d'Aubusson, grand master of the Knights of St. John, lord of Bourganeuf, who had given Zizim a safe conduct. A large tower, in which the latter is said to have been confined, still exists. Having been liberated from his imprisonment in this place, the unfortunate prince was carried to Italy in 1487, where he is said to have been poisoned in 1495, by an agent of his brother and the infamous Pope Alexander VI. (*Malte-Brun*; *Biographie Universelle*, art. *Zizim.*)

BOURGAS, or BOURGHAS, a sea-port town of Turkey in Europe, Roumelia, on the Black sea, at the bottom of the gulf of the same name, 70 m. N.E Adrianople; lat. 42° 29′ 20″ N., long. 27° 28′ E. Pop. 6000? It is built on a promontory of a moderate height, and has a neat clean appearance. Its fortress is in ruins. It has a celebrated manufactory of pottery. "A fine clay is found in the neighbourhood, which is formed into pipe bowls, cups, and other utensils. These are unglazed, but highly polished, and ornamented with gilding. In this state they are exposed for sale in the shops of the bazar, which forms the principal street of the town; and as these shops are matted, and kept clean and neat, the whole has a rich and showy appearance. They pride themselves on this little manufacture, and sell it proportionally dear." (*Walsh's Journey*, p. 120, 4th ed.) The town has also some trade in corn, wine, butter, cheese, iron, and other productions of the contiguous country. The gulf of Bourgas is open to the E.: the anchorage is to the S. of the town, and has a depth of from 12 to 5 fathoms.

BOURG-DE-PE'AGE, a town of France, dep. Drôme, cap. cant., on the Isère, 10 m. N.E. Valence. Pop. 2602. The river separates it from Romans, of which it is properly a suburb. It is neat and well built; and has manufactures of hats and coarse silk, with dye-works, rope-works, tanneries, &c. (*See* ROMANS.)

BOURG-D'OYSANS, a town of France, dép. Isère, cap. cant., on the Rive, near where it falls into the Romanche, in a deep valley at the bottom of a steep hill, 18 m. S.E. Grenoble. Pop. 3019. It principally consists of two long streets, with ill-built houses, many of which have their windows fitted up with oiled paper instead of glass. The valley in which the town is situated seems to be on all sides enclosed by mountains, and was for a while completely submerged and formed into a deep extensive lake! This inundation was occasioned by the course of the Romanche having been obstructed, in the 11th century, at the point where it escapes from the valley, by rubbish brought down from the adjoining mountains. This natural mound, having been gradually undermined, at length gave way, and the waters of the lake made their escape on the 15th Sept. 1219, sweeping all before them as far as Grenoble, which was laid under water. (*Hugo*, art. *Isère.*)

BOURGES (an. *Avaricum*), a city of France, dép. Cher, of which it is the cap., in an extensive plain at the confluence of the Auron and the Evre, 124 m. S. Paris; lat. 47° 4′ 38″ N., long. 2° 23′ 40″ E. Pop. (*ex* cant.) 19,646. It is agreeably situated on the declivity of a hill, and is surrounded by a thick wall flanked at regular distances with lofty towers in good preservation. (*Malte-Brun.*) Streets sufficiently broad*, but dirty; houses mean-looking, being low and having their gables to the streets. Large tracts, occupied by gardens, nurseries, promenades, &c., are enclosed within the walls, so that the streets have a deserted aspect, though less so at present than formerly, the population having increased rapidly during the last 10 years. Bourges contains some fine old public buildings. At the head of these is the cathedral, one of the noblest Gothic edifices in France, begun in 845, but not finished for some centuries afterward. It is 348 ft. in length by 123 in breadth, and has several towers, the highest of which has an elevation of 221 ft. The palace of the archbishop is also a fine edifice; its garden, laid out by Lenotre, has an obelisk in honour of the Duc de Charost. The Hôtel de Ville, built by Jacques Coeur, famous alike for his skill and success as a merchant and financier, his immense wealth, and the injustice of which he was the victim, is a splendid Gothic mansion, that cost a vast sum. Besides the mayoralty, it furnishes accommodation for the courts of law. The prisons are built on the ruins of the ancient palace of the ducs de Berri; and the remains of the old tower that formerly commanded the town, and which was demolished in 1651, serve to enclose the courts of the prison. There are also the Hôtel de Prefecture, formerly the Hôtel de l'Intendance, barracks, a small but elegant theatre, a college, two large hospitals, a public library with 13,000 volumes, &c. Bourges is the seat of an archbishopric, of tribunals of primary jurisdiction and commerce, of a royal college with about 240 pupils, a primary normal school, a diocesan seminary with above 100 pupils, and a secondary ecclesiastical school; it has also a society of agriculture, commerce, and arts; a course of geometry and mechanics applied to the arts, and a school of midwifery. It has manufactures of fine and coarse cloths, hosiery, &c., and its cutlery has been long in high estimation. There are in the town two mineral springs.

Bourges was formerly the seat of a celebrated university established by Louis XI. in 1463; but this having been suppressed at the Revolution, its place has been supplied by the royal college already alluded to. Louis XI. was born in this town; and it is also the birth-place of the celebrated preacher Bourdalone, Jacques Coeur, and other distinguished persons. The house occupied by the famous jurist Cujas has been purchased by the city authorities for a barrack for *gens d'armes!*

To mark his respect for his native place, Louis XI. not only gave it a university, but also conferred on its mayors and magistrates the privilege of nobility. This, however, was anything but an advantage, inasmuch as it served only to fill the town with poor gentlemen, and to discourage manufactures and commerce. The clergy were also exceedingly numerous. But most of the religious establishments were suppressed at the revolution, when the privileges and distinctions of the nobility and gentry were also abolished.

Bourges is one of the most ancient cities of France. It was taken by Cæsar, anno 52 B.C., and was for 475 years the capital of Aquitaine. It has suffered much at different periods from war, fire, and pestilence. Several councils have been held in it; and here, in 1483, the ecclesiastical constitution, denominated the Pragmatic Sanction, was accepted by the French clergy. (*Martinière, Grand Dictionnaire Géographique*; *Malte-Brun*; *Hugo*, art. *Cher*; *Dict. Géographique, &c.*)

BOURGNEUF, a sea-port town of France, dép. Loire Inférieure, cap. cant., 23 m. S.W. Nantes. Pop. 2689. The port dries at low water: and the bay, which is extensive, is gradually filling up with sand. To such an extent is this the case, that above 500 hectares of land are now under cultivation in the single commune of Bourgneuf that,

* This is the statement of Hugo; Malte-Brun says they are narrow.

25 years ago, were under water; and the channel between the town and the opposite island of Bouin, formerly 2700 yards across, is now narrowed to less than 100 yards! There were formerly in the vicinity very extensive salt marshes, the produce of which was largely exported; but these, though still very considerable, are now materially diminished. There are on the coast large beds of oysters. (*Hugo*, art. *Loire Inférieure.*)

BOURGOIN (an. *Bergusium*), a town of France, dép. Isère, cap. cant., on the Bourbre, in a fine situation, surrounded by beautiful hills, 9 m. W. La Tour-du-Pin. Pop. 4325. It is neat and well built; has a tribunal of original jurisdiction, and manufactures of calicoes, bagging, &c., with paper-mills and flour-mills. It is favourably situated for commerce, being traversed by the roads from Grenoble to Lyons, and from the latter to Chambéry.

BOURG-ST.-ANDEOL, a town of France, dép. Ardèche, in an agreeable situation on the Rhone, 9 m. S. Viviers. Pop. 4290. It has several good buildings, and neat, well-kept streets; a quay along the river, and a handsome suspension bridge over it, with some trade in corn, wine, and silk. It is named from St. Andeol, who suffered martyrdom in the Vivarais, in the beginning of the 3d century. Within a short distance of the town is a remarkable monument of antiquity, sculptured on the face of a rock, but now a good deal defaced. It has been very variously interpreted; some antiquaries having supposed it to be Diana in chase of a stag, and others that it represents a sacrifice in honour of the god Mithras. The latter is believed to be the correct explanation. (*Hugo*, art. *Isère*; *Millin*, *Voyage dans le Midi de la France.*)

BOURGUEIL, a town of France, dép. Indre-et-Loire, cap. cant., in a fine valley on the Doigt, 9 m. N.N.W. Chinon. Pop. 3600. It has a communal college, and is surrounded by fruitful gardens, where anise, coriander, liquorice, and other plants are cultivated to such an extent as to supply materials for a pretty extensive trade. Its vicinity also produces fine red wine. (*Hugo*, art. *Indre-et-Loire.*)

BOURLOS, or BOORLOS a lake or lagoon of Egypt, between the Damietta and Rosetta branches of the Nile, parallel to the Mediterranean, from which it is everywhere separated by a narrow neck of land, except at one point where it communicates with the sea by a narrow channel, anciently the Sibbenitic mouth of the Nile. It is about 38 m. in length, and 17 m. in its greatest breadth. It is connected with the Nile by several canals; and is mostly shallow and marshy, being navigable only along its N. shore.

BOURNE, a par. and town of England, co. Lincoln, parts of Kesteven, wapentake Aveland, 91 m. N. London. Area, 8190 acres. Pop. of par., 1821, 2242; 1841, 19,832; of which the town had in 1831, 2355. It is situated in a level district adjacent to the fens, the town consisting chiefly of one long street of well-built modern houses; the church is the remaining portion of a much larger structure, in the Norman style, with two towers. There are Baptist and Wesleyan chapels; an endowed free school for 30 children; two almshouses, one supporting six old men, the other six women; and a town-hall, a handsome modern edifice, on the site of one built by Lord Burleigh in the reign of Elizabeth: it has a market-place under. The weekly market is on Saturday. Annual fairs are held April 7, May 7, and Oct. 29. A navigable canal extends from the town to Spalding and Boston, by which coal, timber, and other commodities, are supplied. The chief trade of the place is in leather and wool. There are several large tan-yards. The ann. value of real prop. in 1815 was £10,139. It is the central town of a union of 37 parishes; its own average poor rates are £1843, and it has five guardians. Petty sessions for the parts of Kesteven are also held in the town, and it is a polling place for that district and Holland. The name is derived from a small stream of remarkably pure water, which gushes from a source near Bourne. Roman coins and tesselated pavements have been found on the site; trenches and mounds of a Saxon castle are traceable: a priory of Augustine monks was founded in Wm. II.'s reign, whose revenue, at the general suppression, was £197 17*s.* 5*d.* Wm. Cecil, Lord Burleigh (Elizabeth's minister), was born in this town in 1520. Dr. Dodd, once celebrated as a popular preacher, but now principally remembered by his disgraceful death, was also a native of Bourne.

BOURTANG, a fortified town of the Netherlands, prov. Groningen, in the extensive morass of the same name, 31 m. E.S.E. Groningen. The morass, though it increases its strength, renders it unhealthy. It was taken by the Spaniards in 1593, and by the French in 1795.

BOUSSA, a city of Interior Africa, and cap. of a prov. of the same name, on an isl. of the Niger; lat. 10° 14′ N., long. 3° 11′ E. Pop., according to Clapperton, 10,000 or 12,000; but, according to Lander, 16,000 or 18,000. The country in the neighbourhood is bold and rocky, which renders Boussa a place of considerable strength; for its walls (which are tolerably well built, and kept in good repair) extend to, and are united with, the two extremities of a rocky precipice which skirts the W. branch of the enclosing river. The houses are, however, built in detached patches, and do not occupy more than a tenth part of the walled area, presenting the appearance of several small villages, rather than of one continuous town. The prov. of Boussa extends about 50 m. N. of the river, and is about the same length from N. to S., the city lying about 15 m. from its S. extremity. The soil is very fertile, especially that of the isl., producing corn, yams, cotton, rice, timber trees, and other African vegetation, in great abundance: it also abounds in the usual African animals; elephants, hippopotami, lions, tigers, &c. Boussa is considered, politically, as part of the great kingdom of Bornoo; but it appears as if the different states were perfectly independent of each other, though all speaking the same language; at all events, the communications of the sultan of Boussa with Clapperton and Lander seem to have had no reference to any controlling power. Of the Bornoo states, Boussa is, if not the largest, the most populous and most powerful. (*Clapperton's Second Exped.*, p. 96–106; *Lander's Records*, i. 141–143.)

Boussa possesses a melancholy interest for Englishmen, from its being the spot where the enterprising Mungo Park met his death. It is well known, that after his first successful expedition in the service of the African Association, that adventurous traveller was employed by government to complete his own partial discovery of the course of the Niger. This commission he did not live to effect; after traversing a far larger portion of Africa than had before been traversed by any European, his boat was attacked by a native army at this place, where the river is shut in by two high rocks, leaving barely passage room for the current, *as through a door.* (*Adami Fatouma's Journal*, p. 214.) Assailed from the top of these rocks, Park defended himself for a long while, throwing all his provisions overboard to lighten his boat; till, finding all hope of successful resistance at an end, he, with his remaining companions, leaped into the water, in a last attempt to escape by swimming, and was drowned, or, as is perhaps more probable, dashed to pieces by the missiles hurled down upon him. The boat subsequently drifted on a reef of sunken rocks, not half a stone's throw from Boussa; and a slave of Park, the only living remnant of his unfortunate expedition, was made prisoner. The cause of this murderous attack is represented by Isaaco and Adami Fatouma, Park's native friends, to have been owing to the knavery of a chief, who, secreting the presents entrusted to him by Park for the king, excited the indignation of the latter, by telling him "the white man had left nothing for him." The explanation given to Lander on the spot, twenty years later, however, was, that the natives took the adventurers for a party of Fellatahs, which nation had just then commenced that series of usurpations which they have since carried to an extreme height. Be this as it may, the destruction of the traveller was signalized by feastings and rejoicings; but before the revelries were ended, it so chanced that an infectious disorder broke out among the Boussians, sweeping off the sultan and a great number of his subjects, among whom, it is reported, the murderers of the party were included. The effect of this upon a superstitious people may be conceived; prayers and sacrifices were offered to the white man's god, and an expression grew into use among the surrounding nations, of which subsequent travellers have felt the full benefit, "*Do not hurt the white men, unless you would perish like the people of Boussa.*" The Boussians themselves share fully in this feeling; they are overwhelmed with shame at a recurrence to the subject, and plead their youth at the time, or their personal innocence, without attempting the slightest exculpation of their fathers. The death of Park involved the loss of his papers. This was to be the more regretted, as he had passed far beyond Timbuctoo, that native city of which such marvels had been reported in ancient times, but of which no European had ever obtained a glimpse. The recovery of these papers was long attempted by every means that could be used; and Lander in his second expedition thought he had succeeded: an old man was found who possessed a book and papers taken from the river at the time of the murder, but, on inspection, the former proved to be an old nautical publication of the last century, and the latter a few memoranda of no consequence, such as rough observations on the height of water in the Gambia, a tailor's bill, an invitation to dinner, and the like. Great anxiety was displayed on this occasion by the sultan and his subjects to restore the journal; but, in all probability, it either sank with Park to the bottom of the Niger, or was dispersed upon its surface among the other ruins of the time: in either case, it was irretrievably lost. (*Isaaco and*

Albani Fatouma; *Park's 2d Journal*[*], p. 173-219; *Clapperton*, p. 109; *Lander's Records*, i. 144-149; *Travels*, p. 394, 395.)

BOUSSAC, a town of France, dep. Creuse, cap. arrond., on a steep rock, near the confluence of the Veron and the Little Creuse, 21 m. N.E. Gueret. Pop. 952. "Boussac," says M. Malte Brun, "contains fewer inhabitants than the capital of any other arrondissement in France. It stands on a rock, and is almost inaccessible to carriages; surrounded with walls flanked with bastions, commanded by an old embattled castle, from which the view extends along a defile formed by arid and wild mountains. The town is as gloomy a residence as can well be imagined." (Vol. viii., p. 299, *Eng. Trans.*)

BOUXWILLER, a town of France, dep. Bas Rhin, cap. cant., near the Moder, surrounded by mountains and forests, 20 m. N.W. Strasburg. Pop. 4076. It is commanded by a fine old Gothic castle, and has manufactures of cotton, linen, arms, and braziers' ware, hats, &c., with breweries and bleachfields.

BOVA, an inland town of Naples, prov. Calabria Ultra, cap. cant., on a mountain, 17 m. E.S.E. Reggio. Pop. 3500. This town suffered severely from an earthquake in 1783, but was rebuilt in better taste under the patronage of Ferdinand IV. It is the seat of a bishopric; has a cathedral and several churches, a seminary, a hospital, and two *monte-de-pietà*.

This, as well as several other towns in the Neapolitan states, is believed to have been founded, or, at all events, to have been occupied, by fugitives flying from Epirus and the Morea to escape the cruelty of the Turks. The foundation of Bova is ascribed to the great immigration which took place in 1477, when John Castriot, son of the famous George Castriot, or Scanderbeg, was expelled from his hereditary dominions by the Turkish conqueror, Mohammed II. At later periods, similar immigrations took place from Corona, Maina, &c. The immigrants and their descendants have continued to be a distinct race, and have preserved the language and dress, though not the religion, of their forefathers. They occupy several towns and villages in different parts of the kingdom, their total number being at present supposed to amount to about 32,000. (*Swinburne's Two Sicilies*, i., 250, 4to. edit.; *Craven's Tour in Naples*, p. 314; *Biographie Universelle*, art. *Scanderbeg*.)

BOVEY, t., St. Genevieve co., Mo. It has one academy, 20 students, one school, 20 scholars. Pop. 246.

BOVEY TRACEY, a par. and town of England, co. Devon, hund. Teignbridge, 186 m. S.W. by W. London. Area, 6480 acres. Pop. of par., 1891, 1685; 1831, 1697. The town stands on the slope of a hill, at the base of which the Bovey flows, and is crossed by an ancient bridge of three arches. There is one main street, which branches off at the ancient market-place like a Y, one part continuing up the ascent, the other extending to the bridge. There are a few respectable modern houses, but the greater part are ancient and meanly built. The church is a Gothic structure, with a good tower, at the E. end of the town; there are also Baptist and Wesleyan chapels, and an endowed free school for twenty-four children. Annual cattle fairs are held on Easter Mon., Holy Thurs., 1st Thurs. July, 1st Thurs. Nov. The market (granted in 1259) has been discontinued within the present century. There are two potteries, which employ many of the inhabitants; the remainder are engaged in agriculture: serge-weaving and wool-combing were once carried on to a considerable extent, and have become extinct only within a recent period. The ann. value of real prop. in 1815 was £6714. The average poor-rates amount to £382. A portreeve and bailiff are annually appointed at a court leet held by the lord of the manor.

The Bovey heathfield, extending at the base of the town, is a low, mossy tract between 7 and 8 m. in circ., surrounded by hills which open to the S.E., in which direction the Teign flows after being joined by the Bovey. The granite hills on the outskirts of Dartmoor rise on the W. side, and the green sand range of Haldon on the E. The Bovey coal and clay formations traverse this plain in a S.E. direction, their outcrop being at the foot of the hill on which the town stands. There are seven beds of lignite, in all forming continuous strata of about 70 ft. in thickness, and dipping at an angle of 23 ft. at the part where they are worked for the use of the pottery, which stands on the spot, and which is almost the only purpose to which the fuel is appropriated, the imperfect combustion and large proportion of ashes rendering it unavailable for general purposes, though occasionally used in the cottages of the neighbouring poor. The clay beds overlie the lignite: there are five in all, running parallel with each other, and alternating with beds of sand and gravel; the four western beds are potter's clay; the other pipe clay: shafts are sunk on and through them, at intervals, for 6 or 7 m. along their course, at such parts as are found sufficiently pure for the market; they vary in depth from 40 to 90 ft., the lignite being always arrived at in sinking through the four western beds, and a fine sand under the eastern one. From 30,000 to 40,000 tons of this clay are shipped annually at the port of Teignmouth for the Staffordshire potteries, the greater portion of which is excavated in the parish of Kingsteinton, and conveyed thither by the Stover canal, formed through this inland basin, and locking into the Teign, about 3 m. above the place of shipment. This canal effectually drained the greater part of what had previously been an unhealthy morass, and fitted it for cultivation; a railway from the Haytor granite quarries traverses the heathfield, and terminates at the head of it: both were creations of the Templar family, whose mansion and property have since been transferred to the Duke of Somerset.

BOVINA, p. t., Delaware co., N. Y., 10 m. E. Delhi, 76 m. S.S.W. Albany, 350 W. Drained by Little Delaware river and its branches. It has four stores, one fulling-mill, three grist-mills, one saw-mill, thirteen schools, 478 scholars. Pop. 1408.

BOVINO (an. *Vibinum*), a town of Naples, prov. Capitanata, cap. distr., on the declivity of a mountain, watered by the Cervaro, 19 m. S.S.W. Foggia. Pop. 5000. It is fortified, is the seat of a bishopric, and the residence of a judge of primary jurisdiction; it has a cathedral, two parish churches, and several convents. A battle took place near this town, in 1734, between the Spaniards and the Imperialists, in which the former were defeated.

BOW, p. t., Merrimac co., N. H., 7 m. S. Concord, 477 W. Drained by Turkey river, which enters the Merrimac in the N. part of the town. A canal, three fourths of a mile long, passes round Bow Falls in the Merrimac, overcoming a descent of 25 feet by 4 locks. It was finished in 1812, and cost $25,000. The town contains one store, one grist-mill, six saw-mills, twelve schools, 268 scholars. Pop. 1001.

BOWDOIN, p. t., Lincoln co., Me., 17 m. W. Wiscasset, 18 m. S.S.W. Augusta, 577 W. Incorporated in 1788. It contains three stores, one fulling-mill, three grist-mills, eighteen schools, 849 scholars. Pop. 2073.

BOWDOINHAM, p. t., Lincoln co., Me., 21 m. S. by W. Augusta, 12 m. N. Bath, 579 W. Incorporated in 1762. The lumber trade and ship-building are considerable. It contains several foreign commission-houses, fourteen stores, one grist-mill, two saw-mills, eighteen schools, 976 scholars. Pop. 2402.

BOWEN, t., Madison co., Ark. Pop. 453.

BOWERSVILLE, p. v., Franklin co., Ga., 124 m. N. by E. Milledgeville, 595 W. Situated on the E. side of the N. fork of Broad river.

BOWERBANK, t., Piscataquis co., Me. Bounded S.W. by Sebec pond. It contains three schools, 75 scholars. Pop. 165.

BOWLES, t. Franklin co., Mo. It contains five schools, 90 scholars. Pop. 1449.

BOWLINGGREEN, p. v., capital of Caroline co., Va., 40 m. N. Richmond, 80 W. It is built around a fine green, ornamented with trees and shrubbery, and contains a court-house, jail, two churches, one Episcopal and one Reformed Baptist, forty dwellings, and 250 inhabitants.

BOWLINGGREEN, p. v., capital of Warren co., Ky., 144 m. S.W. Frankfort, 668 W. Situated on Big Barren river, a branch of Green r., and is accessible by steam-boats of 200 tons through the year. It contains a fine court-house, a jail, a college, a female seminary, three churches, one Presbyterian, one Methodist, and one Baptist, and fourteen stores. It has considerable trade, particularly in tobacco. Pop. 1400.

BOWLINGGREEN, t., Licking co., O. It contains one school, 25 scholars. Pop. 1464.

BOWLINGGREEN, p. v., capital of Clay co., In., 60 m. S. by W. Indianopolis, 631 W. It contains a court-house, jail, seven stores, one grist-mill, two saw-mills, two tanneries, one academy, 45 students, two schools, 105 scholars. Pop. 235.

BOWLINGGREEN, t., Pettis co., Mo. Pop. 410.

BOWLINGGREEN, p. v., Oglethorpe co., Ga., 63 m. N.N.E. Milledgeville, 596 W.

BOWLINGGREEN, t., Marion co., O. Watered by a branch of Scioto river. It contains two schools, 60 scholars. Pop. 394.

BOXBOROUGH, p. t., Middlesex co., Mass., 28 m. N.W. by W. Boston, 476 W. Hops are extensively cultivated. It contains three churches, one Congregational, one Methodist, and one Universalist; two stores, two grist-mills, two saw-mills, four schools, 100 scholars. Pop. 426.

BOXFORD, p. t., Essex co., Mass., 29 m. N. by E. Boston, 13 m. S.W. Newburyport, 469 W. Incorporated in 1685. It contains one Congregationalist and one Unitarian church, three stores, one cotton-factory with 480 spindles;

[*] That portion of Park's observations which is published was intrusted to Rennie's care at Sansanding, before the departure of the traveller for Timbuktoo.

four grist-mills, four saw-mills, six schools, 205 scholars. Pop. 982.

BOXTEL, a village of the kingdom of Holland, prov. Brabant, on the Dommel, 7 m. S. Bois-le-Duc. Here was fought, on the 14th Aug., 1794, an obstinate action between the French and the allied British and Dutch troops, under the command of the Duke of York. The latter were defeated with considerable loss, and obliged to retire behind the Maese.

BOYDTON, p. v., capital of Mecklenburg co., Va., 109 m. S.S.W. Richmond, 232 W. It contains a court-house, jail, two churches, one Methodist, and one Presbyterian; four-stores, and about ninety dwellings. It is the seat of Randolph Macon college, which is situated one mile west of the village, and is chiefly under the direction of the Methodists, and contains a president, five professors, or other instructors, and 98 students. The commencement is on the 3d Wednesday in June.

BOYLE, an inl. town of Ireland, co. Roscommon, prov. Connaught, on the Boyle, 94 m. W.N.W. Dublin. Pop. (1821) 3407; (1831) 3433: pop. parish (1834) 11,810 of whom 1042 were of the Estab. Church, five Prot. Diss., and 10,763 Rom. Cath. The river divides it into two portions, which are connected by a fine modern bridge; and there are two other bridges near the town. The public buildings are the parish church, two Rom. Cath. chapels, and Baptist and Methodist meeting-houses; a new market-house, a lecture-room, and large barracks. It is a constabulary station, and has a dispensary, bridewell, savings' bank, and loan fund. The chief articles of trade, which is wholly carried on by land carriage, are grain, butter, and flax: some coarse woollens are manufactured. The butter-market is on Mondays, but the principal market-day is Saturday: fairs on March 6, April 3, May 9 and 30, July 9 and 25, Aug. 16, Oct. 1, and Nov. 25.

The corporation, under a charter granted by James I., in 1613, consists of the borough-master, twelve burgesses, and an indefinite number of freemen. It returned two mem. to the Irish H. of C. until the Union, when it was disfranchised. General sessions are held every nine months, and petty sessions on Mondays. A seneschal's court in the town has jurisdiction in several adjoining baronies, but none in the borough. Branches of the Belfast and Agricultural banks were opened here in 1835 and 1836. The post-office rev. in 1830 was £639, and in 1836, £696. The mail coach from Dubblin to Sligo passes through thrice a week, and a mail car plies every day to French Park. (*Stat. Surv.; Railway Rep.*)

BOYLE, county, Ky. Taken chiefly from Mercer co. in 1842. Situated in the central part of the state, and contains 175 sq. m. Bounded N.E. by Dick's river, a branch of Kentucky river, and watered by its tributaries. It has a very fertile soil. The statistics are included in those of the counties from which it was taken. Capital, Danville.

BOYLSTON, p. t., Worcester co., Mass., 39 m. W. Boston, 408 W. Watered by the S. branch of Nashua river. Incorporated in 1786. It contains three churches, two Congregational, and one Universalist; five schools, 264 scholars. Pop. 797.

BOYLSTON, t., Oswego co., N. Y., 140 m. N.W. Albany. Drained by Little Sandy and Trout creeks. It contains six schools, 150 scholars. Pop. 481.

BOYNE, a river of Ireland, which has its source in the bog of Allen, near Carberry, in Kildare, 225 feet above the level of the sea. It flows N.E. by Trim, Navan, and Slane, to Tullaghallen, whence it follows an E. course to Drogheda, uniting with the sea about two miles lower down. The bar at its mouth has only 2 ft. water at low spring-ebbs, and from 9 to 10 feet at high water: hence only the smaller class of vessels can come up to Drogheda. It has been rendered navigable for barges as far as Navan.

The Boyne will be ever memorable in British history for the important victory gained on its banks, about 3 m. above Drogheda, on the 1st of July, 1690, by the forces under our great deliverer, William III., over those of James II. This victory, by securing the triumph of the liberal principles of government established at the Revolution, may be said to have been the great cause of the subsequent progress of the British empire in wealth, power, and population. In 1736 an obelisk, 150 feet in height, was erected in commemoration of this great event, on the point facing the ford at Oldbridge, 2 m. W. Drogheda, where King William was wounded in the arm on the evening previous to the battle.

BOZRAH, p. t., New London co., Ct., 33 m. E.S.E. Hartford, 359 W. Yantic river affords water-power. It contains the manufacturing villages of Bozrah and Fitchville. It has three churches, one Congregational, one Methodist, and one Baptist; four stores, two cotton-factories with 5484 spindles, three grist-mills, four saw-mills, two tanneries, six schools, 288 scholars. Pop. 1067.

BRA, a town of the Sardinian States, prov. Alba, cap. mand., near the N. bank of the Stura, 22 m. N. Mondovì: Pop. 7000. It has three parish churches, a hospital, with fabrics of silk and linen, and a considerable trade in corn and cotton. It is reckoned particularly healthy.

BRABANT, N. and S. provinces of the Low countries: the first making part of the kingdom of Holland, and the latter of that of Belgium, which see.

BRACCIANO, a town (an. *Sabata*) and lake (an. *Lacus Sabatinus*) of the Papal dominions, 25 m. N. Rome. Pop. 1746. The town is situated on the W. side of the lake, is well built, has a flourishing paper-manufactory, and an appearance of prosperity. It has a magnificent feudal castle belonging to the Torlonia family, now dukes of Bracciano.

The lake is nearly circular; its circumference, without following all the windings of the shore, being about 20 m. It is not generally deep, but is well stocked with fish. The Monte Rocca Romane, covered with wood, rises on the N.E. side of the lake, and it is in most parts bordered by hills. Besides Bracciano, it has on its margin Trivignano (an. *Trebeniscum*), Anguillara (an. *Angulara*), Vicarello (an. *Vicus Aurelii*), San Stefano, near which are the ruins of several Roman villas, &c. It gives rise to the river Arone (an. *Ars*), which falls into the sea about 8 m. N. from the mouth of the Tiber. The scenery round the lake is of the most pleasing and sylvan kind. Without being positively unhealthy, the air of Bracciano is, in summer, what the natives call "suspected." (*Gell's Rome and its Vicinity*, i., 222.)

BRACEVILLE, Trumbull co., O., 154 m. N.E. Columbus, 310 W. It contains five schools, 340 scholars. Pop. 880.

BRACKEN, county, Ky. Situated in the N.E. part of the state, and contains 220 sq. m. Bounded N. by Ohio river, and S.W. by Licking r., by the N. branch of which it is drained. The surface is uneven; soil, productive. It contained, in 1840, 4953 neat cattle, 7963 sheep, 13,865 swine; and produced 183,509 bushels of wheat, 8531 of rye, 282,018 of Indian corn, 76,425 of oats, 6121 of potatoes, 343,485 pounds of tobacco, 4466 of sugar. It had thirteen stores, one woollen-factory, four flouring-mills, seven grist-mills, seven saw-mills, four tanneries, three distilleries, one college, 104 students, one academy, 103 students, nine schools, 233 scholars. Pop.: whites, 6983; slaves, 819; free-coloured, 151; total, 7953. Capital, Augusta.

BRACKLEY, a bor. and town of England, co. Northampton, hund. King's Sutton, 56 m. N.W. London. Area of par., 2790 acres. Pop. of par., 1821, 1851; 1831, 2167. The town stands on a slope, on the N. bank of the Ouse, which is here crossed by a two-arched bridge. Houses, mostly rude buildings of unhewn stone. There are two churches of great antiquity; a national school; almshouses founded in 1663; and a good town-hall. A weekly market is held on Wednesday, and an annual fair on St. Andrew's day. Under a charter of 2 James II. it had a mayor, seven aldermen, and twenty-six capital burgesses; and these, until the passing of the Reform Act, when it was disfranchised, had the exclusive privilege of returning two mem. to the H. of C. The charter authorized courts of record and of quarter sessions, but they have long been disused. The borough comprises two distinct parishes, only ecclesiastically united, Brackley St. James, and Brackley St. Peter; the poor-rates of the former, in 1836, were £386 14*s.*; of the latter, £696 15*s.* It is the union town of thirty parishes. (*Bridge's Hist. Northamptonsh.; Baker's ibid.*)

BRADFORD, a par., market town, and parl. bor. of England, W. Riding co. York, wapentake of Morley. The par. contains 33,710 acres, and had, in 1841, 132,164 inhab. The township of Bradford, comprising 1680 acres, had, in 1801, a pop. of 6393; in 1821, of 13,064; and in 1831, of no less than 23,233! and it has increased even more rapidly since 1831. But, in addition to the township of Bradford, the townships of Manningham, Bowling, and Horton, including the hamlets of Great and Little Horton, are included in the parl. bor., which has an area of 6930 acres, and had, in 1831, a pop. of 43,527.

Bradford is situated on an affluent of the Aire, at the junction of three extensive valleys, 163 m. N.N.W. London, 31 m. S.W. by W. York, and 8 m. W. Leeds. Though the streets in the older parts be in general narrow, those of a more recent date, which are by far the most extensive, are sufficiently broad, and they are all well paved and lighted. Houses wholly of stone, and well supplied with water. The town has an evidently thriving appearance, indicative of its really flourishing condition. The parish church of St. Peter is a structure in the pointed style of architecture, built in the reign of Henry VI.; the other churches are Christ-church; St. James's, built and endowed at the sole expense of John Wood, Esq.; and a new church, now erecting at the cost of —— Berthon, Esq. The Wesleyan and Primitive Methodists, Unitarians, Independents, Baptists, Roman Catholics, and Society of Friends,

have all places of worship. A free grammar school, chartered and liberally endowed by Charles II., was rebuilt in 1830. It is open to all boys belonging to the par., and has attached to it a library and a writing school: it does not, however, appear to be very popular, and at present (1839) there are only thirty boys attending the grammar school. There are, also, schools on the systems of Bell and Lancaster, a school of industry, and an infant school. The Baptists and Independents have each a college or academical institution within ½ m. of the town, for the preparation of candidates for their respective ministries; and the Methodists have a school for the sons of their preachers at Woodhouse Grove 4 m. distant. A philosophical society has been established. The Exchange, a handsome new building, has attached to it a library and news room. A mechanics' institute, founded in 1832, had, in 1839, 512 members and subscribers: a hall for this institute is now (1839) being erected; it is to cost £3000, and will contain a library, reading rooms, lecture rooms, &c. A dispensary is liberally supported; and there are numerous other charitable institutions. The poor-rates in Bradford township amounted, in 1838, to £5545 2*s.* 4*d.* It may be worth mentioning, that the first temperance society in England was established here.

The town is governed by two constables, elected at a vestry meeting, one of whom retires annually. Four overseers are chosen annually, two for the east and two for the west end. A court for the honour of Pontefract is holden on the first Wednesday of every month, for the recovery of debts under £15, in the new court-house, a commodious and elegant building: a court of requests is also holden in its own court-house. The Reform Act made Bradford a parl. borough, and conferred on it for the first time the privilege of returning two mem. to the H. of C. Its boundaries, as fixed by the Boundary Act, have been already specified. It had, in 1831, 1063 houses of £10 a year and upwards. Registered voters, 1837–38, 1348. The returning officer is named by the co. sheriff. It is also a station for receiving votes at elections of members for the Riding.

The present importance and rapid growth of Bradford are wholly owing to the spirit and success with which it has engaged in manufacturing industry. The production of worsted yarn and stuffs constitutes the staple business of the town. The spinning of the yarn employs a great number of hands, and when spun, it is now mostly woven in power-loom factories. There were in the town, in 1839, above 1500 power-looms, producing, at an average, from three to four pieces each per week; each piece being thirty yards in length, and from twenty to twenty-four inches in width. Norwich was formerly the great seat of the worsted manufacture, which, indeed, is supposed to have derived its name from the par. of Worsted in Norfolk, into which it had been early introduced. But the superior facilities for the prosecution of the manufacture enjoyed by Bradford, chiefly in consequence of the unlimited command of coal, have given it, in this respect, a decided advantage over Norwich; and, in fact, the greater part of the yarn wrought up in the latter is now made at Bradford. The stuffs, when finished at the loom, are partly brought by traders from Leeds, to be dyed there; this, however, is not nearly the case so much now as formerly, some very extensive dye-houses having been recently erected in and near the town. Sales are effected at the Cloth Hall, a building of two stories, each 144 by 36 feet. Thursday is the sale day, and during business hours the hall presents a most animated scene. But of late years, the hall has been used as a place of deposit and sale principally by the smaller class of manufacturers; and a *much* larger amount of goods is sold at the rooms and warehouses of the leading manufacturers.

The hands engaged in the woollen manufacture in the parish were estimated, in 1831, at 7900. The following table shows the number of resident families engaged in agriculture, manufactures, and trade, and in other avocations in the township, according to the pop. returns of 1821 and 1831:

Occupations.	1821.	1831.
Agriculture	17	39
Manufactures and trade	2,452	3,867
Other occupations	50	606
Totals	2,519	4,512

There were in the par. of Bradford, and principally in the town, in 1839, 142 worsted-mills, employing 10,896 hands; nine woollen-mills, employing 681 do.; and two cotton-mills, employing 98 do: making in all, 153 mills, and 11,675 hands. Of 120 engines belonging to these mills, 96 were wrought by steam, and 24 by water. The average rate of wages in the principal employments in the same year, was, men, from 15*s.* to 35*s.* a week; women, 8*s.* to 15*s.*; and children, 2*s.* 6*d.* to 7*s.*

The entire par. of Bradford is very densely peopled, and along all the principal roads there is an almost uninterrupted succession of towns and villages. Besides the woollen trade, which is the principal employment, and others more recently introduced, the iron trade has existed from time immemorial, as is proved by the discovery of a number of Roman coins, in the midst of a mass of scoriæ, the refuse of an ancient bloomery in the neighbourhood of the town. The supply of ore is abundant: the principal works, in which articles of the largest and most complicated description are manufactured, are at Bowling and Lowmoor. There were connected with the iron trade, in 1831, in Bradford town, 351; and engaged in the mines in Bradford, Bowling, and N. Rierley 1178 individuals.

A festival numerously attended, and celebrated with much gaiety, is held at Bradford every seventh year, in honour of Bishop Blaise, said to be the inventor of wool-combing. The manufactures produced here are conveyed to all parts by means of the Leeds and Liverpool canal, which communicates with the town by a branch, 3 m. long, and by the Aire and Calder canal to Hull, and thence to all parts of the world. Markets are held on Thursdays; fairs on March 3, 4, July 17, 18, 19, and Dec. 9, 10, 11; the last is a great mart for pigs. The banks are, the Bradford Banking Company, Bradford Commercial Banking Company, branches of the Leeds and W. Riding and of the Yorkshire district banks, a private banking-house, and a savings' bank, established in 1818, which had on the 20th Nov., 1838, a gross sum of £51,238 19*s.* 10½*d.*, deposited by 1880 subscribers.

In modern times, Bradford has been chiefly remarkable for having (in 1812) been a principal seat of *Luddism*, or of those misguided individuals who supposed that their interests would be promoted by the destruction of that machinery to which, more than anything else, Bradford, in common with other manufacturing towns, is indebted for its wonderful prosperity. The outrages committed by the Luddites were, however, finally suppressed, though not without some severe examples. It is to be hoped that the more general diffusion of sounder information on such subjects may prevent a recurrence of such *felo de se* enormities.

In 1825 the trade of Bradford was completely stopped, for nearly the whole year, by a most obstinate *strike* on the part of the workmen; but since then the business of the town has been prosecuted without interruption. (*Allen's Hist. of Yorkshire; Baines's Hist. and Direct. of Yorkshire; Parl. Reports; Priv. Inform.*)

Bradford (Great), a par. and town of England, co. Wilts, hund. Bradford, on the Avon, 93 m. W. by S. London. Pop., par., 1821, 10,231; 1831, 10,102: houses at the latter date, 2294. The river divides the town into two parts (called the New, and Old town), and is crossed by two bridges, one ancient, with nine arches; the other modern, with four. The old town consists chiefly of three streets, each above the other, on the slope and brow of a hill, rising abruptly from the N. bank; most of the streets are very narrow, but in this respect many improvements have been made within a recent period. The houses are all of stone, and many of them very respectable structures. The church is an ancient building, at the foot of the hill. Six of the principal sects of dissenters have places of worship in the town: there is a charity school for 60 boys, founded in 1712; and two sets of almshouses, one for men, one for women. A weekly market is held on Saturday, and an annual fair on Trinity Monday. There is also a cattle fair at Bradfordleigh, a hamlet in the par., the day following that of St. Bartholomew. The chief manufactures of Bradford are fine broad-cloths and kerseymeres—for these it has been noted for a very long period: there are several manufactories in the town; and in 1839 it had four woollen-mills, employing 418 hands. The stone quarries in Winsley tithing employ above 100 men. It enjoys an extensive water communication with the towns to the E. and W., by means of the Avon and Kennet canal. A court of requests for debts under £5 is held every third Tuesday: its jurisdiction comprises three adjoining hundreds, and it is held on the intermediate Tuesdays, at Trowbridge and Melksham. Bradford is a union town, under the Poor Law Act; its own rates average £5147. The ann. value of real prop. of the parish in 1815 was £26,847. The area of the whole parish 11,740 acres, comprising, besides the town, four chapelries and one tithing. There is much picturesque scenery along the windings of the river and the dells of its wooded hills, and many fine old mansions. About one third of the entire pop. reside in the town, which must have been of some consequence in the Saxon period, for St. Dunstan was elected bishop of Worcester at a synod held in it. Bradford sent members to one parliament in Edward I.'s reign, but never since; nor is there any record of its ever having been incorporated

Bradford, p. t., Penobscot co., Me., 94 m. N.E. Augusta, 669 W. Watered by Pashaw river, which flows into Pe-

nobscot river. It contains one store, one grist-mill, twenty saw-mills, seven schools, 396 scholars. Pop. 1000.

BRADFORD, p. t., Merrimac co., N. H., 25 m. W. Concord, 472 W. Watered by Warner river. It has a pond in the E. part, 500 rods long and 150 wide, which flows into Warner river. Incorporated in 1787. It contains six stores, one grist-mill, two saw-mills, one academy, 52 students, nine schools, 386 scholars. Pop. 1331.

BRADFORD, p. t., Orange co., Vt., 32 m. S.E. Montpelier, 512 W. At first called Moretown, received its present name in 1788; first settled in 1765, chartered in 1791. Wait's river affords water-power, and flows into Connecticut river. It contains four churches, one Congregational, one Methodist, one Christian, and one Union; five stores, two fulling-mills, one woollen-factory, one paper-mill, two grist-mills, two saw-mills, one academy, 158 students in male and female departments, ten schools, 447 scholars. Pop. 1655. The first artificial globes manufactured in the United States were made here, by Mr. James Wilson, in 1812, which have since been made at Albany, and are extensively known.

BRADFORD, p. t., Essex co., Mass., 35 m. N. Boston, 466 W. Bounded N.W. by Merrimac river. A bridge across the Merrimac connects it with Haverhill, where is a village which contains a Congregational church and thirty dwellings. In the E. parish is a village which contains a Congregational and a Methodist church, and a flourishing academy. Boots and shoes are manufactured to the amount of 366,000 pairs annually. It contains twelve stores, two grist-mills, one saw-mill, four tanneries, four academies, 216 students, ten schools, 1165 scholars. Pop. 2222.

BRADFORD, t., Steuben co., N. Y., 12 m. E. Bath, 204 m. W.S.W. Albany. Drained by Mud creek, a branch of Conhocton river. It contains three stores, three grist-mills, seven saw-mills, one distillery, nine schools, 396 scholars. Pop. 1547.

BRADFORD, county, Pa. Situated in the N.E. part of the state, and contains 1200 sq. m. Watered by the Susquehannah river, which receives Chemung river in its N. part, and in other parts Sugar, Towanda, Wyalusing, and other creeks. Bituminous coal is found on Towanda creek. The surface is hilly; soil generally not very fertile. It contained, in 1840, 34,099 neat cattle, 68,767 sheep, 23,283 swine; and produced 154,986 bushels of wheat, 45,738 of rye, 140,532 of Indian corn, 77,863 of buckwheat, 290,903 of oats, 363,412 of potatoes. It had ninety-one stores, two furnaces, fifteen fulling-mills, seven woollen-factories, eighteen tanneries, forty-three grist-mills, 213 saw-mills, one oil-mill, four distilleries, four printing-offices, four weekly newspapers, three academies, 179 students, 190 schools, 7948 scholars. Pop. 32,769. Capital Towanda.

BRADFORD, t., McKean co., Pa. It contains one store, two grist-mills, five saw-mills, four schools, 78 scholars. Pop. 375.

BRADFORD, t., Lincoln co., Mo. It has one academy, 72 students. Pop. 1319.

BRADING, a par. and marit. border-town of England, co. Southampton, div. Isle of Wight, liberty E. Medina, 73 m. S.W. London. Pop. in 1821, 2093; 1831, 2287; houses at the latter date, 338. It is situated at the head of Brading Haven, at the E. extremity of the island, and consists of one long street, of irregular buildings. The church is said to have been built in 704, but it must have undergone extensive alterations and repairs: there are also two Dissenting chapels, a national school for 60 children, and a small town-hall, under which is a market-place, but the market has ceased to be held: there are still annual fairs, May 1, September 21. There is a quay for the accommodation of small vessels, the place being approachable by such at high water; but the tract which forms the estuary (about 900 acres) is uncovered at every tide. An attempt to embank it, and shut out the sea, was made by Sir H. Middleton (the projector of the New river), but unsuccessfully. The town was incorporated, and a market and fair granted in 11 Edw. I.; there was another in 6 Edw. VI., under which the town was governed by two bailiffs and two magistrates; the former elected annually; the former were the bailiffs of the preceding year.

BRADLEY, county, Tenn. Situated in the S.E. part of the state. Drained by Hiwassee river. The surface is uneven. It contained, in 1840, 6426 neat cattle, 3417 sheep, 19,136 swine; and produced 16,854 bushels of wheat, 490,968 of Indian corn, 48,480 of oats, 10,450 of potatoes, 13,335 pounds of tobacco, 21,669 of cotton, and 2481 of sugar. It had fifteen stores, eleven grist-mills, nine saw-mills, five tanneries, six distilleries, two academies, 80 students, eleven schools, 172 scholars. Pop.: whites, 6971; slaves, 401; free colored, 13; total, 7385. Capital, Cleveland.

BRADLEY, t., Penobscot co., Me. Bounded N.W. by Penobscot river; Matawamkeag river runs on its N. border. It contains twenty saw-mills, has $157,000 employed in manufactures, and 125 scholars in schools. Pop. 395.

BRADLEYVALE, t., Caledonia co., Vt. It has one school, 18 scholars. Pop. 50.

BRADNINCH, a par. and bor. of England, co. Devon, hund. Hayridge; 150 m. W. by S. London. Pop., 1821, 1511; 1831, 1594; houses, 324; area, 4320 acres. It is pleasantly situated on an eminence, surrounded by higher hills, except on the S., and consists, for the most part, of a collection of neat, thatched cottages. The church is an ancient structure; and there is a guildhall, with a jail under, built subsequently to a fire that nearly destroyed the place a few years since. There are three paper-mills in the parish, which employ 80 or 90 hands; the rest are mostly engaged in agriculture. It once had a considerable woollen trade, but this has ceased, and its ancient weekly market has been discontinued. There are still two annual fairs held, May 6, and Oct. 2. It had a charter of incorporation, granted by Reginald, Earl of Cornwall, which was renewed and extended by James I. and James II.; under it were appointed a mayor, recorder, twelve masters, twenty-four inferior burgesses, &c.; and courts of quarter sessions and record were held, which have been abolished by the Municipal Reform Act. It returned two mem. to the H. of C. from the reign of Edw. II. to that of Hen. VII., when inability to pay their wages was pleaded, and admitted, on paying a fine of five marks.

BRADY, t., Clearfield co., Pa. Pop. 692.

BRADY, t., Williams co., O. It has two stores, one grist-mill, one saw-mill, one school, 25 scholars. Pop. 351.

BRADY, p. t., Kalamazoo co., Mich., 146 m. W. Detroit, 608 W. Watered by Portage river, flowing from several small lakes. It contains four stores, two saw-mills, four schools, 159 scholars. Pop. 1175.

BRAGA (an. *Augusta Bracara*), a city of Portugal, cap. prov. Entre Douro e Minho, and of the comarca of the same name, on a hill in the middle of a large and fertile plain, between the Cavado and the Dieste, 32 m. N.N.E. Oporto, lat. 41° 42′ N., long. 8° 20′ W. Pop. 14,500. It is defended by a citadel, and is surrounded by walls flanked with towers. The skirts are rather narrow, and the houses old: it is the seat of an archbishopric, and has a large cathedral, several parish churches and convents, an archiepiscopal palace, and seminaries, seventy-eight fountains, some of which are highly ornamented. It has great numbers of silversmiths, harness-makers, and hatters, who supply with their wares all the fairs in the adjoining Portuguese districts, as well as most of those in Gallicia in Spain.

Braga is a very ancient city, its foundation being ascribed to the Carthaginians. Down to a recent period it had the ruins of a Roman amphitheatre and aqueduct, but these are now nearly all obliterated, and it possesses few memorials of its ancient grandeur, except some coins found in the vicinity, and some Roman millstones. About 1½ m. E. from the city, on a hill, is the renowned sanctuary *do Santior Jesus do Monte*, annually resorted to by crowds of pilgrims. (*Milano; Dict. Géographique.*)

BRAGANZA, a town of Portugal, prov. Tras-os-Montes, cap. comarca, in a fertile plain, on the Ferrenza, 35 m. N.W. Mirandella. Pop. 4000. It is partially fortified, has a good citadel, is the seat of a bishopric, has two churches, a college, and some manufactures of silk and velvet. It was erected into a duchy in 1442; and in 1640, John II., 8th duke of Braganza, ascended the Portugese throne under the title of John IV. His descendants continue to enjoy the crown of Portugal, and have also acquired that of Brazil.

BRAHILOW or BRAILOFF, a town of Turkey in Europe, in Wallachia, on the left bank of the Danube, 12 m. S.S.W. Galacz, and about 105 m. by water from the Black sea. Pop. 6000? This may be said to be the sea-port of Wallachia, and in it all the foreign trade of the province centres. All vessels capable of entering the Danube may ascend to Brailoff; and its port, on one of the arms of the river, being defended by a small island from the drift ice carried down by the current in the spring, ships may winter here in perfect safety. Houses regularly built, principally from the ruins of the castle, which has been demolished; and the importance of the town having increased with the independence of the province, and the increasing commerce and navigation of the Danube, several handsome new streets and edifices have been recently erected. The warehouses are capable of containing above 200,000 chetwerts of corn. The great articles of export are the raw products of the country; as corn (particularly wheat), tallow, hides, beef, wool, salt, timber, staves, &c. In 1833 the exports of corn amounted to from 250,000 to 300,000 chetwerts, and those of tallow to about 60,000 poods. In 1832, 280 ships of different burden sailed from Brailoff, and the number has since increased. In 1834, 185 vessels arrived at the port from the Black sea, by the Soulisch mouth

of the Danube. The trade has been principally managed by Greek houses; but merchants from England and other foreign countries are now beginning to establish themselves here and at Galacz. (See *Hagemeister's Report on the Trade of the Black Sea*, Eng. trans., p. 89, and *passim*; and the arts. DANUBE, GALACZ, and WALLACHIA, in this work.)

BRAHMAPUTRA (*the son of Brahma*), vulg. BURRAMPOOTER, one of the largest rivers of Asia, forming the proper E. boundary of Hindostan; the peninsula beyond which should, therefore, rather be called "India beyond the Brahmaputra," than "beyond the Ganges," since the former separates two regions, for the most part unlike, not only in their topographical features, but also singularly so in the races of people who inhabit them, their religion, customs, &c. The Brahmaputra has three separate sources, viz., the Dihong, Dibong, and Lohit rivers, which unite in Upper Assam; the first has been traced by Capts. Bedford and Wilcox, and Lieut. Burlton, through the Himalaya chain to lat. 28° 15′ N., and long. 95° 10′ E., and is, in all probability, a continuation of the great San-po of Tibet. (See SAN-PO.) The Dihong, at the point to which Lieuts. Wilcox and Burlton penetrated, was 360 ft. wide, had considerable depth, and contained many rapids; one of which being found impassable, and the adjacent country wild and difficult in the extreme, prevented the future prosecution of the survey: the Dihong carries twice as much water as the Lohit into the Brahmaputra. The Dibong is the central and smallest of the three rivers; it rises N. the Himalaya, near lat. 28° 10′ N., and long. 97°, and passes through the mountains into Assam, near lat. 29° 15′, and long. 96°. The Lohit, called by the Assamese "holy stream," and considered by the Brahmins as more especially the origin of the Brahmaputra, is formed by the union of the Taluka and Taluding, two streams rising in the high mountain region of Tibet, between lat. 28° and 29° N., and long. 97° and 98° E., which having joined, the river thence resulting takes a S.W. course, penetrating the Lang-tam chain of mountains (a continuation of the Himalaya), and passing through a remarkable basin of rocky hills, a place of pilgrimage often frequented by Brahmins, in which it is augmented by the waters of the Brahmakund, a holy pool fabled to owe its origin to an intrigue between Brahma and the wife of a saint. At its exit from this basin the river receives the name of Brahmaputra, and is 220 ft. broad: for the next 60 m. its course is mostly W.; 15 m. below Suddya, in lat. about 27° 59′ N., and long. 95° 30′ E., at a height of 1150 (Paris) ft. above the level of the sea, the streams of the Dihong and Dibong join it. It now flows in a S.W. direction through the centre of Assam, with a very variable width, since its channel is continually subdividing to enclose a considerable number of islands, the largest of which, that of Majuli, in central Assam, is nearly 70 m. long, and 10 m. in its greatest breadth. While in Assam the Brahmaputra is said to receive as many as sixty tributary rivers. It enters Bengal in the Rungpore district, and soon after changes its direction, flowing at first S. and S.E., encircling the W. extremity of the Garrow mountains, and finally, S.S.W., to fall into the bay of Bengal by a mouth 5 m. wide, in lat. 22° 50′ N., long. 90° 40′ E., in conjunction with the largest branch of the Ganges. The chief tributary streams it receives in Bengal are, the Soormah, Barak, and Goomty, on the left, and the Gadada, Neelcomer, Teesta, and Megna, on the right hand; the latter of which rivers, though not one tenth part of its size, communicates its own name to the Brahmaputra after their junction. The affluents of the Brahmaputra bringing down vast quantities of mud, its waters are usually extremely thick and dirty, and its surface, during the floods, is covered with foam, intermixed with logs of wood, large masses of reeds, and carcasses of men and cattle. Its rise commonly begins in April; it attains its greatest elevation at the beginning of August, towards the end of which month its inundation subsides. Some rise, but no overflow, is experienced in September and October. In Bengal it is not fordable at any season, but it is by no means so readily navigated as the Ganges; the direction of the wind, which blows for so many months contrary to the course of the latter river, is commonly coincident with the direction of the Brahmaputra, and adverse to all progress upwards. Its banks are mostly covered with jungle or marsh-land, and in many places quite destitute of tracks; and its current is so strong, that one mile a day against the stream is, for a season, considered a tolerable advance. (*Ritter's Erdkunde von Asien*, vol. iii.; *Hamilton's E. I. Gaz.*, i., 286—288.)

BRAINTREE, a par. and town of England, co. Essex, hund. Hinkford, 36 m. N.E. London. Area, 2500 acres. Pop. of par. in 1821, 2983; 1841, 16,018. The town is built on an eminence, and consists of several narrow, irregular streets, in which a few good houses, of modern date, are dispersed, but the greater part are ancient, mean buildings, many of them wood; the village of Bocking, in the parish of that name, is a continuation of this town on its N. side, and consists of one long street, in which are three Dissenting chapels, and many well-built houses. Bocking parish includes 3800 acres, and had, in 1831, a pop. of 3128, mostly in the village. Braintree church is a spacious Gothic structure, with a tower and spire, on the elevated site of a still older encampment. There are four Dissenting chapels; an endowed school for 10 boys (in which Ray, the naturalist, was educated), and several charities: the principal one produces £350 a year, which is shared by the poor of this and two adjoining parishes. A weekly market is held on Wednesday; and two annual fairs, each lasting three days, which commence May 7 and October 2. The manufacture of silk and crape forms the chief employment of the inhabitants. These have latterly been a good deal extended, and have superseded the woollen manufacture, previously carried on. There are several manufactories on the course of the Blackwater, which flows N. of the town. Ann. val. of real prop. in 1815, £4493: of Bocking, £6957. Braintree is the central town of a poor law union of 14 parishes: its own rates average £2187: it has four guardians. Those of Bocking average £2910: it has a like number of guardians. The former is also a polling town for the N. division of Essex. (*Wright's Hist. of Essex; Parl. Papers and Rep., &c.*)

BRAINTREE, p. t., Orange co., Vt., 23 m. S. Montpelier, 494 W. Watered by a branch of White river. Chartered in 1781. It contains three churches, one Congregational, one Baptist, and one Christian; two stores, three grist-mills, ten saw-mills, twelve schools, 460 scholars. Pop. 1232.

BRAINTREE, p. t., Norfolk co., Mass., 14 m. S. Boston, 442 W. Manjquot river affords water-power. It contains excellent granite, which is extensively exported. First settled in 1635, incorporated in 1640. It contains three churches, two Congregational and one Unitarian; sixteen stores, one woollen-factory, one cotton-factory, with 1000 spindles; one paper-mill, six grist-mills, thirteen schools, 564 scholars. Pop. 2168.

BRAINTREM, p. t., Luzerne co., Pa., 163 m. N.N.W Harrisburg, 273 W. Bounded S. by Susquehannah river, branches of which afford water-power. It contains three stores, one fulling-mill, three grist-mills, six saw-mills, six schools, 275 scholars. Pop. 1335.

BRAKEL, a town of the Prussian states, prov. Westphalia, reg. Minden, cap. circle, on the Brucht, near its confluence with the Nette, 32 m. N.N.W. Cassel. Pop. 3000. It has a Catholic parish church, a hospital, a work-house; and fabrics of linen, tobacco, and a glass-work.

BRAMBER, a par. and bor. of England, co. Sussex, hund. Steyning, on the Adur, which is navigable for small vessels, 45 m. S. by W. London. Pop., 1831, 97; houses, 27; area, 870 acres. It claims to be a bor. by prescription, and was of sufficient importance to give its name to the rape in which it is situated. It sent two mem. to the H. of C. from the 23 Edw. I., with occasional omissions between that date and 7 Edw. IV.; and subsequently, without interruption, till it was disfranchised by the Reform Act; the right of election was in burgage tenure, voters paying scot and lot, of which there were about 20.

BRAMPTON, a parish and market town of England, co. Cumberland, Eskdale Ward. Area of par., 16,970 acres. Pop. 3345; pop. of township of Brampton, in 1841, 10,365. The town is situated 10 m. N.E. Carlisle, in a deep, narrow valley. It has a town-hall, built by the Earl of Carlisle in 1817, in which courts are held for the barony of Gilsland. The par. church, now in ruins, is at the village of Irthington, about 1½ m. distant; but it has a parochial chapel, built in 1789, and repaired and enlarged in 1827: it has also four Dissenting chapels, a grammar school, a national school, erected by the Earl of Carlisle; an infant school, and twelve almshouses for six old men and as many women. At the E. end of the town is the moat, a conical mount, rising 360 ft. above the level of the streets. The weaving of checks, ginghams, and other descriptions of cotton goods, on account of the Carlisle manufacturers, is carried on to a considerable extent. Market-day, Wednesday.

BRANCH, county, Mich. Situated in the S. part of the state, and contains 598 sq. m. Drained by St. Joseph's river and its branches. It contained, in 1840, 5211 neat cattle, 744 sheep, 13,224 swine; and produced 67,317 bushels of wheat, 89,085 of Indian corn, 1189 buckwheat, 4073 of barley, 70,232 of oats, 74,243 of potatoes, and 46,065 pounds of sugar. It had eleven stores, one furnace, three flouring-mills, five grist-mills, fifteen saw-mills, one brewery, one printing-office, one weekly newspaper, forty-seven schools, 789 scholars. Pop. 5715.

BRANCH, p. v., Coldwater t., cap. of Branch co., Mich., 112 m. W.S.W. Detroit, 561 W. Situated near the W. branch of Coldwater river.

BRANCH, t., Schuylkill co., Pa. It contains eight stores, two grist-mills, fourteen saw-mills, three schools, 145 schol-

ers; 103,500 tons of anthracite coal were mined in 1840. Pop. 1422.

BRANCHPORT, p. v., Jerusalem t., Yates co., N.Y., 201 m. W. Albany, 237 W. Situated at the head of the W. branch of Crooked lake, and contains one Presbyterian and one Baptist church, three stores, twenty-five dwellings, and about 150 inhabitants.

BRANDENBURG, an important prov. of the Prussian states, consisting principally of the ancient mark or marquisate of Brandenburg, having N. Mecklenburg and Pomerania, E. the provs. of Prussia and Posen, S. Silesia and the kingdom of Saxony, and W. Prussian Saxony, Anhalt, and Hanover; between 51° 10' and 53° 27' N. lat., and 11° 13' and 16° 12' E. long. Area, 15,560 sq. m. Pop., 1837, 1,694,042, of whom 1,666,232 are Protestants, 15,268 Catholics, and 12,532 Jews, &c. It is divided into two regencies and thirty-four circles. Principal towns, Berlin, Potsdam, Frankfort, Brandenburg, &c. It consists principally of an immense sandy plain, watered by the Oder, Spree, Havel, Warta, Netz, and other rivers, and by numerous lakes. Soil generally poor: in many parts, indeed, it consists of vast tracts of barren sand, diversified with extensive heaths and moors; but in other parts, particularly along the rivers and lakes, there is a good deal of meadow, marsh, and other comparatively rich land. Forests very extensive. Estimating the whole extent of the prov. at 15,800,000 morgen, it is supposed to be distributed as follows: Water, 300,000 morgen; woods, 3,500,000 do.; arable lands, 6,700,000 do.; gardens, 65,000 do.; waste lands, 3,250,000 do.; buildings, roads, &c., 550,000 do. Corn of all sorts is raised. Buckwheat, however, succeeds better than any other sort of grain on the sandy soils, and next to it rye. Potatoes are now very extensively cultivated. The other principal products are wool, hemp and flax, tobacco, timber, hops, &c. Agriculture, though backward, has made great advances since 1815. The breeds of horses and sheep have been materially improved; particular attention is paid to the raising of wool, which has become a most important product. In 1837 the stock of black cattle amounted to 554,000 head; horses, 180,000; sheep, about 2,500,000; hogs, 175,000. The average rent per Prussian morgen of cultivated land of a medium degree of fertility may be about 2½ rixdollars (7*s.* 6*d.* sterling). Agricultural labourers receive from 7*d.* to 9*d.* a day in summer, but in winter they are seldom employed by the day. With the exception of lime and gypsum, the minerals are of no importance. Manufactures were introduced by the refugees from France subsequently to the revocation of the edict of Nantes, and are pretty extensive. They are principally carried on at Berlin (which see, and PRUSSIA). Breweries, distilleries, glass-works, brick-kilns, tanneries, potash, charcoal and lime manufactories, are very numerous, and employ a great many hands. The internal trade of the prov. is very considerable, and is much facilitated by the rivers and navigable canals by which they are united. The roads, also, have latterly been very greatly improved. (*See* PRUSSIA.) "Whether," says an intelligent traveller, "it be owing to the extreme niggardliness of the soil, which is for the most part sandy and unproductive, the Brandenburgers are in general extremely abstemious; bread, butter, and potatoes being the principal articles of consumption. The latter with the lower classes; and the former I have seen all ranks partake of half a dozen times a day. If you visit a friend, it is more than probable the lunch will be *butter-brod* (bread and butter): if you go to an inn and order refreshment, without specifying anything particular, this will certainly be brought. Still, however popular, it divides its empire with potatoes, which a stranger taking notes might with every justice enter in his pocket-book as the national food. They are served up in an immense variety of forms." (*Germany and the Germans*, i., 97, Lond. 1838.)

BRANDENBURG, a town of Prussia, prov. same name, reg. Potsdam, cap. circ. W. Havelland on the Havel, 35 m. W.S.W. Berlin, and 38 m. N.E. Magdeburg; lat. 52° 27' N., long. 12° 32' E. Pop. 13,000. The river divides it into three parts; the old town on the right, and the new on the left bank; while on an island between them is built the "Cathedral Town," which, from standing on piles, is also called "Venice." Streets of the old town narrow and crooked; but those of the new town are comparatively broad and straight; both are walled, and connected by a bridge. On the island is the cathedral, a structure of the 14th century, the castle, and an equestrian academy. It has eight churches, five hospitals, a council-house with a public library, a gymnasium, a citizens' school (*Burgerschule*), a superior female school, with numerous elementary and charity schools; a work-house, a theatre, and three public squares, in one of which stands the Rolandsäule, a column hewn out of a single block of stone. The font and monuments in St. Catherine's church are worthy of notice, as are also the works of art in the cathedral. There are manufactures of woollens, fustians, linens, stockings, paper, &c.; with numerous breweries, distilleries, tanneries, and some boat-building; and it has a brisk trade both by land and water. It has been several times besieged—by Henry the Fowler, Albrecht the Bear, Gustavus Adolphus, &c. It was the birth-place of Julius Von Voss. (*Von Zedlitz, Der Preussische Staat*, 1836, i., 186, 187, &c.)

BRANDENBURG (NEW), a town of the grand duchy of Mecklenburg Strélitz, on a rivulet which falls into the lake Tollen, 17 m. N. by E. New Strelitz. Pop. 6000. It is walled and well built; has a castle, a grammar school, schools for the sons and daughters of townspeople, a work-house, and some woollen and cotton fabrics; but the business of distillation is the most important carried on in the town.

BRANDENBURG, p. v., capital of Meade co., Ky., 94 m. W. by S. Frankfort, 634 W. Situated on the S. bank of Ohio river. It contains a court-house and several stores and dwellings.

BRANDON, a par. and town of England, co. Suffolk, hund. Lackford; 73 m. N.N.E. London. Pop., 1821, 1770; 1831, 2065; houses, 405; area, 5570 acres. It is on the S. bank of the Little Ouse, or Brandon river, which forms the N. boundary of the county, and is here crossed by a neat stone bridge, about a mile below which is a ferry, where goods are deposited for conveyance by the river, to and from the Isle of Ely. Gun-flints are made in the town, and sent to various parts of the kingdom: they are procured about a mile W. of it, from beds traversing a chalk stratum, and alternating with others of pipe-clay: many labourers are employed in quarrying these flints. There is also some traffic carried on in corn, malt, coals, timber, &c. In the neighbourhood are some extensive rabbit warrens, which, in part, supply the London markets. Fairs are still held, Feb. 14, June 11, Nov. 11; but the market has been discontinued. There is an endowed free school. Brandon camp, a sq. earth-work in the vicinity, is supposed to be the *Branodunum* of the Romans. The Duke of Hamilton and Brandon derives his English title from this town.

BRANDON, p. t., Rutland co., Vt., 16 m. S. Middlebury, 43 m. S.W. Montpelier, 472 W. Watered by Otter creek. Mill river, a branch of it, affords good water-power. Bog iron ore, manganese, and marble, are found abundantly. First settled in 1775. It contains three churches, one Baptist, one Congregational, and one episcopal, six stores, four furnaces, one printing-office, one academy, 80 students, thirteen schools, 783 scholars. Pop. 2194.

BRANDON, p. v., capital of Rankin co., Miss., 13 m. E. Jackson, 1003 W. It contains a court-house and several stores and dwellings. A rail-road connects this place with Vicksburg, passing through Jackson.

BRANDON, t. Oakland co., Mich. Drained by the head waters of a branch of Flint river. Pop. 442.

BRANDON, t., Franklin co., N.Y., 10 m. S.W. Malone, 235 m. N. by W. Albany. Drained by Saranac, St. Regis, and Racket rivers. It contains two saw-mills, three schools, 44 scholars. Pop. 192.

BRANDT, t., Erie co., N. Y., 20 m. S.S.W. Buffalo, 280 m. W. Albany. Bounded W. by lake Erie and S. by Cattaraugus creek. It contains one store, six schools, 219 scholars. Pop. 1068.

BRANDY, t., Williams co., O. Pop. 251.

BRANDYWINE CREEK Pa. and Del., rises in Chester co., Pa., by two principal branches, which unite and flow south-easterly through Delaware; and at Wilmington it forms a junction with Christiana creek, and the united stream enters Delaware river thirty-five ms. below Philadelphia. In the course of four miles above Wilmington, it has a fall over 100 feet, and on it are many manufactories of wool, cotton, paper, powder, &c.; and through its whole course, it furnishes many excellent mill seats. The celebrated battle of Brandywine, between the Americans and British, Sept. 11th, 1777, by which the latter gained possession of Philadelphia, was fought near its bank, at Chad's Ford, in Birmingham t., Chester co., Pa., where vestiges of the battle are yet found.

BRANDYWINE, t., Hancock co., Ia. It has one grist-mill, one saw-mill. Pop. 693.

BRANDYWINE, t., Chester co., Pa., 30 m. N.W. Philadelphia, 63 m. S.E. Harrisburg. Watered by Brandywine and Beaver creeks. It contains six stores, one flouring-mill, two grist-mills, five saw-mills, one paper-mill, two tanneries, one distillery, six schools, 300 scholars. Pop. 1672.

BRANDYWINE, hundred, Newcastle co., Del. It contains nine stores, one woollen-factory, three cotton-factories, with 7212 spindles; five flouring-mills, four grist-mills, two saw-mills, seven schools, 415 scholars. Pop. 3367.

BRANDYWINE MILLS, p. v., Northfield t., Summit co., O., 141 m. N.E. Columbus, 241 W. It contains a saw-mill, carding-machine, woollen-factory, and several dwellings.

BRANFORD, p. t., New-Haven co., Ct., 43 m. S. by W. Hartford, 7 m. E. New-Haven, 307 W. Bounded S. by

Long Island sound. Settled in 1644. It contains three churches, one Congregational, one Episcopal, and one Baptist; seven stores, one grist-mill, three saw-mills, one paper-mill, one academy, 60 students, seven schools, 319 scholars. Pop. 1392.

BRANTOME, a town of France, dép. Dordogne, cap. cant., on the Drôme, near its confluence with the Colle, 12 m. N.W. Périgueux. Pop. 2500. It is agreeably situated, and is a neat, handsome town. The walls and ditches by which it was formerly surrounded have been demolished. It has some fabrics of woollen stuffs, hosiery, and cotton. Near the town is an abbey of the Benedictines, the foundation of which is ascribed by some to Charlemagne, and by others to Louis-le-Débonnaire. This abbey was held *in commendam* by the historian Brantome, who retired thither after the battle of Jarnac, and composed in this retreat a part of his works. (*Hugo*, art. *Dordogne*.)

BRASHUR, t., St. Lawrence co., N. Y., 30 m. N.E. Canton, 236 m. N.N.W. Albany, 520 W. Watered by St. Regis and Deer rivers, which afford extensive water-power. It contains three stores, one furnace, one grist-mill, six saw-mills, thirteen schools, 426 scholars. Pop. 2118. The post village is denominated *Brashur's Falls*, on Deer river.

BRATTLEBOROUGH, p. t., Windham co., Vt., 121 m. S. Montpelier, 79 m. E.N.E. Albany, 82 m. W. by N. Boston, 422 W. Bounded E. by Connecticut river, watered by West river. First settled, in 1724, at Fort Dummer in the S.E. part of the town, which was the first English settlement in Vt. A bridge across Connecticut river connects this place with Hinsdale, N. H. The town contains an *east* and a *west* village. The East village is situated on the Connecticut river, at the mouth of Whetstone brook, which passes through it, and affords water-power. It is one of the most considerable and flourishing villages in the state. It contains four churches, one Congregational, one Unitarian, one Methodist, and one Baptist, a bank, numerous stores, an extensive printing and publishing establishment, called "the Brattleboro' Typographic Company," with a capital of $150,000; another printing-office, and an asylum for the insane. The West village contains an academy and a number of dwellings. There are in the town twenty stores, one furnace, three tanneries, one paper-mill, three grist-mills, seven saw-mills, three printing-offices, two weekly newspapers, two academies, 245 students, sixteen schools, 838 scholars. Pop. 2624.

BRAUNSBERG, a town of Prussia, prov. E. Prussia, cap. circ. on the Passarge, about 3 m. above where it falls into the Frische Haff. Pop. 7600. The river is navigable as far as the town by vessels of small burden, and it has some shipping, and exports corn and timber. It is the residence of the bishop of Ermeland, the seat of a royal court of justice, and has several churches, a monastery, a normal school, and four hospitals. But it derives its principal claim to notice from its seminary, the *Lyceum Hosianum*, for the education of Catholic clergymen. It is so called from its having been founded and endowed by the learned Stanislaus Hosius, bishop of Ermeland. It has six professors, and had, in 1837, 27 students.

BRAXTON, county, Va., situated in the N.W. part of the state. Watered by Elk and Little Kanawha rivers. It contained, in 1840, 2890 neat cattle, 3097 sheep, 5614 swine; and produced 8960 bushels of wheat, 68,627 of Indian corn, 20,929 of oats, 5866 of potatoes, 4155 pounds of tobacco, 19,420 of sugar, 4000 bushels of domestic salt. It had two stores, twenty grist-mills, twenty saw-mills, two tanneries, five distilleries. Pop.: whites, 2509, slaves, 64; free coloured, 2; total, 2575.

BRAXTON, C. H., p. v., capital of Braxton co., Va., 321 m. W.N.W. Richmond, 299 W. Situated on the N. side of Elk river. It contains a court-house and a few dwellings.

BRAY, a township of England, co. Berks, hund. Bray. Pop. 1000? This place would be unworthy of notice in a work of this sort, were it not that it has attained a proverbial notoriety. The parson who held the living, a vicarage, in the reigns of Henry VIII., Edward VI., Mary, and Elizabeth, appears to have been gifted with a most accommodating conscience. He commenced a Papist, then became Protestant, next Papist again, and then Protestant again! On being taxed with inconsistency, he defended himself by saying that he had always adhered to his principle, which was "to live and die Vicar of Bray!" The well-known song represents this worthy vicar as living in the reign of Charles II. and his successors; but the above is Fuller's account of the matter (vol. i., 79, ed. 1811).

BRAY, a marit. town of Ireland, cos. Wicklow and Dublin, prov. Leinster, on the Bray or Dargle, 12 m. S.E. by S. Dublin. Pop. in 1821, 2029; in 1831, 3656: pop. in 1834 of the parishes of Bray and Old Connaught, in which the town is situate, 5176 of whom 1184 are of the Estab. church, 29 Prot. Diss., and 3963 Rom. Cath. The town, which takes its name from Bre, or Bree, a headland at the foot of which it stands, is divided into two portions by the river, which also separates the counties of Wicklow and Dublin. The part on the N., or Dublin side, is called Little Bray: the communication between the two divisions is kept up by an old bridge. It has a parish church, a large and elegant Rom. Cath. chapel, a Presbyterian meeting-house, and several schools, one of which, an infant school, is a spacious building: it has also a savings' bank, a loan fund, a hospital, and a dispensary. An old castle in Little Bray has been converted into a barrack. A constabulary and a coast-guard force are stationed here, and near the town is a martello tower. The town is neatly built, and is become a fashionable watering-place. It was formerly incorporated, and parliaments were held here, but its chartered privileges have fallen into desuetude. A manorial court is held monthly, and petty sessions on alternate Mondays. It manufactures small quantities of linen and coarse woollens; there is also a brewery and flour-mill. Markets are held on Tuesdays and Saturdays; fairs for freezes on Jan. 12, May 4, Aug. 5, and Nov. 12; and for cattle on March 1, May 1, July 1, Aug. 15, Sep. 20, and Dec. 14. Post-office revenue in 1830, £543; in 1836, £585. A mail coach, several stage coaches, omnibuses, and cars, pass daily through the town, or ply from it to neighbouring places, chiefly to Kingstown. The harbour is barred by a bed of shingle, which has to be cut through annually, in order to admit vessels of any size. The imports are coal, to the amount of 5000 tons, and freestone and limestone of 7,000. A considerable fishery of cod, haddock, and herring, was formerly carried on, which has been completely annihilated. The salmon fishery has also declined. Trout, caught in the Bray river, is abundant and highly esteemed.

BRAZIL,* an empire of S. America, second only in extent to the giant empires of China and Russia, stretches along about two thirds of the E. coast of that continent, while its superficial area occupies nearly half its whole extent. It lies between 4° 17′ N. and 33° S. lat.; its most easterly point is Cape St. Augustin, in 34° 58′ W. long. but the longitude of its W. frontier cannot be determined with accuracy, since its boundary-line on that side is in countries hitherto unexplored by Europeans: it probably verges upon 75°. The length, from N. to S., is between 2600 and 2700 m., and its breadth, from E. to W., between 2300 and 2400 m. Its extent of coast along the Atlantic ocean exceeds 4000 m.; its area has been estimated at from 2,300,000 to 2,700,000 sq. m. It is bounded E. and S. by the Atlantic ocean; N. by French, Dutch, and British Guiana, and the republic of Colombia, from which it is separated by a chain of mountains, under the various names of Serra de Tuhuny, Serra Pecaraimo, &c., and the Rio Oyapoco; E. by the Atlantic ocean; and W. by the states constituting the federal republic of La Plata, with Bolivia, Peru, and Ecuador or Quito. The country which was formerly included under the name of Brazil is proved by ancient maps to have extended only from the sea-coast to Rio San Pedro. The Portuguese, however, have never ceased adding fresh acquisitions to the country which they already possessed, and their possession has from time to time been confirmed to them by treaties with Spain.

The following statement of the area and population of the different provinces is borrowed from the *Weimar Almanac* for 1839.

Provinces.	Area in sq. m. (Eng.)	Pop. 1823.	Ch. Towns.
1 Para	620,000	143,073	Para.
2 Rio Negro	424,000	43,227	Barcellos.
3 Maranham	68,072	182,986	San Luis.
4 Piauhi	60,547	46,296	Deirna.
5 Ceara	70,193	272,713	Aracati.
6 Rio Grande del Norte	31,227	68,736	Natal.
7 Parahiba	19,769	246,232	Parahiba.
8 Pernambuco	29,935	602,205	Pernambuco.
9 Alagoas	19,292	256,956	Porto Calvo.
10 Sergipe	18,147	267,523	Sergipe.
11 Bahia	64,675	559,650	Bahia.†
12 Espirito Santo	37,906	73,996	Vittoria.
13 Rio Janiero	189,316	589,650	Rio Janeiro.
14 San Paulo	191,012	610,632	San Paulo.
15 Minas Geraes	253,573	928,233	Mariano.
16 Goyas	313,760	150,000	Villa Boa.
17 Matto Grosso	436,459	82,000	Villa Bella.
18 Fernando	1,060	600	
Total	2,738,943	5,130,418	

Nearly two thirds of Brazil consists of high land and mountains. Estimates have been given of the compara-

* It is commonly supposed that the wood yielding the red dye *Cæsalpinia Brasiliatto*, derived its common name of Brazil-wood from its being principally imported from, and produced in, Brazil. This, however, is not the fact. It has been shown that woods yielding a red dye were called Brazil-woods long previously to the discovery of America; and that the early voyagers gave the name of Brazil to the part of that continent to which it is still applied, from their having ascertained that it abounded in such woods. (*Bancroft's Philosophy of Colours*, ii., 316-321.)

† Both the area and pop. of this prov. are much underrated: the table, in fact, is but little to be depended upon.

tive quantity of the country under tillage and that still in a wild state, as well as of that occupied by rivers, swamps, &c., &c.; but from the very limited knowledge which Europeans possess of by far the larger portion of Brazil, it is plain such estimates can be good for nothing, unless it be to throw ridicule and discredit on all statistical computations. It is, however, abundantly certain that the extent of cultivated land bears but a very small proportion indeed to that of the whole country; perhaps not more than 1½ or 2 per cent.!

Perhaps no country is more favoured by nature, as regards the requisites for carrying on an extensive commerce, than Brazil. All its principal cities are on the coast: its harbours are among the finest in the world, and are connected with the interior by numerous large rivers, most of which are navigable for a considerable way inland.

The principal rivers are—1. The Amazon, generally considered the largest river in the world, supposed to be formed by the junction of the modern Marañon (Tunguragua) with the Ucayale, or ancient Marañon. It enters Brazil at San Francisco de Tabatinja, and flows, from W. to E., along the immense northern province of Para, discharging itself into the Atlantic in about 50° W. long. Its principal tributaries are—the Madeira, which takes its rise in Potosi, and flows a distance of 700 leagues; the Xingu, in the province of Matto Grosso, itself possessing several smaller tributary streams; the Rio Negro,* which rises in New Granada, and loses itself in the N. of Brazil, after a course of 700 leagues; the Tapajoz, which rises in Matto Grosso. In addition to these are upwards of sixty others of less importance. 2. The Rio Pardo, which traverses a portion of the province of San Paulo, rises in the district of San João del Rey, and empties itself in the Parana. 3. The Rio Doce, traversing the province of Espiritu Santu, and serving as a sort of means of uniting the interior of Minas Geraes with the coast. 4. The Para or Tocantins, formed by the junction of the Araguay and the Tocantins, properly so called; the former is the principal branch. N. of this junction, being the smaller section of its course, it is known by the name of the Para, and S. by that of the Araguay: it rises in the province of Goyas, which it traverses, together with part of Para, and empties itself into the Atlantic Ocean. At the mouth of the Para, the phenomenon of the *bore*, to which the Indians have given the name of *pororoca*, manifests itself in a very striking manner. Three days previously to the new or full moon, when the tides are highest, an immense wave, upwards of 15 ft. in perpendicular height, rushes from shore to shore with a tremendous noise, and is succeeded immediately by a second and a third, and sometimes by a fourth. The tide, instead of occupying six hours to flow, attains its greatest height in a few minutes. The roaring of the pororoca is heard at the distance of nearly two leagues. (*Dénis, Brésil*, p. 293, Paris, 1837.) 5. The Rio San Francisco, one of the largest of the Brazilian rivers, rises in the vicinity of the Parana, in the prov. of Minas Geraes. It is the only river of importance between Bahia and Pernambuco. Its course is interrupted by the cascade of Paolo Affonso. 6. The Rio Grande-do-Sul, in the province of San Pedro. 7. The Parana, or La Plata, which separates Brazil from Paraguay and the states of La Plata, and forms also the boundary-line between the province of San Paulo, Matto Grosso, and Goyaz. The Rio Pardo, the Itahy, and the Aguapehy, empty themselves into it.

In addition to the above, we may succinctly enumerate—1, the Parnahyba, in the prov. of Maranhao; 2, the Oyapoco, dividing French Guiana from that portion belonging to Brazil; 3, the Paraguacu, emptying itself into the bay of Bahia; 4, Rio Itapicuru, known also by the name of Jacobiana and Rio do Peixe, in the province of Maranham; 5, the Rio Grande do Norte; 6, the Jiquinhona, so celebrated for its diamonds: it empties itself into the ocean after having watered the province of Minas Geraes; 7, the Jaquaribe, &c., &c. Many of the rivers of Brazil, especially the Marañon, like the Nile, overflow their banks, and subject the country, until the middle of January, to extensive inundations, attended with an injurious effect upon the health. The navigation of many of the Brazilian rivers, at a distance from the coast, is interrupted by dangerous falls and rapids, and the mouths of many of the smaller rivers are subject to winds and currents, which render them extremely unsafe.

Lakes.—The lakes of Brazil are few and inconsiderable in extent: the principal are those of Los Patos and Mirim, the former of which is merely a widening of the Rio Grande de San Pedro. There are also those of Juparanam, Jiguiba, Manguaba, Parapitinga, Jaguarassu, &c.

The form of Brazil may be said almost to resemble that of a heart, of which the greatest diameter, from E. to W., in a straight line from Cape Roque to Peru, approaches an extent of 35 degrees. The E. side of Brazil is traversed, from N. to S., at more or less distance from the coast, by a mountainous range, of which the average height is about 3000 ft.: it is known by the name of Serra do Mar, and its greatest height is 4000 ft. This range serves to divide the coast-land from the high land, consisting of Campos,* the average height of which is about 2500 ft. It gradually becomes lower in the direction of Paraguay, until it be lost in the low and mostly marshy plains inhabited by the Indian tribe of Guaycurus. Many geographers have fallen into the error of supposing that the prov. of Matto Grosso contains the highest mountains, and that they form a junction with the Cordilleras of Peru and Chili. But Eschwege, who resided in the country for ten years, during which period he visited the greater part of it, confutes the supposition, in his *Brasilien die neue Welt* (vol. i., p. 165; Braunsch., 1830). He observes that broad and extensive plains lie between, and that the sources of the Madeira, which flows in a northerly direction towards the Amazon, and of the Paraguay, taking a southerly course towards the La Plata, are both within a few miles of each other, and that the elevation of their sources is inconsiderable. The highest range of the Brazilian mountains is that which traverses the centre of the country, and its greatest altitude is about 6000 ft. The mountains of Brazil may be subdivided into three different ranges: 1. The coast range, or Serra do Mar above mentioned. This is by far the most picturesque of the Brazilian chains, and in some parts approaches within 16 or 18 m. of the sea, while in others it sweeps inwards to a distance of from 120 to 140 m. The soil near the coast displays evidences of the richest cultivation, and teems with abundance of the choicest productions. At a distance, and in the vicinity of the mountains, are found ancient forests (matto virgem), whose giant trees, and countless plants and shrubs, of luxuriant growth, so thickly interwoven as almost to defy the attempts of man to force a passage, sufficiently attest the excellence of the soil on which they grow. On crossing the Serra do Mar, we meet with a barren tableland, called Campos Geraes, with few traces of cultivation. In the valleys, gold and diamonds are frequently discovered. The Serra do Mar chain commences in the Campos de Vacaria, sinks abruptly in the direction of the Rio Doce, and loses itself completely at Bahia. The celebrated Monte Pascoal, which was seen by the early navigators, forms a part of the Serra do Mar. It is known by various names in the district through which it runs. On the E. side it is styled Serra dos Aymores, while in the neighbourhood of Rio it is styled Cerra dos Orgoës. It is worthy of remark, that the plants growing in the Campos are altogether distinct from those on the other side the Serra do Mar; and the zoologist may discover quite a new race of animals as well as birds, in this region.

2. The central chain, called in some parts Serra do Mantequeira, and in others Serra do Espinhaco, is more extensive than the former, and comprises the highest points in Brazil; viz., the Itacoluml, near Villarica; the Serra do Carassa, near Caltas Altas; and the Itambé, near Villa do Principe. This range traverses the prov. of Minas Geraes, running in its northerly course, through Bahia and Pernambuco, and in its southerly course through San Paulo and Rio Grande. It is not only remarkable as comprising the highest points in Brazil, but is highly interesting in a geognostical, botanical, and zoological point of view. In different parts, it bears the various local names of Serra do Lopo, Serra Sallado, Serra de San Geraldo, Serra dos Esmeraldas, &c., &c.

3. The Serra dos Vertentes, or the Water-separating mountain, so called because it divides the E. tributaries of the rivers Amazon and La Plata from the river San Francisco. This chain is sometimes called the Brazilian Pyrenees. Its loftiest and most remarkable points are those of Serra de Canastra and Marçella, where, on one side, the Rio San Francisco, and on the other, the most important tributaries of the Rio Grande, take their rise; and the Pyrineos, in the province of Goyaz, where the tributaries of the Paraña are found.

Soil.—The soil of Brazil is of various descriptions. In the neighbourhood of Rio Janeiro, it consists in a great measure of plains, which bear every trace of former inundations: those which, during high tides, are covered by the sea have degenerated into swamps, upon which we find the Rhizophora of Linnæus; those that lie higher consist of quicksands, and seem almost incapable of cultivation. The marshy plains at a distance from the sea might perhaps, by dint of draining, be made available for the purposes of growing rice and the sugar-cane. The soil upon the heights which surround these plains consists of a mixture of clay

* Eschwege enumerates upwards of 40 tributaries to this single river. (*Brasilien die neue Welt*, ii., 136, 137.)

* The Brazilians give this name to all tracts of country, whether plain or hilly, that are destitute of wood. They distinguish such tracts as are diversified by occasional wood by the name of *campos serrados*.

and coarse quartz sand; it retains but little moisture, and in times of drought becomes extremely hard. A few miles from the town, traces of considerable improvement are observed. A pretty deep layer of rich quartz sand rests upon a bottom of granite or decayed feldspar. The soil is much injured, however, by the universal growth of the Mandioca.* In the mountainous districts in the interior of the provinces, which are still covered with their native woods, the excellence of the soil is amply proved by the size and abundance of the trees. Neglected for centuries, a layer of the richest mould has been formed of their fallen leaves and decayed trunks, which resting again upon a rich and deep bed of clay, is of a red or yellow colour, as it contains more or less oxide of iron. Between Rio Janeiro and Villarica, the soil is everywhere of hard and excellent white clay; the mountains are of granite, in which the amphibole predominates.

Climate, &c.—The great extent of Brazil will, of course, account for a considerable variation of climate. Along the coast, the ordinary temperature is from 19° to 20° Reaumur, with some modifications, according to the localities. Thus, while the thermometer seldom rises above 20½° at Bahia, it sometimes stands as high as 26° and 27° at Rio Janeiro. Winter is severe in the S. provinces, and it even freezes at Rio Grande de San Pedro and San Catharina. The climate, in the vicinity of San Paulo, is usually accounted the most agreeable, and the temperature permits the growth of European fruits. The west wind, in the interior of Brazil, is unwholesome, as it passes over vast marshy forests. The sea-coast, from Para to Olinda, appears to possess a similar climate to Guiana. Notwithstanding the position of Brazil between the equator and the tropics, the air, owing to the height of the greater portion of the country, is in general temperate, rather than hot. Pernambuco and a few of the other provinces suffer occasionally from drought, to which, however, the coast lands are seldom subject.

The seasons may be properly reduced to two, the rainy and the dry, although some divide them into four; viz., the spring, commencing in Sept.; the summer, in Dec.; the autumn, in March; and the winter, in June. The rainy season usually sets in about Oct. or Nov., and is preceded in some parts by fogs, thick groups of clouds, and sudden gusts of wind, as well as by occasional showers, and the temperature is also extremely variable. This season generally lasts till March. The period of its commencement and termination varies according to latitude and natural position.

Prince Maximilian observes (*Reise nach Brasilien*, ii., 194), that in the region of Campos Geraes, Feb., March, April, and May, are usually the rainy months; June, July, Aug., and Sept., are called the cold season; and that during Oct., Nov., Dec., and Jan., the greatest heat prevails.

Mr. Von Langsdorff, formerly Russian consul at Rio, makes the following remark upon the seasons in Brazil, in a letter to a friend, given in *Eschwege's Journal* (ii., 166): "Winter, in this country, resembles summer in the N. of Europe; summer appears one continuous spring; while spring and autumn are unconsciously lost in winter and summer." It may therefore be more truly said of Brazil than, perhaps, of any other county—

> Stern winter smiles on this auspicious clime;
> The fields are florid in eternal prime;
> From the bleak pole no winds inclement blow,
> Mould the round hail, or flake the fleecy snow;
> But from the breezy deep the groves inhale
> The fragrant murmurs of the eastern gale!

Products.—The most celebrated, though not the most important of the natural productions of Brazil, are diamonds. The provinces known to possess them are Minas Geraes, Minas Novas, Goyaz, and Matto Grosso; but it is supposed that several of the other provinces are furnished with these highly prized gems. The diamonds found in Minas Geraes are generally the largest, but they are not of the purest water. The most celebrated diamond mines in Brazil are those of Serrado Frio,† which are also known by the name of the Arrayal Diamantino, or diamond district, properly so called. This district is surrounded by almost inaccessible rocks, and was formerly guarded with so much vigilance that not even the governor of the province had the liberty of entering it without the special permission of the director of the mines.

The mines are wrought by accumulating the cascalhao, a kind of ferruginous earth (in which the diamonds are found mixed with flints), and washing it. The former operation is generally performed during the hot season, at a time when the beds of the rivers and torrents are dry, and the diamond-sand can be easily extracted. When the wet season arrives, the operation of washing commences. It is performed in the open air, and frequently under sheds, where the action of the sun is least likely to injure the health of the negroes. At the bottom of the shed glides a small stream, which occupies one of its sides. Seats, raised, and without backs, are arranged along the shed, in such a manner that the subaltern officers (feitores) are enabled to watch the negroes at work. One feitor superintends eight negroes. Each negro works in a compartment of the shed, separated or walled off, as it were, from the others. The cascalhao to be examined is placed in troughs close to the stream, and the negroes are introduced entirely naked, excepting in time of extreme cold, when they are allowed a kind of waistcoat, but without either pockets or lining. They are furnished with an alavanca, a kind of hand-spike, by means of which they separate the earth from the flint, and then, taking the largest stones in their hands, they proceed to search for the diamonds. Notwithstanding the precaution of making the negroes work naked, robberies of diamonds are of frequent occurrence. When a negro discovers a diamond, having first shown it to the feitor, he deposits it in a large wooden vessel suspended in the middle of the shed. If any negro is fortunate enough to discover a diamond weighing 17 carats, he is purchased by the government, and receives his liberty. The discovery of a stone of less weight also confers liberty upon the finder, but with some restrictions. Various premiums are distributed, according to the value of the stone, even to a pinch of tobacco. (*Dénis Brésil*, p. 345.) Notwithstanding every imaginable precaution, negroes find means to purloin diamonds, which they dispose of to smugglers (contrabandistas) at a very low price. The latter dispose of them chiefly at Tijucu and Villo do Principe. They obtain a higher price at the latter, because their risks are greater in transporting them thither. The negroes frequently contrive to impose upon the contrabandistas, as they have the means, by some simple process, of giving crystals the appearance of rough diamonds, so as effectually to deceive them. Formerly there were as many as 30,000 negroes employed in the mines, but, according to Freiyreiss, the number employed at the time of his visit to Brazil (about 1833) did not exceed 20,000.

The diamonds differ greatly in size. There are some so small that 16 or 20 would scarcely make a carat. It is rarely that, in the course of a year, more than two or three are found weighing from 17 to 20 carats; and two years may pass without discovering one of the weight of 30 carats. The administration of the diamond mines is regulated by a law of the 2d Aug., 1771, entitled, "Regimento para a Real Extracçaõ dos Diamantes do Arrayyal, do Tijuco, do Serro do Frio," consisting of 54 articles. Down to the date of this law, the right of working the diamond mines was farmed out; but from that period, the government have taken it into their own hands, and they are all under the superintendence of a board, *Junta Real para a Administraçao dos Diamantes.*

Eschwege (*Brasilien die neue Welt*, i., 120) gives the following table of the weight of the diamonds extracted from the first discovery. As little is known respecting the weight of those discovered during the first ten years (from 1730 to 1740), he commences with the latter year:

	Carats.	Average per year.
From 1740 to 1772 . . .	1,666,569	52,080
—— 1772 — 1806 . . .	910,511½	26,826
In the years 1811, 14, 15, and 16 .	74,147	18,537
During the 11 years of which there are no statistical accounts to which he could gain access (i. e., from 1806 to 1822, deducting the above), and during which the produce remarkably decreased, it cannot, at an average, be estimated at more than	232,000	12,000

Eschwege estimates the total value of these, at the rate of 8000 reis the carat, to be 23,869,534,000 reis, = 59,673,835 cruzadoes, = 39,782,556 Prussian dollars, or £3,475,537; so that, supposing this estimate to be tolerably correct, it follows that the total value of the diamond-washings, during a period of above 80 years, was hardly equal to 18 months' export of sugar or coffee. The crown receives one fifth of the total value.

After Mexico and Peru, Brazil has furnished Europe with the greatest quantity of the precious metals. Gold is supposed to exist in great abundance throughout the district which extends from the neighbourhood of San Paulo and Villarica as far as the confines of the river Ytênes. The greater portion, however, of the supposed mines remain at present untouched. The most celebrated mine is that of Congo Soco, situated in a beautiful valley, at the distance of about 40 leagues from Villarica. The first person who worked this mine was a Portuguese, named Bethencourt,

* Although the soil of Brazil is generally well adapted for the cultivation of this plant, its tendency is, nevertheless, to exhaust it completely in the course of a few years. A plantation never yields more than three crops, after which it is abandoned.

† These mines were not actually discovered until the government of Dom. Lorenzo d'Almeida, although the diamonds were known to have been in the possession of the negroes, who met with them accidentally while employed in gold-washing, and other persons ignorant of their value, long before that period. They were first brought from Brazil to Lisbon in 1728, by Bernardo da Silva Lobo. He showed them to the Dutch resident consul, who recognised them as diamonds, and informed him of his important discover

who commenced, about 1740, to labour with his own hands. In a short time he amassed a splendid fortune. In consequence, however, of the want of care and activity on the part of his descendants, to whom he bequeathed his mines, they ceased to be productive, and were therefore disposed of, about 25 years since, to a capitaõ mor, named José Alvez, for the sum of 9000 cruzadoes. The latter disposed of them, in 1825, after a good deal of bargaining, to a company of Englishmen, known as the "Anglo-Brazilian Mining Company," for £70,000 sterling, his first demand being £90,000 = 1,000,000 cruzadoes. (*Denis, Brésil*, p. 338.) The operations of this company extend also to Inficionado, Catas Altas, and Antonio Pereira. In the first six months of the year 1829, the mines of Congo Soco are stated to have yielded 2037 lbs. 4 oz. 15 gr.; and there seemed to be little doubt, that in this district, the working of the mines would be attended with great advantage, although in other parts the company had not been so successful. Malte-Brun estimates the value of the ingots exported from Rio Janeiro to England, from 1st Jan. to 1st July, 1829, by the company, at 4,166,000 francs.

About Villarica the gold is found in the form of powder and fine dust, in crystals, and sometimes, though rarely, in whole lumps. Spix and Martius (*Eng. Trans.*, ii., 182) mention an instance of a massy piece weighing 16 lbs. having been found. They state that it is related to have been discovered in heaps, under the roots of plants pulled out of the ground, whither it had been accidentally washed by the rains.

The following account of the administration of the gold mines; the manner of procuring the gold; the dress and mode of working of the mines, &c., has been compiled from Spix and Martius, as it was thought advisable to preserve some account of the practices in use prior to the establishment of the Anglo-Brazilian Mining Company.

It is washed out of streams and rivers from the clayey surface of the soil, or out of iron-stone flötz, or quartz veins. The dress of the gold-washers (faiscadores) is a leather jacket; they use a round bowl, cut out of the wood of the fig-tree, from a foot and half to two feet in diameter and a foot deep (gamella), and have also a leather bag fixed before them. They generally select those places where the river is not rapid, where it makes a bend and has deep holes. They commence by removing the large stones and upper layers of sand with the feet, or the gamella, and then take up a bowlful from the deeper and older gravel of the river. They continue to shake, wash, and strike off the stones and sand at the top, till the heavy gold dust appears pure at the bottom of the vessel, on which a little water is thrown with the hand, and the gold at length put into the leathern bag. A man may earn in this way several florins per day.

The gold formations differ much in various parts of the country. The produce of the gold mines was most considerable in the first half of the last century. Towards its close, from 70 to 80 arrobas were annually smelted in Villarica; while, previously to the arrival of the English company, the quantity had dwindled down to 40.

The royal fifth, which is separated from the gold immediately on its arrival at the smelting-house, amounted, in 1753, from the productions of Minas, to 118 arrobas; and down to the year 1814, the total amount was 6933 arrobas, = 85,000,000 cruzadoes. The gold, however, had decreased so much, that in 1815 the royal fifth did not amount to more than 20 arrobas. The total value, therefore, down to the year 1814, would be 34,665 arrobas. Stein (iii., 780) computes the amount of what had been smuggled from time to time at 10,000 arrobas. All the gold in the district of Villarica is brought into the palace of the governor, where it is smelted. For this purpose 18 persons are employed, under the superintendence of an escrivaõ contador, who receives a salary of 3000 cruzadoes. When the bars are smelted, and their weight and fineness are determined, they are returned to their owners, but cannot pass instead of coin without the Brazilian and Portuguese arms, the number of the list, the mark of the smelting-house, the date of the year, and the degree of fineness, being stamped upon them. A printed ticket is also given with each bar, which, in addition to all the above particulars, states the value in reis, the weight which the proprietor gave in gold dust, and how much was deducted for the king. It is only natural to suppose, that a soil abounding in mines of gold and diamonds, must have excited the cupidity of adventurers. Several years ago, bands of contraband miners, usually of desperate character, and forced to shun society, roved about the country, in search of gold and diamonds. They frequently discovered diamond mines, and river-courses abounding with gold, which they worked until they had exhausted them, unless previously dispossessed by the emissaries of government. The crowing of a cock is said to have been the means of putting one mine into the possession of the latter, in the district now called, from that circumstance, Canta Gallo.

The eagerness of all classes to engage in mining pursuits, formed, for a lengthened period, a powerful obstacle to the improvement of the country. But happily this rage is now greatly abated; and the energies of the population being directed to the safer and infinitely more productive occupations connected with the culture of the soil, mining has become an object of very inferior importance; and the value of the gold and diamonds that are now produced is quite inconsiderable, compared with that of various other articles. (See *post*.)

Iron abounds in the mountain-chain of Morro, near Villarica, and in the district lying between Inficionada and Conceicao for a distance of 150 m. In the prov. of Minas Geraes, near the village of Ypanema, in the mountain of Araasojava, is a mine of magnetic iron-stone, know to contain from 80 to 90 per cent. pure iron. (*Stein*, p. 780.) The first discovery of iron in Brazil took place near Villa Sorocayba, in the province of San Paulo. It was not properly worked till 1810, when the Conde de Linhares brought over a company of Swedish workmen. In the prov. of San Paulo are also the rich and extensive mines of Garasoava, Bomfin, and Sorocayba, just mentioned.

The working of the iron mines was, for unknown, but certainly bad reasons, long prohibited by government; but that prohibition no longer exists, having been repealed soon after the arrival of the court in Brazil. Malte-Brun has omitted to mention the latter fact; and the reader might infer from his account, that the prohibition had not been removed. As evincing the importance attached by the Brazilians to the opening of the mines, a gigantic pyramid has been erected upon the summit of the Garasoava, in commemoration of the event. In the smelting and other operations, the Swedish method is practised.

Among the other mineral productions of Brazil, may be mentioned platina, found in the prov. of Minas Geraes; and copper, found near St. Domingo, in the same prov. Precious stones abound in Brazil, especially topazes, of which there are a great many varieties, found principally in the district of Capaõ. In some parts of Minas Novas, white and blue topazes are found, though the usual colour be yellow.

Vegetable Products.—Among these are sugar, coffee, cotton, cocoa, rice, tobacco, maize, wheat, mandioc, beans, cassava-root, bananas, ipecacuanha, ginger, yams, oranges, figs, &c., &c. Of these, the most important are sugar and coffee, which are now, in fact, the staple products of the empire, and the culture of which has increased with almost unexampled rapidity. Sugar is principally raised in the prov. of Bahia, the soil of which is admirably suited for its growth; but it is also extensively produced in some of the other provinces. The value of the sugar exported from the different ports of the empire is believed to be at present (1839) little short of £2,000,000. The coffee of Brazil was formerly not liked in Europe, owing to defects in its treatment. The merit of having introduced a better system is due to a Dr. Lecesne, a planter from St. Domingo, who, having established himself in the vicinity of Rio, instructed the cultivators in the most approved methods of treating the plant. The effects of this liberal conduct have been most striking. Coffee is still principally produced in the vicinity of Rio; and so rapidly has its cultivation been extended, that while its produce in 1818 only amounted to 74,215 bags, it amounted in 1836 to 704,385 bags. Estimating the average crop at 700,000 bags, worth at the port of shipment, £3 10s. a bag, the total value of the coffee exported would be £2,450,000! And notwithstanding its extraordinary extension, such are the boundless capacities of the country that the culture of both sugar and coffee may be said still to be in its infancy, and to admit of an indefinite increase.

Cotton ranks, next to coffee and sugar, as one of the principal products of Brazil. It is mostly grown in the province of Pernambuco, and, in respect of quality, is inferior only to sea-island cotton. Its cultivation has not, however, been increasing for several years past. The exports may amount, at an average, to about 170,000 bags of 160 lbs. each, worth about £5 per bag, making in all the sum of £850,000. It is grown chiefly in the province of Bahia, in the low lands round the bay; but partly also in the province of Maranham. Tobacco is principally grown in the islands in the bay of Rio Janeiro, in that of Angra dos Reys, &c., on the lowest coast-land; it is, however, inferior in quality to that of the U. States, and the cultivation has rather decreased. Rice is largely cultivated in some places, and is exported; but the principal dependence of the population is on the mandioca, regarded by the Indians as a bequest from their prophet Suné, and which, on that account, has sometimes been supposed not to be indigenous. The culture of the tea-plant has been tried in Brazil, and the soil and climate have been found suitable to its growth; but its culture has not made, and could not rationally be expected to make, any progress, inasmuch as it can only be successfully carried on where labour is abundant and cheap; whereas it is here both scarce and dear.

The forests of Brazil, which are of vast extent and luxu-

variance, furnish almost every variety of useful and ornamental wood; their products being adapted alike to ship-building, carpenters' work, cabinet work, dyeing, &c. The cocoa-tree is plentiful in the sandy soils along the coast. It is thicker and taller than in the East Indies: cocoa is in general use among all ranks, and forms one of the chief articles of the internal trade. The carrassato or castor-tree, is an indigenous production, and is much cultivated for the sake of the oil extracted from its seed, in general use for lamps and other purposes. The jacarandu, or rose-wood, is peculiarly valuable for cabinet work. One of the most valuable woods the *Cæsalpinia Braziletta*, or Brazil wood (called *ibiripitanga* by the natives), producing a beautiful red dye, has been already referred to. It is found in the greatest abundance, and of the best quality, in the province of Pernambuco; but being a government monopoly, it has been cut down in so improvident a manner, that it is now seldom seen within several leagues of the coast. There are also cedars, logwood, mahogany, &c. The forests of Brazil yield large quantities of caoutchouc, now become an article of much importance, with nuts, &c.

Animals.—The Brazilian forests are full of rapacious animals; among which are the tiger-cat, the hyæna, the sarata, an animal about the size of a fox but far more ferocious; the jaguar, or tiger of S. America, the sloth, and the porcupine. The planters are much annoyed by ounces; wild hogs are common, and the singular animal called the anta, or tapir: the latter resembles the hog in shape, but is much larger; it is, in fact, the largest of the native quadrupeds, is timid and harmless, feeds like a horse, is amphibious, and capable of remaining for a long time at the bottom of lakes without coming up to respire. When killed, its flesh is generally eaten, and is said to differ but little from that of the ox.

The useful animals, as the horse, ox, and sheep, are all descended from the stocks brought from Europe by the early settlers. Their increase, especially that of cattle and horses, has been astonishingly great. Vast herds of wild cattle are met with in all the open parts of the country, particularly in the *llanos*, or plains of the S. provinces. Some idea of the numbers of these cattle may be formed from the fact stated by Mr. Luccock, that a single individual, Jose Antonio dos Anjos, slaughtered, in a single season, 54,000 head of cattle! Hides, tallow, jerked beef, horns, and bones, have long formed, and still continue to form, leading articles of export from Brazil. Above 300,000 hides have frequently been exported from Rio only in one season; and their total export from all the ports of the empire may be estimated at from 650,000 to 800,000 a year! It is only in particular situations that any use is made of the beef, which mostly becomes the prey of vultures, wild dogs, and other ravenous animals. Sheep being less able to defend themselves from attack, and being probably, too, not so well suited to the country, have not increased so rapidly as cattle and horses. Horses are of middle size, strong, active, and fleet. From 40,000 to 50,000 are said to be annually sent to the North. (*Modern Traveller*, xxix., 392.)

The ema, or American ostrich, is found in the Brazilian plains; and the forests swarm with innumerable varieties of birds, monkeys, &c. In the marshy countries the boa attains to an enormous size, and they are also infested with the coral-snake, and other venomous reptiles.

Manufactures.—These, unless we call the preparation of sugar a manufacture, can hardly be said to exist in Brazil, and are restricted to the production of the coarsest species of cotton cloths, the tanning of leather, and a few of those that are simplest and most necessary; but a great number of trades are necessarily carried on. "The European stranger in Rio," says Dr. Von Spix, "is astonished at the number of gold and silversmiths and jewellers, who, like the other tradesmen, live together in one street, which calls to mind the magnificent *ruas de Ouro* and *de Prata* of Lisbon. The workmanship of these artisans is, indeed, inferior to that of the European, but is not destitute of taste and solidity. Many trades which are very necessary in Europe are, at present, almost superfluous in the interior of this country, on account of the circumscribed wants of the inhabitants. In the capital, however, and the other towns on the coast, joiners, whitesmiths, and other artisans, are numerous; but tanners, soapboilers, and workers in steel, are scarce. There is a great demand for mechanics to build sugar and other mills, to construct machines for working the gold mines, &c.; and very high wages are paid them. Hitherto no glass, china, cloth, or hat manufactures, have been established in the capital; and their erection would not be advisable in a country which can obtain the productions of European industry on the lowest terms, in exchange for the produce of its rich soil." (*Travels*, i., 198.)

Commerce.—The trade of Brazil is very extensive: her existing commercial system is one of great freedom and liberality, and is well calculated to accelerate the development of her resources. The duties on imports and exports are both moderate, and are imposed for the sake of revenue, and not for prohibition: her imports comprise most sorts of manufactured goods suitable for her population and climate, particularly cottons, linens, woollens, and hardware, from England; flour, coarse cottons, beef, pork, &c., from the U. States; wine, silks, salt, brandy, olive oil, &c., from France and Portugal; linens, lace, pitch, &c., from Hamburgh, &c. Cottons, which are by far the principal article of import, are mostly all brought from England; and the importance of the Brazilian market may be learned from the fact that, in 1837, when the trade of this country was unusually depressed, the declared value of the various descriptions of cotton goods shipped for Brazil amounted to £1,014,485. During the same year, our exports of all sorts to Brazil amounted to £1,824,082; but in ordinary years they now generally amount to about £2,500,000. The total amount of the exports from the U. States to Brazil, during 1837, was $1,743,909; of which $1,301,217 were domestic, and 441,992 foreign, produce. Perhaps we may estimate the total value of the imports of ordinary merchandise at £4,000,000 or £4,500,000 a year.

But the largest and most valuable of all the articles imported into Brazil does not appear in the list of imports. According to a convention entered into by this country with the Brazilian government, the importation of slaves into Brazil should have entirely ceased in 1830. Far, however, from this being the case, the belief is, and it appears to be perfectly well founded, that their importation is carried on to as great an extent at present (1839) as at any former period. There is, in fact, no reason to think that it has sustained any material interruption from the convention alluded to, and the measures we have taken in relation to the trade. It is difficult, on such a subject, to get at anything like accurate information; but Mr. Fowell Buxton, who has carefully inquired into the facts, is of opinion that the importation of slaves into Brazil, since 1830, cannot be estimated at less than 78,000 annually! (*African Slave Trade*, 1839, p. 12.) And, immense as this amount may appear, there seem to be pretty strong grounds for thinking that it is but little, if anything, above the mark. It is affirmed, by those who have had good means of coming at the truth, that recently upwards of 50,000 slaves have been imported in a single season into Rio only!

Whatever may be the ultimate effect of this prodigious importation of Africans, there appears little hope of its speedy reduction. The boundless extent of fertile and unoccupied land in Brazil admirably suited for the growth of sugar, coffee, cotton, and other colonial staples; the growing demand for them, and the thinness of the existing population, which prevents the planters from extending their concerns so rapidly as their interest requires, constitute irresistible temptations to the importation of slaves; while the limited extent of the voyage, and the facilities which the all but interminable coasts and numerous bays of Brazil afford for their secure landing, enable them to be introduced with as ease and expedition unknown anywhere else. The making the trade piracy, and the capital punishment of those engaged in it, might, perhaps, do something to check it; but we doubt whether anything short of this will be found to be effectual.

The articles of export from Brazil have been already enumerated in our account of the productions of the country. The principal are coffee, sugar, and cotton; and then follow hides, and other animal products, gold and diamonds, cabinet and dye-woods, drugs, gums, nuts, &c. The export trade of Brazil is principally carried on with Hamburgh and the other Hanse towns, and the United States. This would not, however, be the case, were it not that Brazil sugar and coffee are virtually excluded from our markets. Were the duties on these articles reduced, so as to admit of their being brought into home consumption, our trade with Brazil would be very much increased. At present we obtain payment for the principal part of our exports to Brazil, at second hand, by drafts on Hamburgh and New-York.

For some account of the money, weights, and measures of Brazil, *see* PORTUGAL.

On the next page is a statement, derived from the best authority, of the average amount of the exports of Brazil, specifying the amounts shipped from each province, and the values at the port of shipment.

Population.—The population of Brazil, in 1830, is stated by Cannabich, upon the authority of documents existing in Brazil, to amount to 5,735,502. Malte-Brun estimates it for the same year, at 5,340,000. Balbi computes the total at 5,300,000, subdivided as follows:

Portuguese, or Filhos do Reino, Creoles, &c.	900,000
Mestizoes (free) and mulattoes	600,000
(slaves)	250,000
Free negroes	180,000
Negro slaves	2,936,500
Converted Indians	300,000
Independent Indians, European settlers, &c.	150,000

BRAZIL.

A Statement of the Average Amount of the Exports of Brazil, specifying the Amounts shipped from each Province, and the Values of the Shipment.

		£ s. d.	£	£	£
Middle Provinces.					
Rio.—Coffee	bags, 550,000	at 3 10 0 per bag			155,000
Hides	No. 300,000	— 0 13 0 per skin			1,500,000
Sugar	cases, 22,000	— 11 16 0 per case			200,000
Cotton, drugs, dyes, gold, and diamonds					500,000
Northern Provinces.					2,850,000
Bahia.—Coffee	bags, 10,000	— 3 10 0 per bag	35,000		
Cotton	— 47,000	— 4 0 10 —	190,000		
Sugar	cases, 58,000	— 10 0 0 per case	580,000		
Tobacco	packages, 15,000	— 3 5 0 per pck.	50,000		
Drugs, hides, leather, rice, rum, &c.			20,000		
				875,000	
Ceara.—Cotton	bags, 14,600	— 4 12 0 per bag	65,000		
Hides			5,000		
				70,000	
Macayo.—Cotton	bags, 10,000	— 4 10 0 per bag	45,000		
Sugar	cases, 3,000	— 10 0 0 per case	30,000		
				75,000	
Maranham.—Cotton	bags, 75,000	— 4 10 8 per bag	340,000		
Rice			60,000		
				400,000	
Para.—Cocoa	bags, 60,000	— 0 16 8 per bag	50,000		
India rubber	tons, 300	— 66 13 4 per ton	20,000		
Isinglass, rice, drugs, and cotton			180,000		
				250,000	
Pernambuco.—Cotton	bags, 60,000	— 5 0 0 per bag	300,000		
Hides and dye-woods			100,000		
Sugar	cases, 20,000	— 10 0 0 per case	200,000		
				600,000	
Paraiba.—Cotton	bags, 20,000	— 5 0 0 per bag	100,000		
Sugar	cases, 5,000	— 10 0 0 per case	50,000		
				150,000	
Southern Provinces.					2,450,000
Rio Grande of the South.—Hides and tallow (chiefly coastwise to other ports, but), foreign export, about			100,000		
Santos.—Sugar, rice, and coffee (much direct to Rio, but), foreign export			100,000		
					200,000
					5,500,000

But we are satisfied that the highest of these estimates is very decidedly under the mark, and that the population of Brazil may at present (1839) be safely estimated at from 6,500,000, to 7,000,000. Exclusive of the immense importations of negroes from Africa, amounting, as previously seen, to about 80,000 a year for several years past, the white immigrants have, in some late years, amounted to from 8000 to 9000. But, supposing the entire immigration of whites and blacks to have averaged 80,000 a year since 1829, that would make, in the interval, an addition to the population of about 800,000; for, owing to the indulgent way in which slaves are treated in Brazil, the presumption seems to be that their natural increase, during the period in question, will have, at least, equalled the deaths. Even if we were not aware of this extraordinary immigration, the rapid increase of commerce and wealth would leave no doubt of there being a nearly corresponding increase of population.

In Brazil, unlike the Spanish and English colonies, there is hardly any political division of castes, and very few of those galling and degrading distinctions which have been made by all other nations in the management of their colonies. This was not intended by the mother country, but has arisen from the circumstances connected with the colonization of this vast territory, which rendered intermarriage with the natives inevitable. It is true that, according to the old code, people of colour are not eligible to some of the chief offices of government, nor can they become members of the priesthood; but, from the mildness of the laws, the mixed classes have gained ground considerably, and the regulations against them are evaded, or rather have become obsolete. Marriages between white men and women of colour are by no means rare; and the circumstance is scarcely observed upon, unless the woman be decidedly of a dark colour, for even a considerable tinge will pass for white. The laws as to slaves are peculiarly humane. (*Modern Traveller*, xxix., 91, and the authorities there referred to.)

It will be seen, from the previous table, that the number of the aborigines is very inconsiderable, and the diseases introduced by Europeans are said to produce a fearful mortality among them. At the time when the Jesuits, Anchieta, and Nobrega, exerted themselves to introduce European civilization, an epidemical smallpox suddenly carried off two thirds of the population. (*Southey's Brazil*, i., 294.)

The Brazilerois, or native Brazilians—those born of Portuguese parents in Brazil—amount to about 600,000. They appear to inherit all the idleness and inactivity of their European ancestors. Weech remarks, "that the very narrow compass in which the necessities of the poorer classes are confined is almost incredible. A hut, constructed of thin poles of wood, plastered together, as it were, with earth, and covered with straw, is ample security against the sun and rain; a straw mat serves them as a bed, seat, and table; a dish and pot complete the house and cooking apparatus; a couple of cotton shirts, a pair of linen trowsers, a calico jacket, a pair of wooden shoes, and a coarse straw hat, complete a wardrobe that furnishes them handsomely for a year; and a kitchen garden, a few fruit-trees, and a mandioc field, furnish them with a plentiful subsistence. Give them but a viola (a small guitar strung with metal strings), and some tobacco to make their much-loved paper cigars, and their dearest wishes are gratified. Smoking the latter, and strumming on the former, they can beguile entire half-days in a state of enviable forgetfulness, vegetating like the plants. A few fowls, sent to the city from time to time, furnish the necessary supplies; and thus are thousands of families, whose annual income does not exceed 20 milreis" (54 florins—£4 10s.).

The wealthy inhabitants of the country differ only from those of the city in their greater ignorance. Wealth alone possesses value in their eyes; knowledge and character appear to them almost superfluous. The stranger, therefore, who cannot boast of wealth is, in their estimation, a very insignificant person.

Denis gives the following quotation from an unpublished voyage in Brazil, by M. de Tollenare, in which he distinguishes between the vanity of the Parisian and the Brazilian: "The vanity of a Frenchman," says he "peeps out in his conversation, by his pretensions to wit; if he be rich, he wishes everybody to believe that he owes his wealth to his talents, although it is more frequently due to chance. His luxury will be the expression, more or less happy, of good taste. He refines upon the conveniences of life; follows the most absurd fluctuations of fashion; pretends to an admiration of the fine arts, while he admits within the circle of his friends only those who manage flattery with address.

"The Brazilian, infected with the sin of vanity, is self-satisfied, and does not care to conceal it; whatever may be the source of his wealth, he never considers the means by which he obtained it as any reproach to him; he never strives to disguise them; let him be but rich, and he is in-

sensible to shame; when he is poor, he is perpetually exhibiting '*maladresse*.' His luxury is rude and solid; his admiration rests upon substantial ornaments and massive jewels. Both men and women bestow much attention on their toilet, when they appear in public; 'Madame' repairs to mass, attended by a numerous retinue of slaves, richly attired; and on her return, she perhaps squats upon a mat, to eat, with her fingers, dry fish and mandioc!"

The planters of Brazil are very similar to those of other countries. The possession of an engenho (sugar plantation and manufactory) establishes, among the cultivators, a sort of nobility. A *senhor d'engenho* is always spoken of with respect; and to attain this rank is the object of every one. When the senhor is in the company of his inferiors, or even of his equals, he is reserved, holds his head high, and speaks in that loud and commanding tone, that betokens the man accustomed to be obeyed. (*St. Hilaire.*)

The mulattoes (commonly called Pardos, signifying of a brown colour, for the term mulatto is regarded as a reproach in Brazil) are the offspring of Europeans and negroes. They show considerable ingenuity and perseverance in the mechanical arts, and are even said to display a taste for painting.

There can be no doubt of the effectual influence of the mulatto in the political affairs of the country; a physical organization essentially energetic, and which fits him to bear up against the heat of the climate; his activity and his intelligence point him out as a person likely to make a conspicuous figure in a revolution, if not to organize a movement.

The Creoles are those born in Brazil of African parents; the Mamlucos are the offspring of whites and Indians; the Curibocos, of negroes and Indians; and the Cubros of mulattoes and negroes. The African negroes form, as has been seen, a very large proportion of the population. Their condition, though not equal to that of the slaves in Buenos Ayres and the adjacent countries, is upon a far better footing than in many other colonies. It varies, however, in the different provinces, and the course of restraint is milder in those situated in the interior. In the provinces formerly inhabited by the less warlike races among the Indians, who formed early alliances with Europeans, the introduction of negroes has been less necessary. Such, for example, is the case with Rio Grande do Sul, Uruguay, San Paulo, and the countries traversed by the Amazon. The negro population is most numerous in the provinces devoted to the raising of sugar and coffee, as Bahia and Rio Janeiro; and in these probably they have the greatest facilities for obtaining their liberty. The negroes brought to Brazil belong generally to Angola, Anguiz, Benguela, Cabinda, Mozambique, and Congo. Since the recent attempts to repress the trade, Korosmantines, or negroes from the Gold Coast, who are thought to possess a greater degree of intelligence, are not so frequently met with. There are three modes by which the negroes of Brazil obtain their liberty; it may be granted them by their master while living, or he may bequeath it to them by his will, or they may obtain it by ransom.

There is a practice said to be common in Brazil, which tends in some measure to alleviate the horrors of slavery. If a stranger passing in the street, or being in a dwelling, hear the cries of a negro undergoing the bastinado, his voice may immediately arrest any farther chastisement. Every one, however incensed, is bound to cease instantly, under pain of committing a grave injury against the party who implores his clemency, and whose words possess all the force of an official command. "Basta, basta, Senhor!" Enough, enough, sir! are the words employed upon this occasion. The free negroes, of whom the larger number are found in Rio and San Salvador, do not prove such useful members of society in the cities as in the country, where they not unfrequently become wealthy farmers.

The Brazilians divide the Indian races into "Indios mansos," civilized or converted Indians speaking the Portuguese language, and Tapuios or Gentios, or wild hordes.

The general opinion has been that the whole American race, from the polar regions to the straits of Magellan, offered no distinctive traits, and that it was almost impossible to subdivide it. There appear, however, to have been two dominant races in Brazil, which, though analogous as regards certain customs and traditions, seem nevertheless to be pretty distinct.

The Tapuyas, or natives of Brazil, are robust and well made; the colour of their skin, somewhat resembling copper, is found to be of various shades among the different tribes: they have prominent cheek-bones, their hair is black and sleek, and hangs over the shoulders, and instances are related by Roulox Baro of its growing so luxuriantly as to form a sort of garment. They are in the habit, like other American races, of painting themselves red and other colours: they pierce the under lip, for the purpose of introducing a light wooden ring or some other ornament, which they prize beyond precious stones, and never remove. It has not been clearly ascertained whether all the tribes of the Tapuios were anthropophagi in the full extent of the word; that is to say, that they sacrificed their enemies to their vengeance. There is no doubt, however, that the greater part of them were cannibals. It has been said that it was the custom of the Tapuyas, when very old, to give themselves as a burnt-offering to their children, who devoured them after having put them to death!

The other dominant race consisted of the collective tribes known under the common name of Tupis. The chief of these was the Tupinambas. Before the conquest of Brazil, they formed establishments of towns, containing from 5000 to 6000 inhabitants, of which, however, at the present day, no vestiges remain. Like all the other natives, the Tupinambas painted their skins a bluish-black and red, and though the devices were arbitrary, they bestowed much care upon them, and a whole day was not unfrequently occupied in delineating those singular combinations in which they delighted. Among the Tupinambas, the chief was at the same time elective and hereditary; that is to say, that the preference was generally given to the son as his father's successor, though the custom does not appear to have been immutable. It is related that Montaigne, on meeting an Indian chief at Havre, inquired, through an interpreter, what was his right among his tribe; upon which the latter replied, "It is that of marching foremost to the battle;" and this might be said to express succinctly the extent of power assigned to him by his people. The Tupinambas inhabit chiefly the coast from the river Camama to that of San Francisco. The Corvados were formerly very numerous, but are now reduced to a number comparatively insignificant. They dwell chiefly on the banks of the Rio Xipotó, in the prov. of Minas Geraes. They have one trait that distinguishes them from most other Indian tribes, *i. e.*, they bury their dead. The Corvados, it appears, have lost much of their primitive ferocity, but also much of their former courage and intelligence. They have a curious festive dance, which they perform round a large vessel of liquor. The chief holds a maraca or castanet in his right hand, and dances round the vessel; his motions are accompanied by a low monotonous singing; all the rest stand motionless round the vessel, staring at him, and sometimes break out into immoderate cries. After the chief has partaken of the liquor, he hands it round to the others, and they generally continue drinking until they become intoxicated.

The Cafusos, a mixture of Indians and negroes, are a very singular race. What gives them a peculiarly striking appearance, is the excessively long hair of the head, which, especially at the end, is half curled, and rises almost perpendicularly from the forehead to the height of a foot or a foot and a half; thus forming a prodigious and very ugly kind of peruke. This strange head of hair, which seems more artificial than natural, is merely a consequence of their mixed descent. (*Spix and Martius*, i., 394.)

The Puris, at the commencement of the present century, are supposed to have amounted to about 4000, and were at that time very troublesome enemies to the Brazilians. Not less than 144 fazendos have been from time to time destroyed by them. The Rio Doce, the S. banks of the Parahyba, San Fidelis, and the country watered by the Rio Pomba, in Minas, are the chief points exposed to their incursions. This race is more implacable than any of the Indian races of Brazil.

The Botocudos, descended from the Aymores, occupy at present the territory lying between the Rio Doce and the Rio Pardo. In the savageness of their nature they can scarcely be exceeded by the Puris. The name given to them by the Portuguese is derived from patoque or botoque (literally the bung of a cask), and is in consequence of the circular ornament which they wear in their ears and lips.

There are many other tribes, such as the Cotités, Toponazes, Cariôs, Maconis, Chiquitos, &c., &c.

The Indians of Brazil are generally of a short or middle stature, and mostly of a robust broad make. It is seldom that some of a taller and more slender shape are seen among them. They generally go naked; some, however, have a slight covering round the hips, and even where this is not the common practice, the women of particular races frequently use a sort of covering in the presence of Europeans. They almost universally paint their skins, and are fond of ornamenting their heads with feathers. The colour of their skin is a darker or lighter copper, differing according to the age, &c., of the individual. Their skin is very fine, soft, and shining. They live in irregular monogamy or polygamy. While the man is solely occupied with the chase, war, and making his arms, all the cares of the domestic concerns fall on the women. They subsist chiefly on the products of the chase, fishing, roots of various kinds, fruits found in the woods, and honey.

The general language is the Guarani or Brazilian, called also Tupi, and may be considered as one of three chief dialects of a primitive idiom. The three languages known as

the Guarani form a family, which differs not only from all the languages of S. America, but also from all those of the New World.

Literature, &c.—It was not till 1808 that a printing press was introduced into Brazil, at Rio, by John VI., on his arrival from Portugal. A newspaper was immediately established, and it is a curious fact, that only thirty years ago there should not have been a single journal in a country where more than thirty periodical publications are now regularly issued.

The first work of importance published in Brazil did not, however, appear, until 1817. It was the *Corografia Brasilica, ou Relaçao historico geografico do Reino do Brazil*, by Manoel Ayres de Cazal, printed at Rio, in 2 vols., 4to. The work of Henderson, "A History of the Brazils," 4to, London, 1821, is almost wholly translated from the above. The few works written by Brazilians prior to the commencement of printing in Brazil, were printed at Lisbon.

Minas Geraes has produced a poet in the person of Gonzaga, whose songs are extremely popular among the people. His poems, chiefly lyrical, under the title of "Marilia de Dirceo," por T. A. G., were published at Bahia, in three parts and have gone through numerous editions. The first part had reached a fourth edition in 1812. When Brazil shall one day have a literature of its own, Gonzaga "will have the glory of having attempted the first Anacreontic tones of the lyre on the banks of the pastoral Rio Grande and of the romantic Jequitinhonho."

Notwithstanding Pedro I. has founded two universities, literature appears to make no progress in Brazil. The journals would seem to engross all the literary talent of the country, though none of them can be said to be conducted with ability, or to have attained an extensive circulation. The Mercantile Gazette, at the head of the periodical press, numbers about 2000 subscribers. An imitation of the "Penny Magazine" has been attempted at Rio, but the projectors having fixed the annual subscription at 50 francs per annum, its success has not been very great. The three journals which have the largest number of subscribers are the "Aurora" (about 800), the "Official Courier" (about 700), and the above-mentioned "Commercial Gazette of Rio de Janeiro" (about 2000). A "Journal of the Parliamentary Debates" was attempted, but did not pay the cost of printing. In the year 1836, thirty-five journals were published in Brazil, of which five were of a literary and scientific tendency; four of the latter being printed in Rio itself. None of the journals devote much space to criticism, and they are all of a very inferior description.

A Portuguese translation of the French work, "The Art of being Happy" (of which five editions were speedily exhausted in the original), met with very little success, although the impression was only 500. Not so, however, with the celebrated Portuguese work, "The Art of Stealing," which is to be found in nearly every house in Brazil!

It is very rarely that any work is a source of profit to its publisher, with the exception of a journal; it is the custom here for the writer to pay for the insertion of his articles in the journals, instead of receiving any remuneration for them.

It is a difficult matter to find compositors in Brazil, and when found, they will only hire themselves for the lightest possible works. They are generally young mulattoes. Printers usually employ their slaves.

There are some good French booksellers at Rio, who keep, for the most part, epitomes and manuals. A Portuguese translation of "Faublas" appeared in 1836, and was bought up with avidity.

We are indebted to the journal "Das Ausland," 1838, Nos. 62, 63, for the greater portion of the above information.

Education.—The greatest want of Brazil at the present moment seems to be that of good elementary instruction. Hitherto most schools established in the country have been under the control of ecclesiastics, alike bigoted and uninstructed. The increase of such schools would be an evil rather than a good. Luckily, however, the influence of the clergy is every day becoming less powerful; and several respectable academies have been opened in most of the large towns by parties not under their guidance. But, speaking generally, there are as yet no means in Brazil by which even the children of the middle classes can acquire anything like a really good and useful education. Till some efficient measures be taken to supply this defect, but little improvement need be looked for either in the morals or literature of the people.

Income and Expenditure.—At an average of the years 1832–33, 1833–34, and 1834–35, the income and expenditure of Brazil were as follows:

	Income.	Expenditure.
1832–33	12,338,395 dollars,	12,602,975 dollars,
1833–34	12,978,029	12,016,691
1834–35	14,819,561	12,908,950

The budget for the year ending the 30th of June, 1838, was fixed as follows:

Ministry of the interior	. .	1,527,072 dollars,
Do. justice	. . .	809,945
Do. foreign affairs	. .	153,449
Do. marine	. . .	2,131,030
Do. war	. . .	3,113,224
Do. finance	. . .	5,877,985
Total	. .	13,622,696

The revenue for the same year was estimated by the minister at $12,663,289. It principally arose out of the customs' duty of 15 (now 20) per cent. on imports, and 2 per cent. on goods exported, including transhipments, &c.; from tenths and duties on the sale of lands and houses; the mining duties, and the revenue of the diamond district; 15 per cent. on the export of hides from the Rio Grande; and a variety of other items. In 1835–36, the customs' duty of 15 per cent. on imports produced, exclusive of the provinces of Rio Grande and Para, $6,231,488. The total debt of Brazil may be estimated at £15,000,000.

Government and Administration of Justice.—Prior to 1808, Brazil was merely a Portuguese colony, but on the arrival of John VI., it was raised to a kingdom. In August, 1822, Brazil was forcibly separated from the mother country, and erected into an empire, and Don Pedro declared emperor. In 1824, the present constitution was drawn up, and on the 20th March, in the same year, was accepted by the emperor, who, conjointly with the two chambers, took the oath of allegiance to it. The spirit of the constitution is monarchical, and its principal heads are as follows:

"The empire of Brazil is free and independent. Its government is monarchical, hereditary, constitutional and representative. The reigning dynasty is that of Don Pedro. The Roman Catholic is the established religion; all other religions are tolerated, but their places of worship can receive no ecclesiastical marks of distinction. The political powers recognised by the Brazilian constitution are four in number: The legislative or two chambers, the moderating or the emperor, the executive, and the judiciary. The emperor and the general assembly represent the Brazilian nation; all their power flows from the nation. In the general assembly resides the legislative power, subject to the sanction of the emperor. The general assembly is composed of two chambers, the chamber of deputies and the senate. The senators are elected for life, and chosen by the provinces. The chamber of deputies is elective and temporary. To the chamber of deputies alone belongs the right—1st, of imposing taxes, and regulating all matters of finance; 2dly, entire power as to the state of the army and navy; 3dly, of choosing a new dynasty in case of the failure of issue of the regnant. The proceedings of each chamber are public, excepting where the exigency of the state demands their being secret. No senator or deputy can be arrested during the continuance of his mandamus. It is not lawful to be at the same time member of both chambers. The power of judging the individual offences of members of the royal family, ministers, councillors of state, senators, and deputies, belongs solely and absolutely to the senate. The executive power resides with the emperor, which he exercises by means of responsible ministers. The emperor calls together the general assembly, declares war, and concludes peace; but whenever the safety of the state allows, he has recourse to the advice of the general assembly. The ministers are responsible, and are impeachable on the ground of treason; embezzlement of the public money, or property; of corruption, or extortion, or abuse of power, or violation of the freedom, safety, and property of the citizen. Any elector is eligible for a deputy, provided he derive from his property, trade, or employment, a specified net revenue.

The number of senators is 54, and of deputies 568. Each senator and deputy receives a certain amount of salary. Parliaments are quarterennial, and each meeting lasts four months. The executive power is delegated to six ministers, under whose control are placed all matters connected with the interior, foreign affairs, justice, marine, war, and finance.

Brazil is divided into eighteen provinces, for the purposes of district government, and their affairs are administered by as many presidents, who are styled "presidentes de provincias."

The affairs of the emperor's palace employ 255 persons. The diplomatic body is composed of two envoys-extraordinary, one resident at the court of France, the other at that of England: there is also a resident in Austria, and a chargé d'affaires in Portugal, Spain, Belgium, the Hanseatic Republics, Prussia, Rome, Naples, Florence, &c. In America there are three; viz., in the U. States, at Buenos Ayres, and at Monte Video. The secretaries and attachés amount to 18.

The Brazilian aristocracy, in 1837, was composed as follows: 16 marquises, 6 counts, 19 viscounts, 20 barons, and

29 ladies, preserving the titles of their deceased husbands. The nobility is not hereditary.

Brazil was recognised as an independent empire by Portugal, Sept. 7, 1825, and subsequently by the other cabinets of Europe.

Don Pedro II., the present emperor, was born Dec. 2, 1825, and therefore is not of age to govern in Brazil until 1842. A provisional council of regency was formed on the abdication of Don Pedro, consisting of three members, nominated by the senate. This council was soon succeeded by another, but the power was shortly afterward vested in an individual, in which manner it is still exercised. The present regent is Don Diego Antonio Feijo. His authority ceases in the course of 1839, and the regency then devolves upon the heir apparent to the crown, Donna Januria, sister of the emperor, born March 1, 1821.

As regards legislation, everything remains to be done in Brazil. Where a statute-book is wanting, the administration of justice must be fluctuating and uncertain. The criminal code is a curious memorial of the turbulent times of 1830, when it was compiled, state offences being treated in it with the greatest indulgence. In consequence, government found it imperatively necessary, on the increase of crime in the provinces, and the progress of disaffection in the disturbed districts of Para, Rio Grande do Sul, and San Pedro, to have recourse to far stronger punishments than were warranted by the letter of the law.

As the prosecution of criminals is left to the parties who have been injured, it not unfrequently happens that crime goes altogether unpunished, parties being unwilling to undergo the expense and trouble of prosecution. The consequence of this system of administration of the law is, that private revenge very often supplies the place of public justice. Mathison (p. 138) mentions an authenticated case of an individual who had committed no less than four assassinations in one year, from motives of private revenge, and in every instance he escaped without being called to any account.

Religion.—The established religion of Brazil is the Roman Catholic; but all other religions are tolerated. One of the chief sects at Rio is that known under the name of Sebastianistas, in honour of the patron saint of Rio. Their chief point of belief is the re-appearance of the king Don Sebastian of Portugal, killed in the disastrous battle of Alcaçarquivir, in 1578, who they suppose did not perish, but are firmly persuaded that he is still alive! This, in fact, was long the popular belief in Portugal.

Ecclesiastical affairs are under the direction of an archbishop, at Bahia (originally a bishopric, being the first founded in Brazil, in 1522, and raised to the archiepiscopal rank in 1867); six bishops: viz., at Rio, Pernambuco, Maranhao, Para, and San Paulo; and two "prelacies," with episcopal powers: viz., Goyaz and Cuyaba. The church of Brazil has been for some time engaged in a dispute with Rome, as to the appointment of the bishops, the pope claiming the sovereign right of nomination, which the church rejects.

Monasteries and nunneries are extremely numerous in many parts of Brazil. The saints' days are represented by many to be celebrated in a manner as splendid as at Rome herself. A recent writer (Dénis, p. 132) observes, that neither the carnival at Venice, nor the declining masquerades of Paris, can convey an exact idea of the tumult and extreme absurdities which prevail during the days of the "*intrudo*," or carnival, not only at Rio, but throughout the cities of Brazil. Luckily, however, measures have been taken for lessening the number of these nurseries of vice and idleness. The revenues of many of them revert to the crown after a certain period, and no new member can now be admitted.

Army and Navy.—The land forces amount to from 60,000 to 65,000 men; of whom 15,000 are regular troops. The latter have received considerable additions of late years, for before the last insurrection they did not exceed 8000.

The remainder of the military force consists of regular and local militia: the former may be despatched on foreign service, while the latter does not leave the place of their abode.

The local militia, in which every man from sixteen to sixty, who is not already enrolled in the regular militia or the troops of the line, may be called upon to serve, constitutes an important defence, and is chiefly employed in maintaining internal order. One great use may be said to be that of keeping up a certain military order among the people. Its chief officers are the "capitao mors," or colonels.

The navy numbers 1 ship of the line, 5 frigates, 6 corvettes, 13 schooners, 4 steamers, &c.; but they are all in a very inefficient state.

Discovery and Historical Sketch.—It is generally believed that the first discovery of Brazil was made on the 20th of January, 1500, by the Spaniards, under Vincente Yanez Pinçon, a native of Palos, and one of the companions of Columbus. He is said to have touched at cape St. Augustin, and to have subsequently coasted along the shore as far as the river Amazon, and thence to the mouth of the Orinoco. His discovery does not appear to have been attended by any important results, for he made no settlement, but merely claimed the country for Spain.

In the same year, Pedro Alvarez Cabral was appointed admiral of a large fleet sent out by Emanuel, king of Portugal, to follow up the successful voyage of Vasco de Gama in the East. Adverse winds drove the expedition so far W. that, on the 25th of April, Cabral fell in with the coast of Brazil, which he supposed at first to be an island; and on Good Friday the fleet cast anchor in a commodious harbour, to which he gave the name of Porto Seguro. Having taken possession of the country for the crown of Portugal, by erecting a cross, and giving it the name of Tierra de Santa Cruz, Cabral proceeded on his voyage, taking care, however, in the first place, to send information of his discovery to his sovereign. Soon after this intelligence reached Portugal, Emanuel despatched a small squadron to explore the country, under the command of the famous Amerigo Vespucci, who had been invited from Seville for that purpose, in 1502, and who made a second voyage in a subsequent year. In 1504, he again returned to Europe, bringing with him a cargo of Brazil wood, &c.

It was not until 1508 that a third voyage of discovery was undertaken to Brazil, as the advantages which had accrued on the former voyages did not appear to have answered the expectations of the projectors. Amerigo Vespucci was then despatched by the king of Spain, to whose service he had returned, to take possession of the country. But this produced a remonstrance from Portugal; and a dispute having arisen among some of the leaders of the expedition, it returned to Spain, without effecting anything of importance. In 1515, another expedition was fitted out from Spain, the command of which was assigned to Juan Diaz de Solis, with the ostensible purpose of finding a passage to the great Pacific ocean. To this navigator is supposed to belong the honour of having discovered the harbour of Rio Janeiro, on the 1st of Jan., 1516, though the priority in this respect has been disputed by the Portuguese admiral, Martin Affonso de Souza. On the return of the expedition to Spain, the Portuguese government claimed the cargoes, and again remonstrated on this interference on the part of Spain.

In the reign of Joan III., the coast was divided into captaincies, many of which extended 50 leagues. It is needless to follow step by step the rising fortunes of the Brazilian territory. Various towns sprung up along the shore, which were subject to the vicissitudes that then usually awaited newly-founded colonies. They were successively taken and plundered by the French, Dutch, English, &c., who, if not expelled, usually contented themselves with a short possession, and abandoned them, after frequently committing the most barbarous atrocities. Notwithstanding these calamities, the colony continued to increase in prosperity and importance under the superintendence of the Portuguese government. But it experienced a severe check on the annexation of Portugal to the crown of Spain in 1588, during the reign of Philip II. As the mines that had been discovered, down to that period, yielded less wealth than those of the Spanish possessions in S. America, Brazil did not receive much favour from that monarch. The Dutch took advantage of this indifference on the part of Spain; and it was not, indeed, until they had made considerable inroads, that an expedition was fitted out, in 1640, to expel them from the territory. About this period, the house of Braganza was restored to the throne of Portugal. After a long and desperate struggle, the Dutch were compelled to evacuate Brazil in 1654. Henceforward it continued in the possession of Portugal, but the latter country being in a very abject, impoverished state, instead of rendering assistance to its colony, was compelled to rest its principal hopes of being able to maintain an independent existence on the wealth and resources of Brazil, which it subjected to all the galling and vexatious restraints of the old colonial system.

In 1808 a new æra began in Brazil. The French having invaded Portugal in the course of the previous year, the prince regent, John VI., and his court, accompanied by a large body of emigrants, set sail for Brazil, where they arrived on the 25th of Jan., 1808. Brazil immediately ceased to be treated as a colony. In the course of the same year, her ports were thrown open to all friendly and neutral nations; and by a decree, dated the 15th of Nov., 1814, all nations were allowed to trade freely with them.

The revolution in Portugal in 1820 was very speedily followed by a revolutionary movement of the same description in Pernambuco; and to restore tranquillity, and anticipate the farther progress of revolution, the government, in 1821, proclaimed the adoption of the Portuguese constitution. Soon after this, the king having left Brazil for Portugal, a

struggle commenced between the Portuguese, who wished to recover their former ascendancy over Brazil, and the Brazilians, who were resolved to preserve their newly acquired liberties, which ended in the complete separation of all connexion, other than that subsisting between independent states, between the two countries. The government of Brazil having been entrusted to the crown prince, Don Pedro, he refused to admit the troops sent out by Portugal to support her authority, or to obey the instructions of the king, his father. In the following year, 1822, Brazil was declared to be a free and independent state, and Don Pedro assumed the title of emperor. After several stormy debates, the project of a constitution (see *ante*), submitted by the emperor, was accepted; but the disputes between the emperor and the chamber of deputies having continued, the former abdicated the throne in favour of his son, a minor, in 1831, and, singular as it may seem, the rights of the latter have hitherto been preserved; and some attempts at insurrection by the republican party have been suppressed without much difficulty, and internal tranquillity has been successfully maintained.

Considering the lengthened period during which Brazil has been colonized; its vast extent and fertility; the variety of its productions, and its favourable situation for commerce, its progress in the accumulation of population and wealth has been extremely slow. This apparent anomaly may, however, be easily explained. The slow progress of Brazil, like that of the contiguous *ci-devant* Spanish colonies, is entirely owing to the vicious principles on which it was governed by the mother country; to the rigid exclusion of foreigners from the country; the oppressive restrictions laid on the trade and industry of the colonists; and, more than all the rest, to the ignorance of the Portuguese, and their inferiority, in respect of science and art, to most other nations of Europe. Portugal could bequeath nothing to her colonies but pride, superstition, and intolerance. But since the downfall of the old colonial system, consequent on the emigration of the court to Brazil, the foundations of a new and better order of things have been laid. *Novus seclorum nascitur ordo.* The settlement of thousands of foreigners in Brazil, and the unfettered intercourse she now carries on with all the most civilized countries in the world, have already had the best effects. And though it will require a lengthened period to counteract the joint influence of ignorance, slavery, and a debasing superstition, Brazil is rapidly rising, not merely in the scale of wealth and population, but also in that of civilization.

BRAZZA, an island of the Adriatic sea, near the coast of Dalmatia, dependant on the circle of Spalatro. It is about 24 m. long, by from 5 to 7 broad, and contains twenty villages, with 15,000 inhabitants. It is very mountainous and rocky: in the most elevated parts there are large tracts quite stony, and hardly fit to bear the wildest plants. Great labour and expense are necessary to bring the ground to a fit state for tillage; yet the inhabitants go on progressively increasing their cultivated land, and consequently their vintage, and diminishing their woods and cattle. Its wine is accounted the best in Dalmatia; the other vegetable productions are oil, figs, almonds, and saffron. The corn crop is extremely scanty, scarcely affording subsistence to the inhabitants for three months in the year; hence they are obliged to import to a large extent from the mainland. The stony nature of the soil, and the scarcity of fresh water, subject the island to frequent droughts. Brazza was famous in ancient times for its kids, which still continue in their former perfection. The pastures here give to the flesh not only of kids, but of lambs, a particular delicacy of taste; the milk, too, of this island is far superior to that of the neighbouring countries, so that its cheese is in great repute in Dalmatia, and wherever it is known. Bees and silk are cultivated with some success; and the berries of the lentisk furnish the peasants with oil during a scarcity of olives. This island belonged formerly to the republic of Venice, and was ceded to Austria at the peace of Campo Formio.

BREATHITT, county, Ky. Situated in the E. part of the state, and contains 700 sq. m. Drained by the N. fork of Kentucky river and its branches. It contained, in 1840, 3517 neat cattle, 2294 sheep, 9674 swine; and produced 1628 bushels of wheat, 91,185 of Indian corn, 7749 of oats, 2994 of potatoes, 2648 pounds of tobacco, 4270 of cotton, 12,377 of sugar, 21,017 bushels of bituminous coal. It had nine grist-mills, one saw-mill, nine distilleries. Pop.: whites, 2076; slaves, 119; total, 2195. Capital, Breathitt.

BREATHITT C. H., p. v., 121 m. E.S.E. Frankfort, 530 W. Situated on the E. side of the N. branch of Kentucky river. It contains the county buildings, and a number of dwellings.

BRECHIN, a royal burgh of Scotland, co. Forfar, on a sloping bank on the left side of the S. Esk, 7½ m. W. from its junction with the sea at Montrose. Pop. of the town 5000; of the town and par., 6508. The main street, which runs nearly N. and S., is about a mile in length. Some portions of the town are very steep, particularly about the Cross. It was formerly walled, and was also a bishop's see: the bishopric was founded by David I. about the middle of the 12th century; and the portion of the cathedral which now forms the parish church still remains. It was originally a stately Gothic structure, but its architectural beauty and symmetry have been defaced by the bad taste displayed in modern repairs. It is surmounted by a square steeple 120 ft. high. In addition to the parish church, which is collegiate, there are in the town no fewer than four Presbyterian dissenting chapels, and one Episcopal chapel; there is also a new place of worship, recently built, in connexion with the established church. There are various schools in Brechin, all of them conducted on the best principles. In the churchyard, near the cathedral, is one of those round towers, of which there is only another in Scotland, at Abernethy, and which, it is supposed, were built by the Picts, but for what purpose is unknown. It is 108 ft. high, is surmounted by a conical roof of gray slate, and has no staircase, either without or within. In another part of the town is an ancient hospital, called the *Maison Dieu*, now used as a stable; but certain funds which belonged to it afford weekly allowances to poor inhab. being the widows or children of burgesses. The Red Friars seem to have had a monastery here, but all traces of it have disappeared. (*Keith's Scot. Bishops*, edit. 1824, p. 397.) But, interesting and venerable as Brechin is for its antiquities and its historical and ecclesiastical name, it is no less important now, though in a very different department—that of manufactures. Its staple manufacture is linen, partly bleached (hence the number of bleaching-grounds in the immediate vicinity), and Osnaburghs, sackcloth, coffee and cotton baggings, &c. "The particular branches of manufacture," to quote from the *New Statistical Account* (No. 1. § *Brechin*), "are heckling, spinning, weaving, and bleaching. There may be employed in heckling about 30 men and women; in spinning, 200; in weaving, from 1000 to 1500; in bleaching, from 40 to 50. Besides the above branches of manufacture, two distilleries for spirits, three nurseries, and three lime-works, have been for some time in full operation in the immediate neighbourhood of the town." Brechin unites with Montrose, Forfar, Bervie, and Arbroath in sending a mem. to the H. of C. Registered electors, in 1838-9, 235. Of the eminent men which this place has produced, the late Dr. John Gillies, author of a valuable history of Greece, a translation of the Politics of Aristotle, and royal historiographer for Scotland, deserves special mention.

Brechin castle, which has been for many years the residence of the Maules of Panmure, stands on a precipice overlooking the Esk, and is separated from the town by a deep ravine. This castle was formerly a fortress. In 1303 it withstood a siege of twenty days by the English under Edward I.; and surrendered only when Sir Thomas Maule, its brave commander, was killed.

BRECKENRIDGE, county, Ky. Situated in the N. part of the state, and contains 700 sq. m. Bounded N.W. by Ohio river, and S. by Rough creek, a branch of Green river. It contained, in 1840, 8557 neat cattle, 13,846 sheep, 23,931 swine; and produced 75,430 bushels of wheat, 3098 of rye, 356,359 of Indian corn, 119,932 of oats, 20,527 of potatoes, 1,807,104 pounds of tobacco, 4115 of sugar. It had twenty-nine stores, two flouring-mills, fifteen grist-mills, twelve saw-mills, one oil-mill, eight tanneries, one distillery, one academy, 59 students. Pop.: whites, 7239; slaves, 1691; free coloured, 14; total, 8994. Capital, Hardensburg.

BRECKNOCK, t., Lancaster co., Pa., 20 m. N.E. Lancaster. Drained by branches of Muddy creek, which afford water-power. It contains two stores, one fulling-mill, one woollen-factory, two flouring-mills, four grist-mills, six saw-mills, five schools, 145 scholars. Pop. 732.

BRECKNOCK, t., Berks co., Pa. Watered by Big and Little Muddy creeks. It contains one store, three grist-mills, three saw-mills, one oil-mill. Pop. 925.

BRECON, or BRECKNOCK, an inland co. of S. Wales, having N. the cos. of Cardigan and Radnor; W. Cardigan and Caermarthen; S. Glamorgan and Monmouth; and E. the latter and Hereford. It is about 35 m. in length, by about 30 m. in breath, and contains 482,560 acres. It is pervaded by two principal mountain chains, which, with their offsets, occupy a large portion of the surface. The highest summits are the beacons of Brecknock, Capellanta, and Cradle mountain; respectively 2863, 2394, and 2545 ft. above the level of the sea. There are, however, a number of beautiful and fertile valleys. The Wye skirts the co. for a considerable distance on the N.W., and it is traversed by the Usk, Taaf, and other lesser streams. Climate rather severe and humid. Though a good deal improved, agriculture is still in a very backward state; and no proper rotation of crops is observed. Oats and barley are the principal objects of attention, but a good deal of wheat is also raised. Turnips are more extensively cultivated than for-

merly, and the stock of cattle and sheep is also improved. Farms mostly small, and generally occupied by tenants at will. Average rent of land in 1810, 5s. 2d. an acre. Manufactures unimportant, consisting principally of woollen cloth, the produce of domestic industry. There are ironworks on the S. confines of the co., adjacent to those of Merthyr Tydvil, Hirwain, and Rumney, which employed, in 1831, 470 men. Principal towns, Brecon, Crickhowell, and Builth. The Welsh language, though still spoken in different parts of the co., is falling rapidly into disuse. Brecon is divided into six hund. and sixty-six par. In 1841 it had 10,634 inhab. houses, and 53,295 inhab. It returns two mem. to the H. of C., one for the co., and one for the bor. of Brecon. Registered electors for co., 1837–38, 2295. Expenditure for the relief of the poor in 1837–38, £12,946.

BRECON, a bo. and town of S. Wales, cap. of the above co., at the confluence of the Honddû and Tarrel with the Usk; 144 m. W. by N. London. Pop., 1821, 4193; 1831, 5026; houses at the latter date, 1150. It is an ancient, irregularly-built town, on a very beautiful and picturesque site; there are three principal streets, which diverge from the high street, and contain many well-built houses: the meanest buildings are towards the approaches, on either side; which, however, on the line of the chief thoroughfare, have been much widened and improved within a recent period: it is paved, and lighted with gas. There are four churches—St. John's, originally attached to the priory; St. Mary's, a chapel of ease (both Gothic, and nearly rebuilt in Henry VIII.'s reign); St. David's, built soon after the Conquest, and one of the oldest in the county; and Christ Church, a collegiate church, established by Henry VIII.: it is extra-parochial, and has a grammar school attached to it. There is an endowed free school for 50 boys, and three or four small charities (the principal of which amounts to £36 a year, for apprenticing poor children), and a borough and county hall, rebuilt in 1770, a good spacious building, in the high street, with the market place under it. There is a promenade along the Usk, under the old town walls, which commands a noble range of mountain scenery; and a more retired one through the priory woods. The Brecknock and Abergavenny canal (35 m. long) commences at this town, and joins the Monmouthshire canal (18 m. long), which last joins the Usk near Newport. There are on it wharfs for coal and lime at Brecon; and a tram road (35 m. in length) at the head, for conveying these and other articles inland. Regular passage and trading boats ply on the canal. Weekly markets are held on Friday for cattle; Saturday and Wednesday for general provisions; and five annual fairs, for stock and agricultural produce (each preceded by a leather fair), 1st Wednesday in March, 4th May, 5th July, 9th September, and 16th November: those of May and November are also statute fairs for hiring servants. There are no manufactures; and its trade chiefly consists in the supply of articles of general consumption to the neighbourhood, which comprises the greater part of the co. The limits of the parl. borough comprise the parishes of St. David's, St. John's, St. Mary's; the Castle, and Christ's church precincts, and the ward of Trecastle, which is 10 m. off, and only connected with it for election purposes. Its present municipal limits are restricted to about one third of the former, and comprise only the town and some small portions immediately contiguous. It has four aldermen and twelve councillors. Previously to the Municipal Reform Act, courts of petty and quarter sessions for the borough were held, but the business was of trifling extent: there was also a court of record, for the recovery of debts, held weekly, on Mondays and Thursdays, and much resorted to. This and the petty sessions are still held. The assizes and quarter sessions for the county are held in Brecon. Brecon has returned one mem. to the H. of C. since the reign of Mary. Previously to the Reform Act the privilege vested in 11 burgesses. There are 356 qualifying tenements of £10 and upwards: registered electors in 1838, 339. Brecon is the chief polling town of the co. The castle of Brecon was built in 1094, from which period the town also dates its origin; many Norman families then settled in the co., whose descendants still remain. It was surrounded by strong walls: these and the castle were destroyed in the last civil war, by the inhabitants, to prevent a siege, or being saddled with the maintenance of a garrison.

BREDA, a fortified town of the kingdom of Holland, prov. Brabant, cap. arrond. and cant., on the Merk, 24 m. W.S.W. Bois-le-Duc, and 30 m. N.N.E. Antwerp. Pop. 13,000. It is one of the strongest places in the kingdom, being regularly fortified, and defended by a citadel rebuilt by William III. king of England; its position, in the middle of a marsh that may be laid under water, contributes materially to its strength. It is well built, with broad and well-paved streets; has four squares, a fine quay, several canals, an arsenal, town-hall, two Protestant and four Catholic churches, an orphan hospital, &c. The principal Protestant church has a spire 362 ft. in height. The ramparts are planted with trees, and afford fine promenades. It is the seat of tribunals of primary jurisdiction and of commerce; and has some manufactures of woollen goods, linen, hats, &c., with breweries and tanneries.

Breda was taken from the Spaniards by Prince Maurice, in 1590, by means of a stratagem suggested by the master of a boat who sometimes supplied the garrison with fuel. With singular address, he contrived to introduce 70 chosen soldiers into the town, under a cargo of turf; who, having attacked the garrison in the night, and secured the gates, their comrades came to their assistance, and gained possession of the town. It was retaken by the Spaniards, under the Marquis of Spinola, in 1625; but was finally ceded to Holland by the treaty of Westphalia, in 1648. (*Dict. Géographique, &c.; Watson's Philip II.*, iii., 158.

BRÈDE (LA), a village of France, dép. Gironde, cap. cant., near Bordeaux. Pop. 1531.

This village would be unworthy notice in a work of this sort, were it not that in its environs is the *Château de la Brède*, where the illustrious author of the *Esprit des Lois* was born, and where he composed the greater part of his immortal works. It is a large gloomy-looking building, in the middle of extensive plains and meadows, and is surrounded by a deep ditch filled with water, over which is a drawbridge. In the chamber used by Montesquieu, the furniture has been carefully preserved as in his time: it consists of a plain bed, a few easy chairs of a Gothic shape, and some family pictures; the room is wainscotted, and from the window there is a fine view over the surrounding country. Montesquieu was much attached to this retreat. "Je puis dire," says he, "que la Brède est un des lieux aussi agréables qu'il y ait en France; au château près, la nature s'y trouve en robe de chambre, et pour ainsi dire au lever du lit." (*Hugo*, art. *Gironde; Inglis's Switzerland, &c.*, p. 322.)

BREMEN, one of the three free German Hanseatic cities on the Weser, by which it is intersected, 60 m. S.W. Hamburg, and about 37 m. direct distance from Bremerhaven, at the mouth of the Weser; lat. 53° 4′ 45″ N., long. 8° 48′ 3″ E. Pop. 42,000. The larger portion of the city, called the *Altstadt*, or old town, lies on the right, and the *Neustadt*, or new town, on the left bank of the river. The streets in the latter are comparatively straight and broad, but those in the former are mostly narrow and crooked, and the houses being high, they have a gloomy appearance. An island in the river is included within the city; the communication between its two great divisions being kept up by a bridge, which crosses this island. The ramparts by which the town was formerly surrounded, have been levelled, planted, and converted into fine gardens and promenades. It has nine churches, of which the cathedral, built in 1160, is the principal: the church of St. Ausgarius has a spire 325 ft. in height. The new town-hall, formerly the archiepiscopal palace, is a building of the same elaborate character as the town halls in Bruges and other cities of the Netherlands. There is also an old town-hall, built in 1405, beneath which are the famous wine cellars, containing vats filled with hock, said to be considerably more than 100 years old. It has also an exchange, with concert and ball-rooms; a museum, built in 1801, containing a public library, lecture and reading rooms, &c.; a theatre; a building called the *Schutting*, or place of meeting of the elder merchants (*Conventiculum Seniorum*); a weighing-house; a *pædagogium* (for scientific instruction), gymnasium, high school, school of commerce and navigation, school of design, &c.; two orphan asylums, and numerous other charitable institutions. One of the most interesting objects in the town is the observatory, from which Dr. Olbers discovered the new planets Pallas and Vesta, in 1802 and 1807. Both sides the river are lined with handsome and convenient quays.

The manufactures of Bremen are pretty considerable. The principal are those for the preparation of snuff and cigars, which employ a great many hands. There are also about 100 distilleries; numerous factories for weaving, and establishments for bleaching linen; two factories for the spinning of cotton; nine sugar refineries; with tanneries, sail and canvass factories, soap and candle do., cordage do., oil works, &c. A considerable trade is also carried on in the building and fitting out of vessels.

The situation of Bremen renders her the principal emporium of Hanover, Brunswick, Hesse, and other countries traversed by the Weser. In consequence, she has an extensive and increasing trade. Vessels of large size stop at Bremerhaven, on the E. side of the river, where a new and excellent harbour has been formed on a piece of ground ceded, in 1827, by Hanover to Bremen. Vessels drawing 13 to 14 ft. water ascend the river as far as Vegesack, 13 m. below Bremen; and vessels not drawing more than 7 ft. water come up to the city. The great articles of import are tobacco, coffee, sugar, and other colonial products; whale-oil, cotton, and cotton yarn, vegetable oil, cheese, butter, wine, tea, rice, iron, spices, dye-woods, &c.

Of the articles of export linens occupy by far the most prominent place; and next to them are snuff and cigars, with hams and bacon, oak bark, rags, bones, chicory, oil-cake, refined sugar, quills, soap, lead, vitriol, &c. We subjoin a list of the principal articles imported into, and exported from Bremen, in 1838, specifying the quantity or (where that is not given) the value of each article.

Principal articles of import in 1838:

Tobacco	23,818,000 lbs.	Pepper	95,000 lbs.
Coffee	14,498,000	Tar	6,594 tons.
Sugar	14,000,000	Butter	1,000,000 lbs.
Train oil	45,090 tons.	Cheese (1836)	793,417
Cotton	6,607 bales.	Tallow	153,000
Cotton yarn and twist	98	Rape oil	900,000
Wine	11,017 hhds.	Linseed ditto	500,000
Tea	900,000 lbs.	Hemp ditto	14,500
Rice	2,500,000	Iron, bar and plate	6,000,000
Hides	1,180,000	&c.	&c. &c.
Indigo	33,000		

The total value of all the articles imported by sea into Bremen in 1838 was 15,900,000 rix-dollars, or at 3s. 2d. per rix-dollar) £2,517,500.

Principal articles of export in 1838:

Linen, fine fabrics (value)	3,445,000 rix-doll.
bagging	43,312
ticking	164 bales.
Lead	31,437 centner.
Iron and steel ware	57,407
Corn and legumes	6,621 lasts.
Tobacco, snuff, &c.	5,546,479 lbs.
Cigars (value)	604,236 rix-doll.
Wheat flour	389,041 lbs.
Butter	334,511
Cheese	288,827
Bones	3,184,742
Leather	149,556
Oak bark	1,767,542
Rags	1,826,556
Cotton goods	241,787
Chicory, green and dry	355,125
Starch	640,720
White lead	109,296
Sugar, refined and coarse	386,973
Oil cake	4,681,741
Rape oil	129,668
Ditto seed	211 lasts.
Quills	13,318,800 no.
Tobacco-pipes (value)	30,418 rix-doll.
Soap (brown)	2,229 tons.
Ditto in bars	334,697 lbs.
Hams	701,539
Syrup	687,953
Bacon	977,290
Juniper berries	38,305
Vitriol	137,861
Wax	67,171
Wood	36,085

Total value of exports by sea in 1838, 11,508,000 rix-dollars, or £1,920,833. But, exclusive of her trade by sea, Bremen has a very extensive internal trade, on which, indeed, her external trade is almost wholly bottomed.*

The shipping of Bremen has increased rapidly since 1820. About that period, most colonial and foreign goods were imported in English and American ships, as consignments on foreign account; but since then, the shipping of the town has been so much augmented that a comparatively small portion of its trade is conducted in foreign bottoms. Since then, also, the Bremen merchants have formed establishments in New York, Rio de Janeiro, Havana, and other emporiums, both in N. and S. America; so that they have become better acquainted with the state of foreign demand and credit, and are able to conduct their business with greater advantage and security. In 1827, Bremen had only 74 merchant ships, whereas, in January 1839, she had 151; viz., 23 ships of 200 lasts and upwards, 26 of from 150 to 200 lasts, 54 from 100 to 150 ditto, 42 from 50 to 100 ditto, and six under 50 lasts. She had then also 86 river ships, of from 12 to 43 lasts. Bremen is the principal continental port for the despatch of emigrants for America, as many as 10,000 having embarked in the course of a single year. In 1837 there entered the port of Bremen 699 ships (including repeated voyages), of the burden of 105,003 tons, from foreign countries. Of these, 20 ships of 3049 tons' burden were British; and 24 ships of 7688 tons' burden, American. Of the Bremen ships no fewer than 96 of 28,875 tons' burden, were from the United States; and 27 ships, of 6340 tons' burden, from Cuba.

* The Bremen rix-dollar = 3s. 2d. sterling; the pound = 7,680 English grains; so that 100 lbs. Bremen = 109·6 lbs. avoirdupois.

Bremen is possessed of a tract of territory lying round the city, on both sides the Weser, containing in all about 74 sq. miles, with a pop., exclusive of that of the city, of 16,000; making the total pop. of the state 58,000. The land, which is low and marshy, intersected by canals, and very fertile, is mostly appropriated to pasture. The inhab. of the city and country are all Protestants, with the exception of about 1500 R. Catholics and a few Jews. The executive government is vested in a senate, consisting of four burgomasters, two syndics, and 24 councillors; but the principal legislative authority is in the hands of the assembly of burgesses (*Wittheit*), composed of all resident citizens that pay a certain amount of taxes, without regard to their religion. The senate chooses senators for life, from a list of candidates proposed by the burgesses. In 1837, the ordinary and extraordinary revenue of the republic amounted to 573,843 rix-dollars, and the ordinary and extraordinary expenditure to 597,006 rix-dollars, leaving a deficit of 23,163 rix-dollars. There is an export duty of ½ per cent. *ad valorem*, on all goods shipped from, and an import duty of ¾ per cent. on all goods imported into Bremen. The port and shipping charges are very moderate. Bremen contributes 485 men to the army of the Germanic confederation.

Bremen is said to have been founded in 788. She was long one of the leading towns of the Hanseatic league. In 1640, she was summoned to the diet, and allowed a seat and vote on the Rhenish bench, in the college of imperial cities. In 1648, at the treaty of Westphalia, the archbishopric to which Bremen had given name was secularized in favour of Sweden, who held it till 1712, when it was taken possession of by Denmark, by whom it was ceded to Hanover in 1731. Bremen acquired from the electors of Hanover a full recognition of its independence and other prerogatives, which had sometimes been disputed by the Swedes. In 1806, it was taken by the French; and from 1810 to 1813, it was the cap. of the department of the Mouths of the Weser. In 1815, it was restored by the congress of Vienna to its old franchises. (*Von Raden's Statistics of the Kingdom of Hanover*, ii., 116, *&c.*; *Conversations Lexicon*; *Board of Trade Papers*, viii., 254, and *private information*.)

BREMEN, p. t., Lincoln co., Me., 40 m. S.E. Augusta, 15 m. E.S.E. Wiscasset. Taken from the E. part of Bristol. It contains four stores, one fulling-mill, one grist-mill, one saw-mill, seven schools, 250 scholars. Pop. 837.

BRENTFORD, a town of England, co. Middlesex, hund. Ossulton and Elthorne, at the junction of the Brent with the Thames, eight m. W. by S. London. Pop., 1821, 8844; 1841, 37,054: houses at the latter date, 6735. It consists of one long indifferently-built street, on the great W. road from the metropolis: a modern stone bridge connects it with the S. bank of the Thames, and another (built in 1824, on the site of one very ancient) spans the Brent, which divides the town into Old and New Brentford; the former in the parish of Ealing, the latter a distinct parish. The church at Old Brentford is dependant on that of Ealing; that of New Brentford is a chapel of ease to Hanwell: both are modern structures. There are four dissenting chapels, three endowed free schools, and two national schools. A weekly market is held on Tuesdays, and annual fairs 17th May and 12th September. There are flour-mills, a distillery, and an iron-foundry, in the town; the malting business is also carried on to some extent. These employ many of the inhabitants, the market gardens of Ealing employ others; and the traffic arising from its thoroughfare is considerable, and occupies another portion. The Grand Junction canal joins the Brent a little below Hanwell, and its communication is continued by it to the Thames, on which there are several wharfs, between the town and Kew gardens. Ann. value of real prop. in 1838, of Old Brentford and Ealing, £27,463; of New Brentford, £7418. It is the central town of a poor-law union of ten parishes: the average rates of the former are £3126, of the latter £1159; the former has five, the latter two guardians. Brentford is usually considered the co. town, but it has no public hall, nor separate jurisdiction. There is a court of requests for debts under 40s. held during the summer half year in the town; during the other at Uxbridge: its jurisdiction extends over the hundreds of Elthorne and Spellthorne. It is the chief polling town, where the co. members are nominated.

BRENTSVILLE, C. H., p. v., capital of Prince William co., Va., 101 m. N. Richmond, 45 W. It contains the county buildings and several dwellings.

BRENTWOOD, p. t., Rockingham co., N. H., 35 m. S.E. Concord, 485 W. Drained by Exeter r., which affords good water-power. Incorporated in 1742. It contains two stores, one fulling-mill, one cotton-factory with 500 spindles; four saw-mills, four schools, 25 scholars. Pop. 888.

BRESCIA, (an. *Brixia*) a city of Austrian Italy, cap. prov. same name, on the Garza, and near the left bank of the Mella, at the foot of the Alps, on the margin of the great plain of Lombardy, 51 m. E. Milan, and 30 m. N.N.E.

Cremona; lat. 45° 38′ 16″ N., long. 10° 13′ 34″ E. Pop. 35,000. It is surrounded by walls and ramparts, and has a castle on a hill on an eminence within the walls: the streets are broad and straight, and its numerous squares, public buildings, palaces and fountains, give it an air of grandeur and magnificence. It is the seat of a bishopric; and has a fine modern cathedral of white marble, begun in 1604, and finished only in 1825; an elegant modern episcopal palace, and many churches and convents, some of which are said to be ornamented with pictures by the masters of the Venetian school. The Palace of Justice (*Palazzo Publico*), built on the site of an ancient temple, is curious, as exhibiting that incongruous mixture of Gothic and Grecian architecture to be found in so many of the edifices of northern Italy: it has also a fine museum of antiquities, a large theatre, a *monte-de-pietà*, a public library, lyceum, gymnasium, an athenæum, or academy of science and belles-lettres, with numerous hospitals and eleemosynary establishments, and no fewer than 72 public fountains. It is distinguished by its industry and trade. Near it are large iron works, and the arms and cutlery of Brescia have been long reckoned the best in Italy: it has also fabrics of silk, flax, paper, &c., with numerous oil-mills, tanneries, &c. A fair commences annually on the 6th of August; and a large building is constructed outside for the accommodation of those frequenting the fair. Brescia has produced many eminent men, among whom may be specified Tartaglia, Mazzuchelli, Agoni, &c.

This city is very ancient. It is supposed to have been the cap. of the *Cenomani*, and it subsequently became a Roman colony and *municipium*. It was sacked by Attila. Being declared by Otho I. a free city, it was governed for nearly 300 years by its own consuls; but being distracted by the contests of the Guelphs and Ghibellines, it placed itself, in 1426, under the Venetian government. It was taken by the French during the League of Cambray, and having revolted, was retaken by them by storm in 1512, when it was given up to military execution. On this occasion, the Chevalier Bayard, the knight *sans peur et sans reproche*, was severely wounded. It has also been repeatedly laid waste by the plague and small-pox; and was in part destroyed, in 1769, by the explosion of a powder magazine. During the ascendancy of Napoleon, it was the cap. of the dep. of Mella.

The chief interest of the town is derived from its antiquities. During excavations, begun in 1820 and continued till 1826, there was discovered a beautiful temple of white marble, adorned with columns of the Corinthian order: and under the pavement was found a bronze statue of Victory, between 5 and 6 feet high, represented as a very fine specimen of art. (*Rampoldi; Conder's Italy*, ii., 60, &c.)

BRESLAU, the second city of the Prussian dominions, cap. prov. Silesia, and of a regency and circ. of the same name, at the confluence of the small river Ohlau with the Oder; lat. 51° 6′ 30″ N., long. 17° 2′ 18″ E. Pop. (1837) 88,869, of whom about 60,000 were Protestants, 24,000 Catholics, and the remainder Jews, &c. It comprises the old and new towns, with various suburbs, some of them built on islands of the Oder, and united to the body of the town by numerous bridges. Streets in the old town mostly narrow; but those in the newer parts are broad, and the houses good; while the number and magnificence of the squares and public buildings give it an air of splendour. Among the latter may be specified the cathedral, founded in 1148; the church of St. Elizabeth, with a spire of 364 feet (*Murray*) in height; and several other churches; the *ci-devant* convent of the Augustines; the palace, now the government-house, built by Frederick the Great; the archiepiscopal palace, town-house, mint, Catholic gymnasium, theatre, Exchange Buildings, university, barracks, &c. A colossal statue in cast-iron of Marshal Blucher, by Rauch, was erected opposite to the Exchange Buildings in 1827, to commemorate the decisive and important victory gained by the Marshal and the Prussian landwehr under his command over the French under Macdonald, on the Katzbach, in 1813. The university was founded in 1702, and had, in 1834, 920, and, in 1837, 791 students—a decline, we may remark, not peculiar to this, but which extends to all the other Prussian universities. Breslau is the seat of government for the province, has a court of appeal for the latter and for the regency, a supreme council of mines, and other administrative establishments. Besides the university, it has a school of industry, of deaf and dumb, of surgery, one Catholic and three Protestant gymnasiums, a seminary for the instruction of schoolmasters, a school of architecture, a school of arts, and an immense number of inferior schools, a society for the promotion of public utility, &c. The library of the university contains above 130,000 volumes, and there are several smaller collections all open to the public. There are a great number of richly-endowed hospitals and other charitable institutions, among which may be specified one for faithful servants. It has numerous breweries and distilleries (of the latter nearly 100), with manufactures of linen, cotton, wool, and silk; alum, soap, plate, jewellery, &c.; and is the centre of a very extensive commerce, being in some measure the *entrepôt* of the province. Exclusive of its own products, the greater part of the linens, cottons, cloth, &c., manufactured in Silesia, are disposed of at its fairs. Metals from the mines, and timber from the forests in the upper part of the province, are also brought here in large quantities, with flax and hemp, madder, and oxen from the Ukraine and Moldavia. Exclusive of its other fairs, two great fairs for the sale of wool are held annually in June and October. The first of these is the greatest fair of its kind in Germany, the quantity sold being usually about 6,000,000 lbs. During its continuance, the town, owing to the number of persons in the Oriental costume, has a good deal of the appearance of an eastern city. The Bank of Berlin has a branch here. The conveyance of goods to and from Hamburgh by water occupies from 30 to 34 days.

The fortifications with which Breslau was formerly surrounded were demolished by the French. The ramparts have since been levelled, planted, and laid out in public walks; the bastions have been converted into terraces; and the ditch into an ornamental sheet of water, to the great embellishment of the city.

Breslau is the most bustling animated town in the Prussian dominions. The inhabitants are evidently wealthy; and the increasing number of new buildings, ornamented villas, and pleasure grounds in the vicinity, attest its growing prosperity. It is said to be a desirable place to live in. It is salubrious; provisions abundant and cheap; education excellent, and to be had for almost nothing; the people intelligent, frank, and sociable; the literary institutions numerous and easily accessible; and the country round beautiful. The *conditorie* (see BERLIN) are very splendid. Dram-drinking is very prevalent, spirits constituting the principal beverage of the lower classes.

BRESSAY, one of the Shetland islands, which see.

BRESSUIRE, a town of France, dep. Deux Sèvres, cap. arrond., on a hill, at the foot of which is the Dolo; 19 m. N.W. Parthenay. Pop. 1894. It is the seat of a tribunal of primary jurisdiction, and of an agricultural society. It was formerly a fortified town, defended by a castle, destroyed in 1793 when the town was burned to the ground, with the exception of the church and of a single house. (*Hugo*, art. *Deux Sèvres*.)

BREST, a strongly-fortified marit. town of France, dep. Finisterre, cap. arrond. of the same name, occupying the foot and declivity of a steep hill, on the N. side of a spacious bay, near the extremity of the penins. of Brittany; 30 m. N.W. Quimper, 132 m. W.N.W. Rennes, and 314 m. W.S.W. Paris; lat. 48° 23′ 14″ N., long. 4° 28′ 45″ W.; pop. 29,773. Inclusive of its suburb Recouvrance, from which it is separated by the river Penfeld, it is about 3 m. in circuit, and of a triangular shape. Brest proper (situated on the E. as Recouvrance is on the W. side of the river) is naturally divided into the upper and lower town: in the first, which is the most ancient portion, though containing a considerable number of good modern edifices, the streets are irregular, crooked, and narrow, and the houses so unevenly placed, that the gardens of some are on a level with the 5th stories of adjacent ones. In some places the declivity is so rapid, that the road to the lower town is formed by flights of steps. In the lower town many of the streets near the port are well laid out, clean, and healthy; elsewhere they are quite the reverse. Recouvrance, although improved latterly, offers but an unfavourable contrast to Brest. The ramparts which surround the town are planted with trees, and form a pleasant promenade, with fine views towards the harbour. The port, or inner harbour, formed by the mouth of the Penfeld, is lined by good quays adorned with large and handsome stone buildings. It is landlocked, capable of accommodating 50 frigates and other vessels, and is protected by formidable batteries, and by an ancient castle on a rock at its entrance. A large portion of Brest is occupied by marine establishments. It has a noble arsenal established by Louis XIV., excellent docks for building and repairing ships, large rope walks, and various magazines for the stores necessary to the fitting out of a navy, with marine barracks and a hospital. In the upper part of the town is the *Bagne*, a building for the reception of convicts sentenced to the galleys; and the largest edifice of its kind in France. It is 277 yards in length; its centre and extremities are occupied by the various officers having charge of the convicts; the intermediate spaces are separated into four divisions, each capable of lodging 500 men It combines security with salubrity. But despite the severe discipline enforced in this prison, it is said to be *plutôt une école de démoralisation qu'un lieu de punition et d'expiation*. (See the interesting account given by Hugo of this prison, ii., 30.) Among other public buildings are the parish church of St. Louis, with a handsome altar, the town hall, and the theatre. There are several public fountains, one of which

is ornamented with a fine statue. Brest is the seat of a tribunal of original jurisdiction, and the residence of a sub-prefect, a maritime prefect, and other functionaries. It contains two public libraries, a cabinet of natural history, botanic garden, and observatory, schools of naval artillery, navigation, medicine, surgery, and pharmacy, societies of agriculture and emulation, a tribunal of commerce, and an exchange.

The outer harbour or road of Brest, is, without any question, one of the finest in the world. It is of great extent, being capable of accommodating the largest navies, and has deep water throughout. The channel, *Le Goulet*, by which it communicates with the ocean, is only 1805 yards across, defended on either side by very strong batteries; and it is farther strengthened by having a rock in its centre, which obliges ships to pass close under the guns of the batteries. Several small rivers discharge themselves into the outer harbour, by one of which, the Châteaulin, there is an inland communication with Nantes. Brest has some tanneries and manufactures of glazed hats; and a fleet of fishing boats for pilchards, cod, and mackerel. Its commerce is comparatively trifling, and mostly confined to supplying provisions to the marine: there is, however, some trade in grain, fish, salt, &c.; and a fair for cattle, leather, cloths, &c., is held monthly.

This town is affirmed by some authorities to be the *Brivatis Portus* of the Romans; but of this there is considerable doubt. It was of little consequence till it was fortified by a duke of Brittany in the 11th century. It was assigned to the English, in 1372, by John IV., duke of Brittany, and was held by them till 1397. In 1489 it was taken by the French; and was soon after permanently united to the monarchy by the marriage of Charles VIII. with Anne of Brittany. Cardinal Richelieu, being sensible of its great natural advantages for a naval station, began, in 1631, the construction of the fortifications and magazines, which were completed by Vauban, in 1680. In 1694, an English and Dutch force that had attacked Brest, was defeated with great loss. The space included within the fortification was considerably enlarged in 1779. (*Hugo*, art. *Finistère; Guide du Voyageur*, &c., 207, 208.)

BRETEUIL, a town of France, dep. Eure, cap. cant., on the Iton, 16 m. S.W. Evreux. Pop. 1980. The country round abounds in iron mines, the working of which, and the smelting, &c., of the ore, afford abundant employment for the inhabitants.

BRETEUIL, a town of France, dep. Oise, cap. cant., at the source of the Annoy, 16 m. N.E. of Beauvais. Pop. 2414. It is ill built, ill paved, and dirty. There are manufactures of woollen stuffs, paper, and shoes, for the use of the troops and hospitals of Paris. It is very ancient, and was once fortified and had a castle; but few vestiges of the latter or of the fortifications now exist. Its ancient abbey still remains. There are some fine nurseries in the environs. (*Hugo*, art. *Oise; Dict. Géographique.*)

BRETIGNY, a hamlet of France, dep. Eure et Loir, 6 m. S.E. Chartres. It is remarkable for a treaty of peace, concluded between France and England in 1360, which restored John, king of France, to his freedom, lost at the battle of Poitiers, in 1356, when he was made prisoner by the English.

BRETTEN, or BRETHEIM, a town of the grand duchy of Baden, cap. bailiwick, 12 m. E. Carlsruhe. It is remarkable as being the birth-place of the learned and amiable reformer Melancthon. The house where he was born, in 1497, is still to be seen in the market-place, with a statue and an inscription erected to his memory in 1705. This town suffered much during the wars of 1632 and 1689.

BREWER, p. t., Penobscot co., Me., 70 m. E.N.E. Augusta, 665 W. Bounded N.W. by Penobscot river. It lies opposite to Bangor, and partakes in the same facilities for navigation. It was formed from the N. part of Orrington in 1812, and contains four stores, one grist-mill, six saw-mills, one rope-factory, three tanneries, thirteen schools, 741 scholars. Pop. 1736.

BREWER, t., Pike co., Ark. Pop. 284.

BREWSTER, p. t., Barnstable co., Mass., 90 m. S.E. Boston, 16 m. E. by N. Barnstable, 499 W. Situated on Cape Cod bay, and separated from the N. part of Harwich in 1830. It contains four churches, one Congregational, one Unitarian, one Methodist, and one Baptist; seven stores, two grist-mills, three tanneries, six schools, 578 scholars. Pop. 1582.

BRIANCON, a strongly-fortified town of France, dep. Hautes Alpes, cap. arrond., on the Durance, 50 m. E.S.E. Grenoble. Pop. 3455. This is the highest town in France, being nearly 4300 feet above the level of the sea. From its commanding a practicable defile, leading from Piedmont into France, it has always been looked upon as one of the keys of the kingdom on the side of Italy. In consequence no expense has been spared on its fortifications, which are now deemed all but impregnable. They consist principally of strong forts built on the contiguous heights, and which command all the approaches to the town.* The two principal forts, *Trois-Têtes* and *Randouillet*, communicate with each other and with the town by a bridge of a single arch 120 feet (40 metres) in span, thrown over a deep ravine. With the exception of a single street, the town is ill built, gloomy, and dirty. It has a tribunal of primary jurisdiction, and a departmental college; with fabrics of cotton goods, hosiery, steel and cutlery, pencils, &c. (*Hugo*, art. *Hautes Alpes.*)

BRIANSK, a town of Russia, in Europe, gov. Orel, cap. distr., on the Desna, 55 m. W. Orel; lat. 53° 16′ N., long. 34° 24′ E. Pop. 5000. It has numerous churches, a foundry of cannons, tanneries, &c.; and there is in the vicinity a manufactory of arms. The neighbouring forests supply fine timber.

BRIARE, a town of France, dep. Loiret, cap. cant., on the Loire, at the point where it is joined by the canal of Briare, 25 m. S. Montargis. Pop. 2977. The canal, to which the town is indebted for its importance, is the oldest work of the kind in France, having been begun in the reign of Henry IV., though it was not finished till 1740. It establishes, by means of its junction with the canal of Loing at Montargis, a communication between the Loire and the Seine; and consequently conveys the various products of the province watered by the former to Paris. (*Hugo*, art. *Loiret.*)

BRICKSVILLE, p. t., Cuyahoga co., O., 140 m. N.E. Columbus, 333 W. The Ohio canal passes through its N.E. corner. It contains one store, two fulling-mills, one flouring-mill, one grist-mill, five saw-mills, seven schools, 495 schools. Pop. 1194.

BRICQUEBEC, a town of France, dep. La Manche, cap. cant., 8 m. W.S.W. Valognes. Pop. 4414. It has in its environs a copper mine.

BRIDGEHAMPTON, p. v., Southampton town., Suffolk co., N.Y., 54 m. S.S.E. Albany, 283 W. Situated in the S.E. part of Long Island, and contains one church, one store, two wind-mills, and fifteen or twenty dwellings.

BRIDGENORTH, a bor. and town of England, co. Salop, hund. Stottenden, on the Severn, 115 m. N.W. London. Pop. of old bor. in 1821, 4345; in 1841, 5298; but the parl. bor., the limits of which were extended by the Boundary Act, had, in 1841, 16,118. It is divided by the river into the upper and lower towns; the former is built up the acclivities and on the summit of a rock, rising abruptly from the W. bank of the stream to the height of 180 feet. Ranges of detached houses, many of which are handsome modern structures, are built each over the other, so that the roofs of one range are lower than the foundations of the next above it, from the base to the summit of the precipice; with these are intermixed other dwellings, excavated in the rock itself; rude caverns, gardens, and trees. Crowning the summit, at the S. end, is the square, ruined tower of the ancient castle, leaning considerably from the perpendicular; and the church of St. Mary Mag., a handsome structure, with a lofty tower and cupola, built in 1792. At the N. end is the ancient church, St. Leonard, built in 1448. Half way between the two churches is a flat, square reservoir raised on lofty brick columns, and looking at a distance like a handsome portico: to this tank, water is forced by machinery from the river, to supply the upper town. There are several good streets leading from the high street to the churches; and parallel over these are others of a like character. A carriage road winds round the rock, and several flights of almost perpendicular pebbled steps, secured in iron framing, lead up through the rock into the interior of the town. The whole has a singularly picturesque effect, and from the pallisaded wall round the castle hill, extensive and diversified views are commanded over a fertile and romantic district. A handsome stone bridge of six arches connects the lower with the upper town. Its streets have an intermixture of ancient and modern houses. St. Leonard's church is endowed with £600 private benefaction, and £1100 public grant. St. Mary's, formerly the castle chapel, and exempted by King John from all ecclesiastical jurisdiction, is endowed with £900 private, and £1500 public grant: both are curacies in private patronage. The Baptists and Independents have each a chapel. There is a free grammar school, founded in 1503, which educates 10 scholars, and has three exhib. to Christ Church, Oxford; a blue-coat school, in a building over one of the ancient gateways, where 30 boys are clothed, educated, and apprenticed; and a national school, supported by subscription, for 200 boys and 150 girls. The hospital of St. Leonard supports 10 aged widows; and endowed almshouses, with £158 a year, maintain 12 burgesses' widows. The town-hall, in the middle of the principal street, is a spacious old building of timber frame-work and plaster, raised on brick pillars and arches: the corporation meetings and courts are held in it, and the market in the covered area underneath. There is

* According to the *Dict. Géographique*, the town is quite open, not being surrounded with either walls or ditches; whereas, according to Hugo, it has a "*triple enceinte de murs.*"

a jail, built by the corporation in 1823. A neat theatre, built about the same period; and a public library, with a good collection in general literature. The weekly market is held on Saturday; and there are seven annual fairs. There is a carpet manufactory, and another for tobacco pipes, in the town. Its iron trade has declined, but nails are still made to some extent; and vessels are also built for the navigation of the Severn. The greater part of its labouring pop. are employed upon the river. It has a spacious line of quay N. of the bridge, and offers every facility for the transit of goods, so that large quantities of corn, malt, beans, &c., are sent thither from various parts of the country, and it has become a thriving inland port: its retail trade is also very considerable.

Previously to the Municipal Reform Act the government was nominally vested in two bailiffs, twenty-four aldermen, and the whole of the burgesses, whose number (including the former) was 634; but in reality it was a self-electing body of fourteen. Petty sessions for the bor. are held every alternate Monday, and general sessions once a year; but no felonies are tried. A court of Record is held on the same days as the petty sessions, which takes cognisance of actions to any amount; but not more than three a year are entered. The revenue of the corporation, derived from lands and tenements, averages about £656 a year. The tolls of markets and fairs, formerly levied by them, were given up in 1825. They hold the Severn water-works in trust for the benefit of the town, and levy a rate on the inhab. to support them: they are also trustees of an estate, producing £100 a year, for the benefit of the two church ministers.

Bridgenorth has returned two mem. to the H. of C. from the 23d of Edward I. Previously to the Reform Act the elective franchise was vested in the corporation and freemen, of whom there were 634. Parl. constituency, in 1837-38, 745.

Bruges was the ancient name of the borough, from a Saxon bridge over the Severn, which was destroyed to prevent the incursions of the Danes. A new bridge was subsequently erected, 1½ m. N. of the old site; and hence the present name originated. The Earl of Shrewsbury built the walls, in which were six gates, in the reign of Will. II.; the castle was built in that of Henry II., and it has since undergone many sieges. Dr. Percy, bishop of Dromore, was born here in 1728.

BRIDGEPORT, city and p. t., Fairfield co., Ct., 62 m. N.E. New York city, 75 m. S.S.W. Hartford, 17 m. W.S.W. New Haven, 270 W. Separated from Stratford in 1821, incorporated as a city in 1836. It is on the W. side of an arm of Long-island sound, which receives Pequanock river, a considerable mill-stream. The harbour is 80 rods wide at high tide, but not more than 12 at low tide. The tide rises from 7 to 9 feet, and the bar at its mouth has 13 feet of water at high tide. A draw and toll bridge 1236 feet long crosses the harbour, a mile and a half from its mouth. The city is chiefly built on a plain, 12 feet above high water. N.W. of the city the ground gradually rises to the height of 50 feet, called Golden Hill, the summit of which is a plain, with a commanding view of the sound and the surrounding country. The city is neatly built, and contains six churches, two Congregational, one Episcopal, one Methodist, one Baptist, and one Roman Catholic, two banks, over twenty vessels engaged in the coasting trade, and five in the fisheries. It manufactures carriages and saddles extensively for exportation. The Housatonic rail-road commences here, and extends to West Stockbridge, Mass., where it unites with the Boston and Albany rail-road, and another to Hudson, N. Y. It has a daily communication with New York by steam-boats. It contains seventy-three stores, six fulling-mills, one woollen factory, one cotton factory, with 3500 spindles, two tanneries, one rope-walk, two grist-mills, three printing-offices, two weekly newspapers. Total capital in manufactures $436,300; eight academies, 263 students, thirteen schools, 564 scholars. There is a lighthouse on Fairweather island. In 1790 there were 110 inhabitants, in 1840, 4570.

BRIDGEPORT, b., Fayette co., Pa. Incorporated in 1814. Situated on the W. side of Dunlap's creek, at its entrance into Monongahela river. A bridge crosses the creek, and connects it with Brownsville. It contains three churches, six stores, one flouring-mill, two saw-mills, one paper-mill, one pottery, one school, 80 scholars, and 135 dwellings. Pop. 788. The National road passes through the place.

BRIDGEPORT, p. v., Pease t., Belmont co., O., 126 m. E. Columbus, 267 W. Situated on the N.W. side of Ohio river. The National road passes through it, along which the village extends for half a mile. It contains one wholesale and seven or eight retail stores, and four warehouses for the storage of flour and tobacco. It has considerable trade. Pop. about 500.

BRIDGEPORT, p. v., Harrison co., Va., 257 m. N.W. Richmond, 215 W. Situated on Simpson's creek, a branch of the W. Fork of Monongahela river. It contains one church, free to all denominations, one grist-mill, one saw-mill, and twenty dwellings.

BRIDGEPORT, p. v., Seneca Falls t., Seneca co., N. Y., 132 m. W. by N. Albany, 363 W. Situated on Cayuga lake, at the W. end of Cayuga bridge. It contains one store, and twenty or thirty dwellings.

BRIDGETON, p. t., Cumberland co., Me., 63 m. S.W. Augusta, 577 W. Bounded E. by Long pond, from which there is a boatable communication, through Sebago pond and the Oxford and Cumberland canal, to Portland. It contains nine stores, three fulling-mills, five grist-mills, seven saw-mills, four tanneries, one pottery, one academy, 80 students, eighteen schools, 769 scholars. Pop. 1987.

BRIDGETOWN, p. v., port of entry, and capital of Cumberland co., N. J., 68 m. S. by W. Trenton, 179 W. Situated on both sides of Cohansey creek, 20 m. above its entrance into Delaware bay. It contains a brick court-house, a stone jail, and the county offices, on the W. side of the creek. On the E. side are three churches, one Presbyterian, one Methodist, and one Baptist; an academy, a bank, a woollen factory, a grist-mill, an extensive rolling-mill, iron foundry and nail factory, which employ 125 persons, whose wages are $30,000 annually. Thirty schooners and sloops sail from the place. The tonnage of the port in 1840 was 14,171. A draw bridge crosses the creek, from which its name was derived. It was formerly called Cohansey.

BRIDGEVILLE, p. v., Thompson t., Sullivan co., N. Y., 106 m. S.S.W. Albany, 289 W. Situated on the W. side of Neversink river, and contains one store, an extensive tannery, twenty dwellings, and about 125 inhabitants.

BRIDGEWATER, a bor., par., and sea-port of England, co. Somerset, hundred N. Petherton, on the Parret, about 7 m. in a direct line, and 12 m. by water, S. from its embouchure in Bridgewater bay, in the Bristol channel, 28 m. S.S.W. Bristol; lat. 51° 7′ N., long. 2° 59′ W. Pop. (of new bor.), in 1841, 31,778; houses, 6216. The town is situated in a fertile well-wooded plain of considerable extent, having E. the Mendip, and W. the Quantock hills; it is built on both sides the stream, but chiefly on the W., the two parts being connected by a handsome iron bridge of one arch. That on the W. bank has a remarkably neat appearance, the houses (mostly of brick) being well and uniformly built, and the streets spacious, clean, and well paved; the other (Eastover) is inferior in these respects, but has also of late years been much improved; the whole is lighted by gas, and well supplied with water from many fine springs. The church is an ancient Gothic structure, with an embattled tower and lofty spire; there are chapels for Baptists, Friends, Independents, Wesleyans, and Unitarians; a free grammar school (founded by Elizabeth in 1561), and two other endowed schools (founded, one in 1723, the other 1781), each of which educates about thirty children; almshouses, with an endowment of about £18 a year; and an infirmary, established 1813, and supported by subscription. The judge's mansion is a handsome modern edifice, in which the courts of justice are held; the market-house is also a good recent building, with a dome and Ionic portico. There is a spacious quay, accessible to vessels of 200 tons; but the entrance to the harbour is difficult, and should not be attempted without a pilot. The tide in the river frequently rises to a great height, rushing forward with a perpendicular front and with extraordinary velocity. (*Norie's Direct. for the Bristol channel.*) There are three weekly markets: Tuesday, for vegetables; Thursday, corn and cattle; Saturday, general provisions. Fairs are annually held on the first Monday in Lent, July 24, Oct. 2, (the principal one), and Dec. 27; they are for linen and woollen goods, cattle, and general merchandise. The imports from foreign parts consist chiefly of wines, hemp, tallow, and timber: customs duties in 1835, £6734 9*s.* 6*d.*; in 1836, £8389 3*s.* 9*d.* The imports, coastwise, consist of groceries, general merchandise, and coals; the exports, of agricultural produce. The Taunton and Bridgewater canal connects the two places. Considerable quantities of Welsh coal are conveyed by it inland, and the agricultural produce of the fertile district round Taunton, brought for shipment to Bristol and other ports. On the 1st of Jan., 1836, there belonged to the port 51 vessels, of the burden of 3511 tons. A great quantity of bricks are made in the vicinity, both common and of a peculiar kind, and large size, resembling Bathstone. The town is on the line of the Bristol and Exeter railway; it is divided into two wards (the N. and S.), and governed by a mayor, six aldermen, and eighteen councillors. Courts of pleas and of petty sessions are held every Monday, and of general sessions quarterly, for the bor. The general quarter sessions for the co., in summer, and the co. assizes, once in two years, are also held in the town; at such times its jail is usually crowded, otherwise it has few prisoners. It has sent two mem. to the H. of C. since the 23d Edw. I.; the right of election, previously to the Reform Act, being in the inhabitants paying scot and lot, and having

resided in the town for a certain period; the number was about 400: number of registered electors, in 1838, 567. In 1836, the number of houses rated at £10 and above, was 730; the rated property of the bor. was £5602, at one third of the annual value The revenues of the corporation are derived from market and fair dues, tithes and rents, and average about £936 a year. The living is a vicarage, united with the rectory of Chilton Trinity, and in the gift of the crown. Bridgewater is a polling place for the E. division of Somerset, and the central town of a union under the Poor-Law Amendment Act. The poor-rates levied in the bor. in 1836 amounted to £9672 8s.

The town derives its name from Walter de Douay, to whom it was granted by William I., and is spelt "Burg" and "Brugge" Walter, in the old records. In the great civil war it sided with the king, and being well fortified and provisioned, was the depository of much valuable property, sent thither for security; all of which, together with 1000 prisoners, fell into the hands of Fairfax, after an obstinate resistance. The ill-fated duke of Monmouth was proclaimed king at Bridgewater, previously to his defeat and capture at the battle of Sedgemoor. The famous admiral Blake, one of the greatest of the naval heroes of England, was a native of this town, having been born here in 1599.

Bridgewater, p. t., Grafton co., N. H., 37 m. N.N.W. Concord, 516 W. Originally a part of New Chester, first settled in 1766, incorporated in 1788. Bounded W. by Newfound lake, and E. by Pemigewasset river. It contains three churches, one Congregational, one Baptist, and one Freewill Baptist; one fulling-mill, one grist-mill, two saw-mills, seven schools, 260 scholars. Pop. 747.

Bridgewater, p. t., Windsor co., Vt., 78 m. S. Montpelier, 458 W. Queechy river and its branches afford water-power. An inexhaustible quarry of steatite, or soapstone, is extensively wrought and exported. Iron ore is also found. Chartered in 1761, first settled in 1780, organized in 1785. It contains two churches, one Congregational, and one common to several denominations, three stores, three fulling-mills, three woollen-factories, one grist-mill, six saw-mills, two tanneries, fifteen schools, 435 scholars. Pop. 1363.

Bridgewater, p. t., Plymouth co., Mass., 25 m. S. by E. Boston, 18 m. N.W. Plymouth, 433 W. Watered by branches of Taunton river. It contains three churches, one Congregational, one Unitarian, and one Baptist, three stores, three furnaces, one paper-mill, two saw-mills, one academy, 45 students, thirteen schools, 577 scholars. Pop. 2131.

Bridgewater, p. t., Oneida co., N. Y., 81 m. W. by N. Albany, 15 m. S. Utica, 370 W. Drained by Unadilla river and its branches. It contains three stores, one grist mill, five saw-mills, ten schools, 437 scholars. Pop. 1418. The village on the W. side of Unadilla river, in the S. part of the town, contains one Presbyterian church, an academy, fifty dwellings, and about 350 inhabitants.

Bridgewater, t., Somerset co., N. J. Bounded S. by Raritan river, by the N. branch of which it is drained. It contains sixteen stores, three fulling-mills, three woollen factories, five grist-mills, two saw-mills, five tanneries, one distillery, two printing-offices, two weekly newspapers. Pop. 2983.

Bridgewater, t., Susquehannah co., Pa. Drained by branches of Wyalusing creek. It contains the village of Montrose, the capital of the co. It has fourteen schools, 660 scholars. Pop. 2082.

Bridgewater, b., Brighton t., Beaver co., Pa. Situated on the W. side of Beaver river, near its entrance into the Ohio. A bridge here crosses Beaver river, 600 feet long, which cost $22,000. It contains five stores, an iron foundry, saw-mill, brewery, salt works, and various manufacturing establishments, two schools, 120 scholars. Pop. 634.

Bridgewater, t., Williams co., O. Pop. 110.

Bridgewater, t., Washtenaw co., Mich. Drained by the N. branch of Raisin river. It contains one flouring-mill, and two saw-mills.

BRIDLINGTON, a market to. of England, E. riding co. York, 176 m. N. London, 37 m. E.N.E. York, 24 m. N. by E. Hull, and 5 m. W. Flamborough Head. Pop. in 1841, including Bridlington Quay, 13,059. The town, which is about a mile from the sea-coast, consists of one long street, with some smaller streets narrow and irregularly built. A priory, erected in the early part of the reign of Henry I., at the E. end of the town, is, though much decayed, a venerable and magnificent specimen of the old English church architecture. It was endowed with very large estates: its last prior being convicted of high treason, was executed in 1537. A part of it, used as the parish church, accommodates above 1900 persons. The other places of worship are those of the Wesleyan and Primitive Methodists, Baptists, Independents, Presbyterians, and Quakers. The schools are, a free grammar school, founded in 1637; two large national schools, an infants' school, and a school of industry, founded in 1781, to instruct poor children in carding, knitting, and wool spinning. A detached building, which formed part of the priory, is used for a town hall and prison. Besides a brisk retail trade, an extensive corn trade is carried on. The business is transacted in the Exchange, a neat commodious building. Hats are also manufactured here, and in the neighbourhood are several wind and water mills, and a steam mill for grinding bones. The malt trade, which was formerly very extensive, is much fallen off. Markets are held on Saturdays, and a cattle market every fortnight; fairs on the Monday before Whitsunday, and Oct. 21. Bridlington is a station for receiving votes at elections for the E. riding. The banks are, a branch of the York Union, and a private banking-house. Bridlington Quay is a neat village, about a mile from Bridlington. Its principal street, which is very broad, leads directly to the harbour, where there is excellent anchorage; it is defended by two batteries. Here are hot and cold baths, and a chalybeate spring, whose medical properties are highly esteemed. An ebbing and flowing spring, discovered in 1811, supplies the inhabitants with abundance of excellent water. The port is a member of that of Hull, and has a neat custom-house on the quay. It is much frequented in summer by visiters for sea bathing. (*Allen's Hist. of Yorkshire; Thompson's Bridlington, &c.*)

BRIDPORT, a bor. and sea-port of England, co. Dorset, hund. Bridport, 127 m. W.S.W. London, in a fertile vale encircled by hills, between the Brit and Asher, which are crossed by several bridges, and unite a short distance below the town. It consists chiefly of three main streets, well lighted and paved, with many handsome modern houses on either side. The church is a cruciform structure of the later Gothic, with an embattled and pinnacled tower in the centre. The Friends, Independents, Wesleyans, and Unitarians, have each chapels. The town-hall (where the council meet, and the borough sessions are held) is a handsome modern edifice in the centre of the place; there is also an endowed free school, founded in 1708, and an almshouse, founded in 1696. Pop. in 1821, 3742; in 1831, 4242: houses at the latter period, 678: this, however, refers to the *old* bor., which was only co-extensive with the parish, an area of about 90 acres. Its present boundaries include portions of six other parishes, and an area of 250 acres. Pop. in 1841, 16,695; inhabited houses, 3262. Its pier harbour (about 1 m. S. of the town, between Lyme and Portland) is safe and commodious, though rather shallow. An act, passed in 1722 (for restoring its piers, and forming a sluice) was carried into effect in 1742, the corporation being trustee. In 1822 another act passed, by which other persons were joined with them in the trust, and the harbour was then materially improved and enlarged, at an expense of nearly £20,000, and is now suitable for vessels of 200 tons; since which the increase of its trade has been progressive. In 1832 it was made independent of Lyme, within whose jurisdiction it had previously been, and established as a bonding port: between twenty and thirty vessels, averaging about 100 tons, belong to it; and several fine coasting smacks are built here. The manufactures are—twine, lines, and fishing-nets, for the home and colonial fisheries, and sailcloth and shoe-thread: these employ several hundred persons. The exports consist chiefly of those manufactures, and of butter and cheese, the produce of the neighbourhood. The imports comprise hemp, flax, and deals, from the Baltic; tallow, skins, coal, culm, slate, wines, spirits, and groceries, coastwise. There are two weekly markets (Wednesday and Saturday), and three fairs (April 6, Holy Thursday, and Oct. 10), chiefly for horses, cattle, and cheese. The bor. is divided into two wards, and governed by a mayor, six aldermen, and eighteen councillors: the revenue of the corporation (derived from market dues and rents) averages about £250 a year. It has sent two mem. to the H. of C. since 23 Edw. I. Previously to the Reform Act the right of election was vested in the householders paying scot and lot, the number of voters being nearly 300. In 1837–38 it had 505 registered electors. Bridport was a borough during the Saxon period: at the Domesday survey it had 100 houses, a mint, and an ecclesiastical establishment. Its staple manufacture is of remote origin; Camden notices a special law of Henry VIII.'s reign, by which the navy was to be exclusively supplied with cordage made at Bridport; and Gibson, in a note on the passage, speaks of the failure of an attempt in his day to form a harbour. (*Gibs. Ed. Brit.* 170.) It confers the title of viscount on the Hood family; the living is a rectory in private patronage.

BRIDPORT, p. t., Addison co., Vt., 79 m. S.W. Montpelier, 8 m. W. by S. Middlebury, 475 W. Bounded W. by lake Champlain, on which are several landing places. Crown Point, N. Y., lies opposite its N. part, chartered in 1761, first settled in 1768, organized in 1784. It contains

three churches, one Congregational, one Baptist, and one Methodist, six stores, one fulling-mill, one grist-mill, three saw-mills, eleven schools, 300 scholars. Pop. 1490.

BRIE-COMTE'-ROBERT, a town of France, dép. Seine et Marne, cap. cant., near the Yères, 10 m. N.N.W. Melun. Pop. 2725. It was built by Robert of France, count of Dreux, to whom his brother Louis VII. gave the lordship of Brie. Its old feudal castle has been demolished. The parish church, founded in the 13th century, is remarkable for the height of its tower. The Hôtel Dieu is nearly of the same age as the church. (*Hugo*, art. *Seine et Marne.*)

BRIEG, a fortified town of the Prussian states, prov. Silesia, cap. circ., on the Oder, about half way between Breslau and Oppeln. Pop. 11,500. It is situated on an elevated bank of the river, over which it has a wooden bridge, and is well built and thriving. Principal public buildings, a gymnasium, formerly a university, to which is attached a good library, a lunatic asylum, with several churches and hospitals. It has extensive manufactures of linens, woollens, cottons, hats, &c., and carries on a considerable trade.

BRIEL or BRIELLE, a fortified sea-port town of the Netherlands, prov. S. Holland, cap. arrond., on the N. shore of the island of Voorn, near the mouth of the Maese, 13 m. W. Rotterdam; lat. 51° 54′ 11″ N., long. 4° 9′ 51″ E. Pop. 4200. It is a handsome well-built town; is strongly fortified; has a good harbour, a tribunal of primary jurisdiction, and sends a deputy to the states of the province.

The Briel is remarkable in Dutch history for being the place where the first foundation of the republic may be said to have been laid. The exiles from the Netherlands, who had taken refuge in England from the persecutions of the Duke of Alva, were ordered by Queen Elizabeth, in consequence of the urgent representations of Alva, to leave this kingdom. Being thus driven to despair, they assembled a small fleet at Dover, under the command of William de Lumey, Count de la Marck, and resolved, if possible, to get possession of some place of strength in their native country. Their original intention was to make an attempt on Enchuysen; but the wind being unfavourable, they cast anchor before Briel, of which they took possession on the 1st of April, 1572. Thus was struck the first blow in that apparently most unequal and long-continued struggle between Holland and Spain, that ended in the independence of the former; a struggle which, whether we consider the sacrifices and perseverance of the weaker party, or the beneficial consequences of their success, is, perhaps, the most extraordinary and important of which history has preserved any account. (For an account of the capture of Briel, see *Watson's Philip II.*, i., p. 427, 8vo ed.)

Briel was the birth-place of the heroic Admiral Van Tromp, who fell in an engagement with the English, under Blake, off the Texel, on the 8th of Aug., 1653.

BRIENNE-LE-CHATEAU, a town of France, dép. Aube, cap. cant., on the great road from Paris to Chaumont, 15 m. N.W. Bar-sur-Aube. Pop. 2002. The town has a fine castle, erected a short while previously to the Revolution, by the minister Lomenie de Brienne. It stands on an artificial plateau, and commands an extensive view. But the place derives almost its entire celebrity from its connexion with the imperishable name of Napoleon. The great captain received the first rudiments of his warlike education in a military academy that formerly existed in this town, but which was suppressed in 1790; and here, in 1814, in an engagement with the Russians and Prussians, he was in imminent danger. (*Hugo*, art. *Aube*, &c.)

BRIER CREEK, p. t., Columbia co., Pa., 94 m. N. Harrisburg, 205 W. Pop. 1905.

BRIEUC (ST.), a sea-port town of France, dép. Côtes-du-Nord, of which it is the capital, on the Gouet, near its embouchure in the bay of St. Brieuc, 38 m. W.S.W. St Malo; lat. 48° 31′ 2″ N., long. 2° 43′ 55″ E. Pop. 11,382. Its port, at the mouth of the river at the village of Ligoué, has a handsome quay, and a commodious harbour, accessible to vessels of 350 tons. The town is pretty well built. The cathedral, a Gothic edifice, was begun in 1220, and finished in 1234; there are, also, a hôtel de ville, a hospital on a large scale, a work-house, a theatre, &c. The bridge over the river is a handsome stone structure of three arches. There are some good squares and fine promenades. St. Brieuc is the seat of a bishopric, and of tribunals of primary jurisdiction and commerce; and it has a departmental college, a diocesan seminary with 160 pupils, a school of arts, and a public library with 24,000 volumes. There are in the town fabrics of linen, serge, flannel, paper, &c., with tanneries and breweries. The inhabitants used to employ a considerable number of ships in the whale and cod fisheries, particularly the latter. In 1698, for example, they had engaged in the cod-fishery 47 ships, of the burden of 6090 tons, manned by 2610 seamen, who brought home 4,669,200 kilog. of cod, &c., worth 1,845,405 fr. But it would seem, from the statements of Hugo, that in the interval between 1698 and 1833, this important business had very rapidly declined, and we have not learned whether it has since recovered. The coast fishery is still carried on to a considerable extent. Horse races were established here in 1807, and are kept up with great spirit. (*Hugo*, art. *Côtes-du-Nord.*)

BRIGHTON, formerly BRIGHTHELMSTONE, a markt. town of England, co. Sussex, rape Lewes, hund. *Wellsbourne*, vulg. *Whalesbone*, 47 m. S. London. This modern *Baie* is situated on the coast of the British channel, between Beachy Head and Selsey Bill. Pop. in 1821, 24,429; in 1841, 46,742: houses, in 1841, 8131. It is of an irregular shape, and is built along the shore, on the sides of a gentle valley, the centre of which, the *Steine*, forms a long slip of land, lying N. and S. The only buildings in this valley, which divides the town into the E. and W. portions, are the palace, and St. Peter's church, recently built. The whole of the town E. of the Steine, has been built within the last sixty or seventy years. Along the cliffs, which in this part rise high above the sea, has been formed the finest marine promenade in the world. A wall of immense thickness (at the foundation 30 ft. wide), and from 60 to 70 ft. high, formed of concrete, protects a fine pavement, and a road upwards of 100 feet in width. From the extreme entrance of the town at the E., this splendid marine drive and promenade is occupied to the Steine by large mansions, and lodging-houses of the first description. Along this line is situated Kemp Town, and its squares, a splendid range, forming three sides of a quadrangle, and having a row of houses, of similar architectural character, diverging from either extremity: the spacious area in front is laid out in walks, &c., and has an arched passage communicating with the beach, the crescent, and various spacious streets, opening from the line of cliff to the northward. West of the Steine is the old town, consisting principally of old and irregular buildings. Many of these have, however, been pulled down, and on the sites of some of them, a new market was constructed in 1829, and a town hall in 1831; but the hall, though large, and making a good appearance externally, is in bad taste and ill contrived within. In every direction around the old town (excepting of course the sea side), new streets and squares have been erected; particularly along the line of cliff, called the King's Road, to Hove, where, facing the sea, but adjoining Brighton, a fine range, called Brunswick Terrace and Square, has been built. The cliffs, in this part of the town, rise only a few feet above the highest part of the beach: in their front is a fine promenade, and, below this, a level space of green sward reaching down to within a very short distance of the sea. On the Lewes road are, Hanover Crescent, Richmond Terrace, and the Grand Parade on the London road, York and St. George's places, and many structures in the cottage style. The royal palace, called the Pavilion, was begun by George IV. when Prince of Wales, in 1784, and finally completed in 1827; it is in the oriental style, and copied from the Kremlin at Moscow; its stone front extends 200 feet; it has a circular building in the centre, surmounted by a pillared dome. The Chapel Royal is on the W., and behind is a circular range of stables in the Arabian style, lighted by a glass dome: it is excluded from the view of the sea by the buildings of Castle Square; and little can be said in favour of the taste displayed in its erection. The old church is a spacious structure, partly in the ornamented and partly in the later Gothic style, with a square tower; it crowns a hill 150 feet above the sea, and serves as a landmark for vessels. St. Peter's church, serving as a chapel of ease to the last, an elegant Gothic structure, built in 1827, at the public expense, has upwards of 1100 free sittings. Besides these, and the Royal chapel, there are seven others connected with the established worship, three occupied by Independents, two by Particular Baptists; a Catholic chapel, a new and elegant building in Upper St. James' street, containing a fine specimen of sculpture from the chisel of Mr. Carew; and chapels for the Scotch Seceders, Friends, and Wesleyan and Whitfield Methodists: there is also a Jewish synagogue. There are numerous free schools, supported by subscription or endowments, of which the principal are, the Blue-coat schools, one for clothing and educating boys, and one for girls; a government school for the children of fishermen; the Union school, supported by the various dissenting sects; with orphan, national, and infant schools. The County Hospital, a large and well supported establishment, is contiguous to the town. There are baths of all kinds, constructed with the utmost regard to comfort and convenience, as well as numerous bathing machines, and a spa, about half a mile W. of the town, where there is a chalybeate spring, in considerable repute; the building is in the cottage style.

The German Spa is delightfully situated in a valley facing the sea, at the foot of the Row Hill. It was established in 1826, for the preparation of artificial mineral waters, in imitation of the natural springs at Carlsbad, Ems, Marienbad, Pyrmont, &c.

Six almshouses for decayed widows were erected in 1795, on the Lewes road, opposite the Royal gardens, by two sisters, of the name of Percy.

Every class of visiters finds suitable accommodations here, in furnished lodgings, inns, and hotels; of all which there is every variety, from those of the most superb and expensive character, to the plainest and most economical. The theatre is small and ill-contrived; but the public assembly rooms, at the Old Ship hotel, are fitted up in the most splendid style. The Royal gardens, N. of the town, are devoted to various amusements, and comprise a good cricket-ground. On the Downs is a well kept course, where annual races are held the first week of August. There are many fine promenades; among them, a very favourite one is the suspension chain pier, constructed in 1821, at an expense of £30,000: the pier head is 60 ft. by 20, and has seats and awnings, as well as tiers of galleries and flights of steps, to facilitate landing and embarkation at different states of the tide; the pier itself is 1200 ft. in length by 14 ft. in width; and an esplanade of the same length, 40 ft. wide connects it with the Steine. The principal market-day is Thursday, but there is a daily supply. Fairs held, one on Holy Thursday, and one on the 4th September. The chief trade of the place is fishing, in which nearly 150 boats are employed. The mackerel season begins in April, the herring season in October; besides which, turbot, soles, skate, &c., are caught in considerable quantities, and supply the London markets, as well as those of the place. A portion of the inhabitants are also employed in making nets and tackle for the fishery, of materials supplied from Bridport. Coasting vessels occasionally discharge coals and light goods on the beach; several steamers ply between this place and Dieppe, which is 21 leagues S. E., and a much nearer and pleasanter route to Paris (*viâ* Rouen) than that by Calais. A railway to the metropolis and Shoreham is commenced. At present many daily coaches ply between Brighton and London. The Reform Act conferred on Brighton the privilege of returning two members to the H. of C.: parl. constit., in 1836, 2091. The parochial affairs are managed by directors and guardians, and the affairs of the town, lighting, &c., by commissioners; but the principal conservator of the peace is the high constable. Magistrates of the county holding sittings at the Town Hall every day, and petty sessions every Monday and Thursday.

Brighton is by some considered to be the spot where Cæsar landed; a notion for which there is no good foundation, and which probably originated in the numerous Roman remains, coins, &c., found in the vicinity. For some centuries it was a mere fishing village, and was frequently attacked and plundered by the French; to prevent which, Hen. VIII. erected some fortifications, which were strengthened and extended by Eliz. In 1665, and again in 1669, irruptions of the sea destroyed a large part of the town, and inundated an extensive tract adjoining; again, in the years 1703–5–6, the fortifications were undermined, and the place threatened with total destruction. In the reign of Geo. II. Brighton first came into some repute as a sea-bathing place, through the writings of Dr. Russell, an eminent physician of that day. In 1760 the chalybeate spring was observed, which tended to increase its growing popularity. No doubt, however, it is principally indebted for its rapid rise, and for the high rank it has long continued to hold among watering and fashionable places, to the zealous and continued patronage of Geo. IV. when Prince of Wales, and when regent and sovereign. It has nearly quadrupled its population in the course of the present century; and the advantages it enjoys in its situation, and in its being the nearest port on the S. coast to London, may, perhaps, insure its prosperity, even though it should cease to be an object of royal favour.

Brighton, p. t., Somerset co., Me., 57 m. N. Augusta, 652 W. Organized in 1816. Drained by a branch of Kenebec river. It contains one store, two grist-mills, two saw-mills, seven schools, 380 scholars. Pop. 803.

Brighton, p. t., Middlesex co., Mass., 5 m. W. Boston, 433 W. Charles river bounds it on the N. and E. It is highly cultivated and has many fine country seats. It is the greatest cattle market in the country. Neat cattle, sheep, and swine, have been sold here to the amount of $2,449,231 in a year. It contains one Congregational and one Unitarian church, twelve stores, one academy 48 students, four schools 200 scholars. Pop. 1425.

Brighton, t., Essex co., Vt. It contains two saw-mills, three schools, 45 scholars. Pop. 157.

Brighton, p. t., Monroe co., N. Y., 217 m. W. by N. Albany, 3 m. E. Rochester, 366 W. Watered by Genesee river. It contains two powder-mills, two saw-mills, fifteen schools, 618 scholars. Pop. 2336. The village on the Erie canal, has one Presbyterian church, one store, thirty dwellings and about two hundred inhabitants.

Brighton, p. v., Beaver co., Pa., 231 m. W. by N. Harrisburg, 257 W. Situated on the W. side of Big Beaver river, over which is a bridge 500 feet long, connecting it with New Brighton, on the E. It possesses a great water-power. It contains one church, two stores, one flouring-mill, one cotton factory with 1200 spindles; one paper-mill, one school, 25 scholars. Pop. 321. In the township are three saw-mills, one pottery, seven schools, 220 scholars. Pop. 902.

Brighton, p. t., Lorain co., O., 105 m. N. by E. Columbus, 374 W. It contains three schools, 52 scholars. Pop. 299.

Brighton, p. t., Livingston co., Mich., 42 m. N.W. Detroit, 551 W. Drained by branches of Huron river. It contains four stores, one saw-mill, five schools, 157 scholars. Pop. 786.

Brighton, p. v., Macoupin co., Ill., 12 m. N. Alton, 71 S. by W. Springfield, 814 W. It contains two stores, one castor-oil factory, and twelve or fifteen families.

BRIGNOLLES, a town of France, dép. Var, cap. arrond., on the Carami, 22 m. N.N.E. Toulon. Pop. 5952. It is neat and well built, and is finely situated in a fertile basin, surrounded with high wooded hills. Its principal ornament is its magnificent public fountain, in the square Carami. It has a tribunal of primary jurisdiction, a primary normal school, a secondary ecclesiastical school, a public library, a society of agriculture, &c., with filatures of silk, fabrics of wine, candles, and tanneries. A considerable trade is carried on in olive-oil, wine, liqueurs, brandy, and excellent prunes, known by the name of *brignolles*. (*Hugo*. art. *Var; Dict. Géog.*)

BRILLON, a town of the Prussian States, prov. Westphalia, reg. Arnsberg, cap. circ., 24 m. S.E. Soest. Pop. 3301. It has two churches, a college, a hospital and fabrics of linen and brass. In the environs are mines of silver, lead, and calamine.

Brimfield, p. t., Hampden co., Mass., 68 m. W. by S. Boston, 19 m. E. by N. Springfield, 378 W. Watered by Chicopee and Quinebaug rivers. It contains three stores, one cotton-factory, with 1322 spindles; eleven schools, 300 scholars. Pop. 1419.

Brimfield, p. t., Portage co., O., 150 m. N.E. Columbus, 10 S.W. Ravenna. It has eight schools, 212 scholars. Pop. 1153.

BRINDISI (an. *Brundusium*), a sea-port and city of Naples, prov. Terra d'Otranta, cap. distr., at the bottom of a bay between capes Cavallo and Gollo; lat. 40° 37′ 50″ N., long. 17° 58′ 32″ E. Pop. 8500. (*Rampoldi.*) In antiquity this was one of the most important cities of Italy, and was the port whence the intercourse between Italy and Greece, and the East, was usually carried on. It owed this distinction as much to the excellence of its harbour as to its situation: but in modern times it is sadly changed for the worse. It is still of great extent within the walls; but the inhabited houses do not occupy above half the enclosure. The streets are crooked and rough, and the houses poor and in disrepair. With the exception of the citadel, a large heavy-looking cathedral, and a few remains of antiquity, there is nothing in it that deserves attention. This melancholy change has been produced by the nearly total loss of the inner harbour. This, which encompasses the city on two of its sides and is deep and capacious, was united to the outer harbour, or bay, by a narrow entrance, like that leading to Portsmouth harbour or the Havana. Unfortunately however, this entrance having been nearly shut up, the inner harbour was in consequence rendered inaccessible to all but the smallest vessels, and in summer became fetid and unhealthy. Julius Cæsar, who attempted to block up Pompey's fleet that had rendezvoused in the inner harbour, by running mounds into its outlets, may be said to have commenced the ruin of Brindisi, which was completed in the 15th century by a prince of Taranto, who sunk vessels filled with earth and stones in the passage left open by Cæsar! The destruction that was thus brought on the town and its offsets roused at length the attention of the Neapolitan gov., by whom a vigorous effort was made in 1776 to obviate the cause of the mischief, by cutting a new channel between the two harbours. But owing, as it would seem, to some defect in the plan, the project has only partially succeeded; the new channel soon filled up, and the entrance to the inner harbour became nearly as much encumbered as before. The canal is now, however, kept open by dredging and otherwise to the depth of 10 or 12 palmi, so that vessels of this draught of water may enter the inner port. The outer harbour, or bay, is deep and capacious, and has good anchoring ground. It is partially protected by an island, on which a fort is built; but it is exposed to the easterly gales, which throw in a heavy sea. (*Swinburn's Two Sicilies*, i., 384, 4to ed.; *Craven's Naples*, p. 148; *Rivera, Considerazioni sui mezzi da Restituire il Regno delle due Sicilie*, i., 242, &c.)

BRINON-L'ARCHEVEQUE, a town of France, dép. Yonne, cap. cant., near the canal of Burgundy, 10 m. E.

Joigny. Pop. 2460. It has fabrics of coarse cloth, and tanneries; and carries on a considerable trade in corn and linen, and in the forwarding of timber by the canal for Paris.

BRIOUDE, a town of France, dép. Haute Loire, cap. arrond., in a vast plain near the Allier, 30 m. N.W. Puy. Pop. 5247. It is old, ill-built, and dirty. Its most remarkable edifices are the college, situated on a hill, and commanding a fine view, and the church of St. Julian, a venerable Gothic fabric, founded in the 9th century. Besides the college, it is the seat of a court of primary jurisdiction, and has a small public library, and a society of agriculture. Brioude was the birth-place of the Marquis de Lafayette, who acted so conspicuous a part in the American and French revolutions. At Old Brioude, about 3 m. S.S.E. of Brioude, is a bridge over the Allier, built in 1454, consisting of a single arch 182 ft. in span. (*Hugo*, art. *Haute Loire*; *Dict. Géographique.*)

BRISACH (NEW), a fortified town of France, dép. Haut Rhin, cap. cant., near the left bank of the Rhine, opposite to old Brisach, 9 m. S.E. Colmar. It was built in 1690 by Louis XIV., and fortified by Vauban. It is a regular octagon, and is regarded as one of the finest works constructed by that celebrated engineer. The streets all terminate in a *place* in the centre, and the houses are all of the same height. It is of no importance except as a fortification. Hugo says he passed through it in 1828, and that two of its gates were then shut up; that most of its houses were deserted, and that the grass grew in the streets. (*Hugo*, art. *Haut Rhin.*)

BRISIGHELLA, a town of the Papal States, leg. Ravenna, on the Lamone, 27 m. S.W. Ravenna. Pop. 3000. It has an extensive trade in silk.

BRISTOL, a city, co., and sea-port of England, at the confluence of the Avon and Frome, 8 m. N.W. of the embouchure of the former, in the Bristol Channel, and 106 m. W. London. Lat. 51° 27′ 6″ N., long. 2° 35′ 28″ W. Pop. of city and suburbs (inclusive of Clifton and the parish of Bedminster, on the S. side of the Avon, co. Somerset), in 1821, 95,758; in 1831, 117,016: but certain portions of the suburbs are excluded from the limits of the existing parl. bor. as fixed by the boundary act, the pop. of which, in 1832, was 104,338. This city extends over 6 or 7 distinct hills and their intermediate valleys, amidst a picturesque and fertile district. In the older portion, forming the nucleus of the modern city, the houses were mostly of wood and plaster, with projecting upper stories over narrow streets; but these are now greatly diminished; in other parts the streets and squares are spacious, and the greater number of the houses well-built modern structures. Those of Kingsdown, St. Michael's, and Clifton hills, on the N. and W., rise with their terraces and gardens each above the other, like an amphitheatre: Redcliffe, on the S., has narrow streets and densely crowded houses, resembling those of the older part of the city: Bedminster is mostly occupied by small modern tenements for the working classes and tan-yards. The whole city is well paved and sewered, and is lighted with coal gas, supplied by two public companies. There is an adequate supply of water conducted by pipes to several public conduits and public pumps. There are twenty-five churches of the established worship, among which are some fine specimens of the ancient Gothic; others are handsome modern structures. Of the former may be noticed the cathedral in College Green, of the age of Stephen, and anciently part of the abbey of St. Augustine; St. Mary's, Redcliffe, crowning the summit of that hill; and St. Stephen's, with its once richly decorated tower. The dissenters of various denominations have thirty-six places of worship, and form a very numerous and important part of the community. There are twelve endowed charity schools: the free grammar-school, founded in 1532, which has several exhibitions, and two fellowships, each of £30 a year, in St. John's, Oxford: Elizabeth's Hospital, founded in 1586, whose endowments produce above £4000 a year, now managed by the charity trustees appointed by the Lord Chancellor; the Redcliffe free grammar school, founded in the 13th of Eliz.; Colston's, in 1708, for the maintenance, clothing, and education of 100 boys; and 8 others. In the whole, above 200 boys and 40 girls are wholly maintained, educated, and apprenticed; 90 boys and 88 girls clothed and educated; and 148 educated only. Besides these, there are (1839) 35 other schools, supported either wholly or partially by benefactions and public subscriptions, in which upwards of 3000 children are educated, and upwards of 10,000 receive instruction in the Sunday schools of the various sects. Of the endowed charitable institutions, the principal are, the Trinity almshouse, with a chapel annexed; its endowments produce £700 a year; it maintains 10 old men, and 36 women: Foster's ditto, with a chapel, has £530 a year, and maintains 14 old people; and the Temple Hospital, founded in 1613, has £609 18s. a year, and maintains 24 old people: the Merchants' almshouses, founded in 4th Eliz. for 31 old sailors and their widows: Colston's, in 1696, has £300 a year, and maintains 24 old men and women: Ridley's, in 1716, has £155 a year, and maintains 10 decayed single persons: Blanchard's, in 1722, has £95 a year, and maintains 5 aged people: there are several others of minor importance. Endowed charities, to the amount of about £23,000 a year, are distributed as follows: £6000 lent in various sums for various terms without interest, to tradesmen; £9000 distributed among the poor; £1000 to the endowed hospitals, and £7000 among the endowed schools. The other charitable institutions are the Bristol infirmary, established in 1735; it is capable of accommodating 200 patients, and has, at an annual average, 1600 *in* and 5000 *out* patients: it is supported partly by its own funded property, and partly by subscriptions and donations: the General Hospital, a smaller establishment than the former, and partly on a self-supporting principle: the Dispensary, which gives medical relief to about 3000 poor annually at their own dwellings; it has two stations. There are also an asylum for the blind, another for orphan girls, a female penitentiary, and between 40 and 50 other charitable societies, which distribute, in various ways, from £12,000 to £15,000 annually. The principal public buildings are—the guildhall, an old structure of the reign of Richard II., with a modern front: the council-house, built in 1827: the jail, a large, well-arranged structure, built in 1820: the bridewell, rebuilt after the riots in 1831: the exchange, an extensive building of the Corinthian order, erected by the corporation in 1743, but never being adopted by the merchants as a place of meeting, the interior is occupied as a corn-market, and its back forms part of the spacious quadrangle in which the principal market is held. The commercial rooms, built in 1811, and used as an exchange, have a handsome dome, an Ionic portico, a large hall, reading-room, and various apartments for the despatch of business. The Bristol institution, a handsome edifice, opened in 1823, has a reading-room, library, theatre, and museum: in the latter are good collections both in natural history and the fine arts; courses of lectures are given, philosophical papers read, and it has occasional exhibitions of paintings. The Mechanics' institute, built in 1832, has a lecture and a reading-room. The Bristol library was established in 1772, and has an extensive collection (about 30,000 vols.) in general literature. There are also law and medical libraries; a medical school, established in 1834, in which complete courses of lectures are given: the certificates of its professors are recognised at Apothecaries' hall; a proprietary school, called the Bristol college, established in 1830, for classical and scientific education; and an academy for the education of young men for the Baptist ministry, to which an extensive library and museum are attached. There is a handsome edifice of the Corinthian order in Princes street, now the office of the Bristol General Steam Navigation Co., but concerts, balls, &c., are sometimes given in its large room: the Victoria public rooms are now (1839), also, in progress. At Clifton are baths and pump-rooms; and connected with the hot wells, is a handsome edifice of the Tuscan order.

The great rise of tides in the Bristol channel, and in the river, enables the largest class of ships to come up to the town: but to obviate the risks and damage to which they were formerly exposed by grounding at ebb tide, a floating harbour, equivalent to a dock, was constructed in 1804, by changing the channel of the river. It extends about 3 m. from the dam above Bristol bridge to the entrance lock at Rownham, occupying the old bed of the Avon and of that branch of the Frome that lies between the quays of St. Augustine and St. Stephen. The present extent of quay frontage is 6000 ft., but the limits admit of any further extension that an increased trade might require. The act authorizing the formation of the harbour (43 Geo. 3, c. 140) enacts that there should be 21 ft. water in a sufficient number of berths; but the mud being suffered to accumulate so as considerably to reduce this depth, occasioned much complaint. This defect has now, however, been in a great degree obviated. A new channel was formed for the river, and the harbour finished in 1809, at an expense of about £700,000. There are two basins for the temporary accommodation of vessels entering or leaving; one at Rownham, for large ships, the other below the iron bridge at Bedminster, for coasters. There are also a floating and a dry dock, founded by the Merchant Venturers in 1769: to the former of these timber ships are compelled to resort, if they do not discharge at some private wharf: further down the river are several private docks, where ship-building, to some extent, is carried on. Vessels frequently load and discharge cargoes in Kingroad, at the mouth of the river, by means of lighters: the Great Western steam-ship is obliged to do this, the entrance to the floating harbour not being wide enough to admit her; but the harbour dues are payable, whether ships enter it or not. The tide in the Avon sets

with great rapidity, especially between the high precipitous rocks of Clifton and Leigh, which seem rent asunder to admit its passage; in Kingroad, its rise at springs is between 48 and 49 ft.; at neaps above 23 ft.; at the gates of the floating harbour its rise is from 4 to 5 feet less than at the tide guage in Kingroad. The bridges which connect the opposite sides of the floating harbour and rivers are—Bristol bridge, of three stone arches, built in 1768; it connects the central part of the city with Redcliffe: two iron bridges each with a single span of 100 ft.; one on the Bath and Wells, the other on the Exeter line of road: a swivel iron bridge (to admit the passage of ships), connecting St. Augustine and Clifton with the rest of the city: a small stone bridge, spanning the Frome at the point where it ceases to be navigable; and a suspension bridge now in progress, which will connect Clifton with the co. of Somerset: this, when finished, will be the most picturesque and striking work of its kind in the kingdom, and probably in the world; the road-way will be 850 ft. in length, 230 ft. above high-water mark, with precipitous rocks on both sides. The Avon, above Bristol bridge, is navigable for barges to Bath, whence the water communication is continued by the Avon and Kennet canal. The Bristol and Gloucester rail-way, intended to connect the two cities, now extends to Coalpit heath (9 m. of line); it has three termini at Bristol, and several thousand tons of coal, monthly, are conveyed thither by it. The Great Western rail-way (118 m. of line), and that of the Bristol and Exeter (76 m.), will shortly effect a rapid means of communication with the metropolis and intermediate towns E. of the city, and with those of Somerset and Devon on the S. W. The Exchange market, and that of St. James, are open daily for general provisions; the chief supply being on Wednesdays and Saturdays: the corn and leather markets are held on Tuesdays and Thursdays; the hay-market, Tuesdays and Fridays; the fellmongers', Wednesdays and Saturdays; the cattle-market, Thursdays, in a walled area of four acres, outside the city, at Temple Meads, at the junction of the Great Western and Exeter railways: this market fluctuates considerably, but the average weekly supply is estimated at 500 head of cattle, 3000 sheep, 400 pigs, 80 horses. A great market is held there on the Thursday preceding Christmas, when the show is usually very fine. Two annual fairs, commencing 1st March, and 1st Sept., and continuing each about eight days, and formerly resorted to by clothiers, hosiers, cutlers, &c., from all parts of England, having greatly fallen off, were abolished in 1837; but fairs for cattle, horses, leather, &c., are still held on the above days.

Bristol was, for a lengthened period, second only to London as a commercial emporium; but though its comparative importance has, in this respect, greatly declined, it continues to be the seat of some important manufactures and of an extensive and increasing trade. The principal manufactures are those of soap, glass bottles, crown and flint glass, chain-cables, anchors, steam-engines and other machinery, refined sugar, tobacco, earthenware, floor-cloths, brass wire, pins sheet lead, zinc, saltpetre, tin, copper and brass wares, pipes, hats, drugs, colours, dyes, starch, bricks, British spirits, malt liquors; there are also extensive soda works and recently a large cotton-mill. Many of the iron foundries are on a large scale, and are increasing both in their number and the extent of their exports. In 1838 there were made at the various soap manufactories 8,029,076 lbs. hard soap, and 253,467 soft do.; in 1838 there were consumed in 39 public breweries, 227,315 bushels malt; and by 703 licensed victuallers, and 767 keepers of beer shops, together, 358,915 bushels. The establishments for glass, sugar, brass, floor-cloths, and earthenware, are also on an extensive scale. The post-office revenue in 1837 was £35,711. There is a savings' bank, established in 1813, and six other banking establishments. The deposits in the former, on the 20th of Nov. 1838, amounted to £296,381, of which £283,188 were contributed by 7433 depositors, and the rest by friendly and charitable societies. Bristol early possessed, and continues to enjoy, a large share of the trade with the West Indies; and among her foreign imports the most important are those of sugar, molasses, rum, coffee, tea, and cocoa; the next most important are those of tobacco, timber, wine, brandy, tallow, fruits, wool, hemp, dye stuffs, oils, saltpetre, hides, &c. The exports consist principally of the produce of the various manufactures of the city, with salt, coals, and culm, in part the produce of the neighbourhood; and cotton, linen, and woollen goods. In 1837 the declared value of exports amounted to £259,687 1*s.* 5*d.*, and 386 ships, of 76,957 tons burden, entered inwards from foreign parts, and 204 ships, of 49,223 tons, cleared outwards: the customs duties during the same year were £1,153,109 13*s.* 6*d.* Bristol carries on an extensive and growing trade with Ireland, from which she imports corn, butter, bacon, potatoes, cattle, horses, sheep, pigs, salmon, &c.: she sends in return tea, raw and refined sugar, cheese, wrought iron, tin plates, copper, glass, woollen, and leather. In 1837 there arrived from Ireland 638 vessels, of 95,604 tons, and cleared for it 340 vessels, of 74,578 tons. The imports, coastwise, consist mostly of iron, tin, coal, salt, agricultural produce, and foreign produce, brought from other ports under bond. The exports are chiefly foreign and colonial produce (especially groceries, spirits, and wines), and the various manufactures of the city. There belonged to the port, in 1836, 271 sailing vessels, of 39,650 tons, and 17 steamers, of 1810 tons. A communication by steam for the conveyance of goods and passengers to Ireland was established in 1826, and has led to a great increase of the trade with that part of the empire. Bristol has also had the honour of being the first port in the empire to establish a regular communication by steam with the United States. The first voyage by the Great Western steam-ship was performed in 1838.

The parl. and municip. limits of Bristol coincide, and had, as already stated, a pop., in 1831, of 104,338; and at present, 1839, probably of 115,000. It is divided into twelve wards, and governed by a mayor, sixteen aldermen, and forty-eight councillors. Previously to the Municipal Reform Act, the government was vested in a mayor, twelve aldermen, and thirty common councillors, the recorder being senior alderman: they were a self-elected body, and filled up their vacancies from the freemen, of whom there were 3109 registered. The governing charter was granted in the 8th of Anne; the earliest in the 9th of Henry II. A court of sessions, or jail delivery, (except for capital cases, now tried at Gloucester,) is held quarterly by the recorder. The tolsey, or sheriff's courts, for all kinds of actions in cases under 40*s.* A court of conscience, established by act 1 Wm. 3, for debts under 40*s.*, has from 150 to 200 causes weekly. There is also a court of requests for debts not above £15, established by act 45 Geo. 3, consisting of the common council and other commissioners, with an assessor, which has on an average from 20 to 25 cases weekly; and a court of assize for *nisi prius* cases, held the week after the Somerset assizes, by the senior judge on the western circuit. The number of prisoners tried at the criminal courts in 1837 was 215, of whom 88 were acquitted and 1 executed. A police force, upwards of 200 strong, on the plan of the metropolitan police, has been established under the Municipal Reform Act.

The county jurisdiction, by water, extends over the Avon, from 4 m. above the city; and seaward, to the steep and flat Holmes, and to the high-water mark on the English side of the Severn, from Aust's Passage to Clevedon. The charters of Hen. VI. and Edw. IV. granted the corporation an admiralty jurisdiction; but this has been lost through desuetude. They are conservators of the port and harbour; and by an act of 47 Geo. III., have the power of licensing pilots, who have the exclusive privilege of piloting all vessels passing up or down to the E. of Lundy island, except Irish and coasting traders: the ports of Bristol, Newport, Cardiff, Swansea, Ilfracombe, and Bridgewater are comprised within this jurisdiction. There are thirty-four licensed or branch pilots, one of whom cruizes from Ilfracombe, the rest from Pill, near the mouth of the Avon. A board of commissioners, elected by the rate-payers, has the exclusive power of paving, lighting, and cleansing the town; they levy an annual assessment on the inhabitants for these purposes, varying from £11,000 to £12,000. The corporation revenues are derived from town and market dues and rents of houses and lands in the city and neighbourhood; the annual average was estimated, in 1835, at £18,773; their debt, at that time, amounted to £86,904; but it has been since paid off by the sale of lands, &c. The Merchant Venturers are another incorporated body, whose governing charter dates in 1st of Chas. I.: they hold, under the former, a beneficial lease of the wharfage and other harbour dues, but have long ceased to be a trading company. The Dock company are also incorporated, by an act of 43 Geo. III.: their affairs are managed by twenty-seven directors, nine of whom are appointed by the municipal corporation from their own body; nine by the Merchant Venturers, from theirs; and nine are proprietors of at least ten shares, and chosen by the shareholders. The Chamber of Commerce was instituted in 1823, "for the protection and promotion of the commercial and manufacturing interests of Bristol;" it is supported by annual subscriptions, and governed by directors, elected annually, who publish reports of their proceedings: they are not an incorporated body, but have exerted a great and beneficial influence in the commercial arrangements and reforms of the town and port since their establishment. The management of the poor, within the old limits of the city, was vested in a corporate body by an act 7 & 8 W. 3, c. 32, and subsequent acts have been passed regulating their number and powers. The guardians consist of the mayor and twelve members elected annually by the town council out of their own body, the senior churchwardens of the different parishes, the senior overseer of the castle precincts, and forty-eight other inhabitants. The amount of poor-rates levied in the united parishes for the

year ending Lady-day, 1836, was £27,095 18s.: the average of 20 years, ending with 1832, was £23,850. Clifton forms the centre of a union, under the Poor Law Amendment Act; in the parishes of that union, which are also within the present limits of Bristol, the average amount of poor-rates for three years, ending 1835, was, in all, £10,788: they are represented by fifteen guardians. *Bedminster* is the centre of another union; its own average rates for the same period were £4734: it is represented by six guardians. The rack rental of Bristol, according to a survey in 1838, amounts to £373,361; the number of rated properties being 19,920; of these, 10,490, valued at £212,404, are within the ancient limits.

Bristol has sent two members to the H. of C. since 1943: previously to the Reform Act, the right of election was in the freeholders and freemen only. No. of registered electors in 1837-38, 9856. Bristol was made the seat of a bishopric in 1541. It is now, in conformity to the act 6 & 7 W. 4, c. 77, united with Gloucester, in a see comprising the city of Bristol, the deaneries of Cricklade and Malmesbury, in Wilts, and the previous diocese of Gloucester: Bristol being constituted a deanery, which, alternately with that of Gloucester, is to elect the future bishops.

The Bristol hot well, under the Clifton rocks, is a place of much resort for invalids, its waters being considered efficacious in consumptive cases. The temp. of this saline spring, when fresh from the pump, is 74° Fahr., and it then evolves free carbonic acid: in each pint of the water (according to Dr. Carrick) there are 3·5 grs. carb. of lime, 1·5 sulph. of soda, 1·5 do. of lime, ·5 muriate of soda, 1 do. magnesia; total, 6 grs. It issues from the cliff, between the high and low-water mark; the hot-well house is finely situated beside the Avon; a carriage road winds from it, behind the rocks, to Clifton Down; a shorter footpath at the back also leads to that village, which is the fashionable part of Bristol: the scenery, by either line, is singularly interesting. The acclivities are occupied by handsome edifices in squares, terraces, crescents, &c., forming fine promenades; the most magnificent of these ranges is York Crescent. Near the water is a good hotel, whence the Irish steam-packets start regularly; and on the cliff a splendid one, where concerts and assemblies are held during the season. Another spring higher up the cliff, but probably from the same source, has within a recent period had baths and a pump-room attached to it. The geological features of the place may be thus briefly described: If the entire area be divided N. and S. into three unequal portions, that on the E. will fall within the limits of a coal formation, which extends N. and S. of the city, but chiefly to the N., about 20 m.: its beds are thin, as compared with those of other coal-fields. The central or largest portion is chiefly occupied by the new red sand, in which saurian remains occur; the western part is chiefly mountain lime. Some of the summits in the N. and W. parts of the city are 250 ft. above the bed of the Avon. In the rocks of Clifton, and the opposite ones of St. Vincent, quartz crystals of great purity occur, known as Bristol diamonds. There are remains of three Roman encampments at Clifton, Rownham, and Abbots-Leigh.

The decline in the comparative importance of Bristol, as a trading emporium, has been chiefly manifested by contrasting its progress with that of Liverpool. The average customs duties of Bristol for the seven years ending with 1787 amounted to £155,189; those of Liverpool, for the same period, to £51,136. In 1784, the customs of Bristol were £334,908, a great increase; but those of Liverpool had advanced, in the same year, to £648,684. One of the chief causes that have been commonly assigned for this relative slowness of progress, is the excess of local taxation; the town and harbour dues having been much heavier than those of any other of the larger ports. The municipal report of 1835 gives the proportion of local taxation charged on 20 principal articles, imported in 1831, in Bristol and three other ports; as—Bristol, £1; London, 10s. 4d.; Liverpool, 11s. 5d.; Hull, 7s. 4d.; Gloucester, 6s. 3d. Since 1831, however, the rates have been considerably reduced, and the mayor's dues wholly abolished.

But notwithstanding this greater weight of local taxation must have operated seriously to the injury of Bristol, too much stress has been laid upon it in accounting for the slower progress of the trade of the port. The real cause of the rapid rise of Liverpool, Glasgow, and other sea-port towns, is to be found, not in the lowness of their port charges, or in any peculiar advantages they individually enjoy, but in their having become the ports of the great manufacturing districts. The extraordinary growth of Liverpool is a consequence of the still more extraordinary growth of the cotton manufacture. Her rise has been dependent upon, and consequent to, the rise of Manchester, Bolton, Blackburn, &c.

According to Camden (*Gibson's ed. of the Brit.*, i., 74), Bristol first rose into notice towards the close of the Saxon dynasty. The most common mode of spelling the name, till the 13th century, was Bricstowe; but in the oldest, and in all the subsequent charters, it is spelt 'Bristoll.' Its castle was built by the Earl of Gloucester, brother to the Empress Matilda. During the wars of the Roses the town was comparatively undisturbed and flourishing; but in the civil war of the 17th century it suffered most severely: at the commencement of hostilities it was garrisoned by the parliamentary forces; subsequently, it was stormed by the king's forces, and surrendered to Prince Rupert: the following year (during which it suffered under the united evils of pestilence and war) it was again stormed, and retaken by Cromwell, who subsequently demolished its castle. The earliest notice, with reference to the trade of Bristol, occurs in the *Anglia Sacra*, (ii., 228); it is there noticed as having a mart for slaves of both sexes, brought from all parts of the kingdom; and also, as having much intercourse with Ireland. In 1247 a great improvement in its port was effected, by cutting a new channel for the river, and forming a double line of quay between Bristol and Redcliffe: a bridge, on the site of the present, was built at the same period. Thence to the 16th century, its manufactories supplied a large portion of the kingdom with woollen goods, soap, and glass: in the reign of Edward III. it was made a staple of wool; and it then traded extensively with Ireland, France, and Russia. In the *Itinerary* of Botoner are details of its trade and shipping in the 15th century, which prove its extended commerce and great enterprise at that period. In 1578 Frobisher returned from an unsuccessful attempt to find a N.W. passage: at the close of the century Henry VII. granted charters to John Cabot and his two sons, which resulted shortly after in the discovery of Newfoundland, and a large part of the American continent: in 1609 Newfoundland was first colonized by Bristol. In October, 1831, a most disgraceful riot occurred here; which, owing to a want of decision on the part of the civil and military authorities, was allowed to attain a most alarming height. The mansion-house, episcopal palace, and several private houses were burned down; and a large amount of property destroyed.

Among the distinguished individuals that Bristol has produced are, William of Worcester, the topographer; Wm. Canynge, the most eminent merchant of his day; Sebastian Cabot, born at Bristol, of Genoese parents, discovered Newfoundland in 1499; Edw. Colston; Sir Wm. Draper; Thomas Chatterton, the poet, whose uncle was sexton of Redcliffe church, where the Rowley MSS. were alleged to have been discovered; Robt. Southey, Esq.; and Bayley, the sculptor. (*Dr. Sayer's Hist. of Bristol, and the Royal Charters of do.; Municip. Commissioners' Report in* 1835; *Ann. Reports of the Chamber of Commerce; Eighth Report of the Charity Commissioners, &c.*, and *Private Information.*)

Bristol, p. t., Lincoln co., Me., 39 m. S.S.E. Augusta, 607 W. Bounded W. by Damariscotta river, S. by the Atlantic, and E. by Pemaquid river, which last affords water-power. It has a good harbour and considerable shipping, employed chiefly in the coasting trade and the fisheries. It contains seven stores, one fulling-mill, two grist-mills, five saw-mills, four tanneries, nineteen schools, 1014 scholars. Pop. 2945.

Bristol, p. t., Grafton co., N. H., 30 m. N. Concord, 511 W. Newfound pond, 6 miles long, and from 2 to 3 broad, lies partly in its N. part, the outlet of which, affording water-power, passes S. through the town into Penuquasset river, which bounds it on the E. Excellent plumbago, or black lead, is found here. Incorporated in 1819 from Bridgewater and New Chester: first settled in 1770. It contains six stores, six fulling-mills, four grist-mills, seven saw-mills, three tanneries, one academy, 25 students, nine schools, 345 scholars. Pop. 1153.

Bristol, p. t., Addison co., Vt., 50 m. S.W. Montpelier, 490 W. The E. part extends on to the Green Mountains. Watered by New Haven river and Baldwin creek. It contains three churches, one Methodist, one Baptist, and one Congregational, four stores, one fulling-mill, two grist-mills, four saw-mills, eight schools, 400 scholars. Pop. 1233.

Bristol, county, Mass., situated in the S. part of the state, and contains 600 sq. m. Bounded S. by the Atlantic and Buzzard's bay. Taunton river affords good water-power. New Bedford in its tonnage, is the second town in the state, and is distinguished for its manufactures, as well as its navigation. The county contained in 1840, 15,441 neat cattle, 15,069 sheep, 13,052 swine; and produced 3705 bushels of wheat, 24,460 of rye, 152,558 of Indian corn, 17,601 of barley, 63,526, of oats, 345,519 of potatoes. It had two foreign commercial houses, 430 retail stores; capital in the lumber trade $103,300; capital in the fisheries $5,980,800; salt was produced to the amount of 35,200 bushels; eleven fulling-mills, seven woollen-factories, fifty-five cotton-factories with 101,282 spindles; ten furnaces, nineteen tanneries, six potteries, sixty-one grist-mills, seventy-three saw-mills, one oil-mill, eight printing-offices, two daily and six weekly papers, ten academies, 612 students, 331 schools, 11,199

scholars. Pop. 60,164. Capitols, New Bedford and Taunton.

BRISTOL, county, R. I., situated in the E. part of the state, between Mount Hope bay on the E. and Narragansett bay on the S. and W., and contains 25 sq. m. It enjoys, by its navigable waters, great facilities for navigation. It contained, in 1840, 1462 neat cattle, 3511 sheep, 1691 swine; and produced 127 bushels of wheat, 1819 of rye, 12,169 of Indian corn, 11,439 of oats, 27,991 of potatoes. It had sixteen foreign commercial houses, sixty-four retail stores, one cotton-factory with 6000 spindles; two ropewalks, six grist-mills, three tanneries, one distillery, two printing-offices, two weekly newspapers; capital in the fisheries $637,500; four academies, 270 students, nineteen schools, 742 scholars. Pop. 6476. Capital, Bristol.

BRISTOL, p. t., port of entry, and capital of Bristol co., R. I., 16 m. S. by E. Providence, 418 W. The village is situated on Bristol bay, a branch of Narragansett bay, and has a fine harbour, capacious, safe, easy of access, with a sufficient depth of water for vessels of the largest class. The tonnage of the district in 1840, was 15,890. It contains a court-house, jail, a market-house, two banks, five churches, one Congregational, one Episcopal, one Methodist, and one Christian, nine foreign commission houses, forty-one retail stores; capital in the fisheries $930,000; one cotton-factory with 6000 spindles; three grist-mills, one ropewalk, one printing-office, one weekly newspaper; total capital in manufactures $155,706; nine schools, 427 scholars. Pop. 3490. About 2 miles N.E. of the court-house is Mount Hope, a beautiful eminence, in early times the favourite residence of King Philip, the celebrated Pequod chief, so formidable an enemy of the early colonists. Its summit presents a delightful view of Mount Hope bay, and the surrounding country.

BRISTOL, p. t., Hartford co., Ct., 17 m. S.W. Hartford, 338 W. Watered by branches of Farmington river. Clocks and buttons are extensively manufactured here. It contains four churches, one Congregational, one Episcopal, one Methodist, and one Baptist; fifty-two stores, four fulling-mills, one woollen-factory, two tanneries, one grist-mill, three saw-mills; total capital in manufactures $160,000; one academy, 25 students, twelve schools, 488 scholars. Pop. 2109.

BRISTOL, p. t., Ontario co., N. Y., 212 m. W. Albany, 9 S.W. Canandaigua, 349 W. Watered by Mud creek. The village at the centre contains an inflammable spring. The town contains three stores, one fulling-mill, two grist-mills, three saw-mills, two distilleries, thirteen schools, 627 scholars. Pop. 1953.

BRISTOL, t., Philadelphia co., Pa., 6 m. N. Philadelphia. Tacony creek affords water-power. It contains six stores, two fulling-mills, two woollen-factories, one cotton-factory with 1400 spindles; one dyeing and printing establishment, one grist-mill, one saw-mill, five schools, 276 scholars. Pop. 1734.

BRISTOL, p. b., Bucks co., Pa., 115 m. E. by S. Harrisburg, 155 W. Pleasantly situated on the W. bank of Delaware river, 20 m. above Philadelphia and 12 below Trenton, opposite Burlington, N. J. Incorporated in 1720. It occupies a commanding situation, is regularly laid out and neatly built, and contains three churches, one Episcopal, one Friends' and one Methodist; ten stores, one flouring-mill, one grist-mill, one saw-mill, two schools, 45 scholars, 250 dwellings, and 1438 inhabitants. The Delaware canal, which communicates with the Lehigh canal at Easton, terminates here, where is an extensive basin for the reception of boats connected with the coal and other trade. Steamboats from Bordentown and Trenton stop here, both ways, daily. In the vicinity are two medicinal springs, from which it probably received its name. The township in which it is situated contains, exclusive of the borough, three stores, four grist-mills, two schools, 391 scholars. Pop. 1450.

BRISTOL, t., Morgan co., O., 5 m. N.E. McConnelsville. Drained by a branch of Muskingum river. It contains two grist-mills, five saw-mills, eleven schools, 409 scholars. Pop. 1645.

BRISTOL, p. t., Trumbull co., O., 173 m. N.E. Columbus, 9 N. Warren, 314 W. The post village is called Bristolville. The town contains seven schools, 280 scholars. Pop. 806.

BRISTOL, p. t., Lapeer co., Mich., 43 m. N. Detroit, 568 W. Drained by Belle river and its branches. It contains two stores, two grist-mills, four saw-mills, six schools, 170 scholars. Pop. 884.

BRITISH EMPIRE (THE), one of the most civilized, powerful, and important states that have ever existed, consists of the islands of Great Britain and Ireland, with the smaller islands contiguous to them, and their dependencies in various parts of the world. Great Britain, the largest, and by far the richest and most populous of the British islands, includes what were formerly the independent kingdoms of England and Scotland; the former occupying its S., most extensive and fertile, and the latter its N. and most barren portion. These two kingdoms, having been united, form with that of Ireland what is called the *United Kingdom of Great Britain and Ireland*, which constitutes not only the nucleus and centre, but the main body and seat of the wealth and power of the empire.

The islands of Great Britain and Ireland are situated in the N. Atlantic ocean, off the W. shores of continental Europe, opposite to the N. parts of France, the Low Countries, Denmark, and the S. parts of Sweden and Norway, between 50° and 59° N. lat., and 9° E. and 11° W. long. Great Britain, which, from its superior magnitude and importance, gives name to the United Kingdom and the empire, is not only the largest of the European islands, but one of the largest in the world. It lies to the E. of Ireland, and approaches at its S.E. extremity at Dover to within 21 m. of the opposite coast of France. But as the coast of Great Britain stretches N.N.W. from Dover to Duncansby Head, the extreme N.E. point of the island, while the opposite shore of the Continent recedes in a N.E. direction, the intervening space, called the North sea or German ocean, is of very considerable dimensions. To the S. of the British islands we have St. George's or the Bristol channel, and W. and N. the broad expanse of the Atlantic.

Great Britain is very irregularly shaped, being deeply indented by numerous gulfs and arms of the sea, but on the whole it approaches to the figure of a wedge, being narrowest at its N. and broadest at its S. extremity. The longest line not intersected by any considerable arm of the sea that can be drawn in Great Britain, extends from Rye in Sussex (lat. 50° 57′ 1″ N., long. 0° 44′ E., to Cape Wrath in Sutherland (lat. 58° 36′ N., long. 4° 56′ W.), a distance of about 580 m.; and its greatest breadth from the Land's End (lat. 50° 4′ 8″ N., long. 5° 41′ 31″ W.) to a point near Lowestoffe, on the coast of Norfolk (lat. 52° 28′ 30″ N., long. 1° 46′ E.), is about 367 m. But, owing to the indentations already referred to, its breadth in some places is much less, being between the friths of Forth and Clyde under 40, and between the Moray Frith and the Minch under 30 m. from shore to shore. Its area is estimated at 83,888 sq. m., of which England contains 57,812 and Scotland (exclusive of its dependant islands) 26,016 sq. m. The area of the Scottish islands is estimated at 4294 sq. m.; but this is only a rude guess.

Ireland lies to the W. of Great Britain, between the parallels of 51° 25′ and 55° 22′ N. lat., and of 6° and 11° W. long. Its figure is rhomboidal; and though it has many noble bays and harbours, it is less indented by gulfs and arms of the sea, and is decidedly more compact than Great Britain. It is everywhere surrounded by the Atlantic, except on its E. shores, which are separated from Great Britain by St. George's channel, the Irish sea, and the North channel. From St. David's Head in Wales to Carnsore point, the distance across is about 47 m.; from Port Patrick in the Rhymes of Galloway to Donaghadee, the distance is 22 m., but from the Mull of Cantire to Tor point in Ireland, the distance is only 13½ m. The longest line that can be drawn in Ireland, in about the same meridian, extends from the old Head of Kinsale in Cork to the Bloody Farland Point in Donegal, a distance of about 237 m.: the longest line that can be drawn crosswise in Ireland, in nearly the same parallel of lat., extends from Emlagh Rash, on the coast of Mayo, to Quintin Point, at the mouth of Lough Strangford, on the coast of Down, being about 182 m.; but in other places the breadth is a good deal less. So conveniently is Ireland situated in respect of water communication, that there is no part more than 50 or 55 m. distant from the sea, or from one of its arms. The area of Ireland is estimated at 31,874 sq. m.

As separate articles will be appropriated to the description of England, Scotland, and Ireland, and their dependencies, it is only intended in this article to take a rapid view of those particulars that have reference to the empire as a whole, and which could not, with propriety, be placed under the description of any one of its separate heads.

Natural advantages of the United Kingdom.—Perhaps no country ever existed more favourably situated, or placed under more advantageous physical circumstances, than the United Kingdom. It is sufficiently extensive to be the centre of a mighty empire; and to support, independent of any extrinsic resources, a very large population, and, consequently, possesses that native and inherent power that is necessary to secure the first of political blessings—national independence. Its insular situation is also of immense advantage; it gives us a well-defended frontier, on which there can be no encroachment, and about which there can be no dispute; and while it renders us comparatively secure from hostile attacks, it affords unequalled facilities for commerce; every part of our frontier being, as it were, a terminus to the "great highway of nations." The surface of the country is agreeably diversified with hill and dale, mountains and plains; and while the soil is not so very

fertile as to yield crops with little labour, and so to encourage sloth on the part of the cultivator, it is in general sufficiently productive, and yields abundant returns to the laborious and skilful husbandman. It has been well observed of Great Britain, and the same thing is equally true of Ireland, that "it is not fertile enough to make men indolent, nor barren to such a degree as to deny grateful, if not ample, returns to the industrious cultivator. In a word, it enjoys the fortunate medium between fertility and barrenness, or (to speak more properly) between easy and difficult culture; inclining rather *to the side of difficulty*, and affording opportunity sufficient for industry and improvements; which is just the circumstance a person would wish for who truly understands the good of his country. Rich soils infuse ease and indolence into the inhabitants; but soils that require laborious cultivation stimulate industry and invention, and impress on the population a hardy, enterprising character." (*Harte's Essays*, p. 188.)

All the most valuable species of the *Cerealia*, as wheat, oats, and barley succeed quite as well in the British islands as in any other country. Potatoes, too, and a vast variety of useful vegetables and fruits, are raised in the greatest abundance. Owing to the peculiar aptitude of the soil and climate, no country can compare with the United Kingdom in the luxuriance of its verdure, and the richness of its pastures. And in consequence principally of this circumstance, but partly, also, of the care bestowed on the selection of the most improved stock, our horses, cattle, sheep, and other useful animals, are all equal, if not superior, to the finest breeds to be found in any other part of the world.

The British islands have also been singularly fortunate in respect of climate. If we desiderate the clear skies of Italy and the south of France, we also want the long-continued droughts and exhausting heats to which they are subject. Though exposed to sudden changes, we are exempted from all violent extremes of heat and cold. The general impression seems to be that the climate of Great Britain has been considerably modified since 1750; and that our winters have become milder, and our summers less dry and warm than formerly. In most seasons, indeed, the winter can hardly be said to commence till after Christmas; and in some years there is little if any frost. The great defects in our climate are the prevalence of cold, blighting E. winds in April and May; and not unfrequently, of rainy weather in August and September. It is but rarely that our crops suffer from excess of drought; but they occasionally suffer from backward summers, and autumnal rains. On the whole, however, the climate of the British islands is, notwithstanding its defects, one of the best, if not the very best, in Europe. It requires, indeed, the most anxious and watchful attention on the part of the husbandman; but, instead of being a drawback, that is an advantage. There is also much truth in the remark of Charles II., as quoted by Sir William Temple: "He thought that was the best climate where he could be abroad in the air with pleasure, or at least without trouble and inconvenience, the most days of the year, and the most hours of the day; and this he thought he could be in England more than in any other country of Europe."

Among the other physical circumstances that have promoted, in no ordinary degree, the power and prosperity of the empire, may be specified the number and excellence of our harbours, affording asylums for the ships, and depôts for the goods of the most distant countries; and the number of our rivers, their depth, and the facilities they afford to internal communication. The last-mentioned circumstance is peculiarly worthy of remark: Great Britain and Ireland being islands, with no part very remote from the sea, it might be supposed that their rivers would be of comparatively small magnitude, and of but little use in navigation. But the fact is distinctly and completely the reverse. The Thames, Trent, and Severn, in England, and the Shannon, in Ireland, are all navigable to a very great distance. The first, notwithstanding, its limited length and volume of water, ranks, as a navigable channel, among the first rivers of Europe; its embouchure is unencumbered by any bar, and it is navigated from the sea to London bridge, a distance of 45 m., by the very largest ships, and to a much greater distance by barges. The Severn, Trent, and Shannon have been rendered navigable for barges and steam-boats for the greater part of their course; the latter, which flows through the interior of Ireland, almost to its very source! The means afforded by the rivers for facilitating internal communication, have been vastly extended by the construction of canals; and, with the single exception of Holland, the United Kingdom has a greater extent of artificial navigation than any other country.

The mineral riches of Great Britain are not merely equal to those of any other country, but superior. We cannot, it is true, boast of mines of gold and silver, but we possess what are really more important and valuable. Iron, the most useful of all the metals, is found in the greatest abundance, and of an exceedingly good quality, in most parts of the empire. Our tin mines are the most productive of any in Europe; and we have also very productive mines of copper, lead, manganese, &c. Our salt springs and beds of fossil salt are alone sufficient for the supply of the whole world. But coal is by far the most important and valuable of our mineral treasures. It is hardly, indeed, possible to overrate the advantages Great Britain derives from her vast, and, to all practical purposes, inexhaustible beds of coal. In this climate, fuel ranks among the principal necessaries of life; and it is to our coal mines that we owe abundant and cheap supplies of so indispensable an article. Had they not existed, wood must have been used as fuel; and it is quite impossible that any attention to the growth of timber could have furnished a supply equal to the wants of the present population of Great Britain, even though a large proportion of the cultivated land had been appropriated to the raising of trees. But, however great and signal, this is not the only advantage we derive from our coal mines: they are the principal source and foundation of our manufacturing and commercial prosperity. Since the invention of the steam-engine, coal has become of the highest importance as a moving power; and no nation, however favourably situated in other respects, not plentifully supplied with this mineral, need hope to rival those that are, in most branches of manufacturing industry. To what is the astonishing increase of Glasgow, Manchester, Birmingham, Leeds, Sheffield, &c., and the comparatively stationary or declining state of Canterbury, Winchester, Salisbury, and other towns in the south of England, to be ascribed? It cannot be pretended, with any show of reason, that the inhabitants of the former are naturally more ingenious, enterprising, or industrious than those of the latter. The abundance and cheapness of coal in the north, and its scarcity, and consequent high price, in the south, is the real cause of this striking discrepancy. The citizens of Manchester, Glasgow, &c., are able at a comparatively small expense, to put the most powerful and complicated machinery in motion, and to produce results quite beyond the reach of those who have not the same command over coal, or, as it has been happily defined, hoarded labour. Our coal mines have been sometimes called the Black Indies; and it is certain that they have conferred on us a thousand times more real advantage than we derive from the conquest of the Mogul empire, or than we should have reaped from the dominion of Mexico and Peru. They supply our manufacturers and artisans with a power of unbounded energy and easy of control, and enable them to overcome difficulties insurmountable by those to whom nature has been less liberal of her choicest gifts.

Estimate of the Mineral Produce of Great Britain, on an Average of Years and Prices.

	Quantity.	Value.
Silver	10,000 lbs. troy	£30,000
Copper	13,000 tons	1,300,000
Tin	5,500	550,000
Lead	46,000	950,000
Iron	1,150,000	7,500,000
Coal	25,000,000	10,000,000
Salt, alum, and other minor produce more than		1,000,000
Total value probably exceeds		£20,500,000

Races of People.—At the earliest period to which history ascends, the British islands were occupied by Celts or Gael, who, it is probable, had passed over into Britain from the contiguous coasts of France, and from Britain into Ireland. To the Celtic population of Britain succeeded the Gothic. At a period long preceding the Christian æra, the Goths or Scythians, advancing from the east, had occupied a large portion of the N. and N.W. parts of Europe. The Low Countries and the N. provinces of France were, in the age of Cæsar, peopled by Goths, who had acquired the distinctive appellation of *Belgæ*; and it appears from Cæsar, that long previously to his invasion of Britain, colonies of Belgians had passed over into it, and then occupied its maritime and most fertile portions. (*De Bello Gallico*, lib. v., § 12.) The Romans, though they subdued Great Britain, did not settle in great numbers in it; and the Belgæ, by whom it had been colonized at the epoch of their invasion, may be regarded as the principal progenitors of the English nation; for, though the various Gothic tribes who passed over into Britain after the departure of the Romans were sufficiently powerful to subdue it, and one of them (the *Angles*) succeeded in giving its name to the greater portion of Britain, they were far too few in number to have occupied it fully, or given it a new language, had their own differed materially from that previously in use. (*Pinkerton's Geog.*, art. *England*, and his *Dissert. on the Goths, passim.*) But the ancient and the more recent Saxon and Belgian colonists being essentially the same people, readily

amalgamated. The invaders having expelled the original or Celtic inhabitants from the lower and more fruitful parts of the country, the latter were compelled to resort to the fastnesses of Wales, the Highlands of Scotland, and the remote parts of Devon and Cornwall. The facilities which these countries afforded for resisting and eluding an invading force, prevented them being overrun by the Goths. They were never even fully subdued by the Roman legions; and at this moment we find them a distinct race, speaking the language of their remote ancestors.

The temporary conquest of England by the Danes, and its subsequent subjugation by the Normans, however important in other respects, made no sensible change in the stock of the inhabitants. The Normans, though long settled in France, where they had acquired the use of the French language, originally emigrated from Norway, and belonged, as well as the Danes, to the Gothic family. Except, therefore, in so far as we may suppose the Celtic and Belgic inhabitants to have been blended together, the Gothic blood would seem to have been preserved pretty pure in all the country S. of the Tay, and E. of the Severn and the Exe.

The Romans did not invade Ireland; and the Goths do not appear to have passed over into it, at least in any considerable numbers. Hence its population, in so far as it is not alloyed by emigrants from England since the invasion under Henry II., and their descendants, may be regarded as of Celtic origin. In fact, the Irish language, a dialect of the Gaelic, is at this moment spoken to the almost total exclusion of English, in various pretty-extensive districts of Ireland; and we should be disposed to consider nearly two thirds of the people of that island, as being linearly descended from the ancient occupants of the country.

Population.—The progress of population in Great Britain and Ireland was long very slow. Latterly, however, it has increased with extraordinary rapidity. This, in the former, has been a consequence of the wonderful increase of manufactures and commerce since 1763, and in the latter, of the splitting of farms, and the endless division and subdivision of the land. The progress of population in the different portions of the U. K., down to the beginning of this century, according to the best attainable information, will be seen in the table first ensuing.

The population of England and Scotland was, for the first time, determined by actual census in 1801; since which a census has been taken every ten years. In Ireland, an incomplete census was taken in 1813; but it was not till 1821 that the population of that part of the empire was exactly ascertained. For the results of the censuses hitherto taken, see the following tables.

PROGRESS of Population in the different Portions of the United Kingdom.

England and Wales.		Scotland.		Ireland.		United Kingdom.	
Years.	Population.	Years.	Population.	Years.	Population.	Years.	Population.
1696	5,500,000	1707	1,050,000	1672	1,100,000	1700	7,650,000
1710	5,066,337			1712	2,009,094		
1730	5,687,993						
1750	6,039,684	1755	1,265,380	1754	2,372,634	1750	9,670,000
1760	6,479,730			1777	2,690,556		
1780	7,814,827			1785	2,845,932		
1801	9,187,176	1801	1,599,058	1805	5,395,456	1800	15,800,000

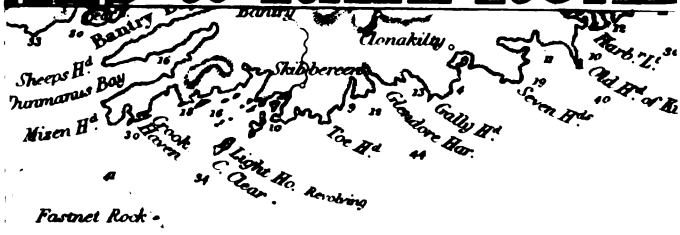
I. SUMMARY ACCOUNT of the Population of Great Britain and Ireland, including the Army and Navy, at the Periods at which Censuses have been taken, with the Ratio of Increase in the intervening Decennial Periods.

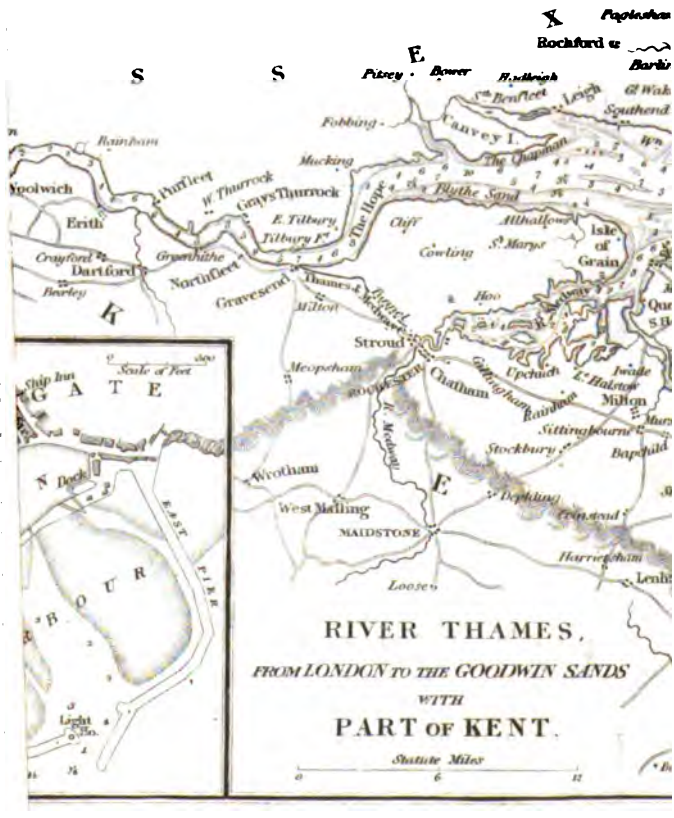
	Population, 1801.	Inc. per cent.	Population, 1811.	Inc. per cent.	Population, 1821.	Inc. per cent.	Population, 1831.		
							Males.	Females.	Total.
GREAT BRITAIN:									
England	8,331,434	14¾	9,551,888	17¼	11,261,437	16	6,276,627	6,714,378	13,091,005
Wales	541,546	13	611,788	17	717,438	12	394,563	411,619	806,182
Scotland	1,599,068	14	1,805,688	16	2,093,456	13	1,114,816	1,250,298	2,365,114
Army, Navy, &c.	470,598	.	640,500	.	319,300	.	. . .	. . .	277,017
	10,942,646	15¼	12,609,864	14	14,391,631	15	8,163,023	8,376,295	16,539,318
IRELAND	. . .	.	. . .	.	6,801,827	14½	3,794,880	3,972,521	7,767,401
Totals	. . .	.	. . .	.	21,193,458	15	11,957,903	12,348,816	24,306,719
Population of Jersey, Guernsey, Man, &c., not included in the above	. . .	.	. . .	.	. . .	.	. . .	. . .	103,710
Total population of the empire in 1831	. . .	.	. . .	.	. . .	.	. . .	. . .	24,410,429

II. GENERAL SUMMARY of Population of Great Britain and Ireland in 1831.

	Houses.				Occupations.			Persons.		
	Inhabited.	Families.	Buildings.	Uninhabited.	Families chiefly employed in Agriculture.	Families chiefly employed in Trade, Manufactures, and Handicraft.	All other Families not comprised in the two preceding classes.	Males.	Females.	Total of Persons.
England	2,396,622	2,745,336	23,462	113,885	761,348	1,182,912	801,076	6,276,627	6,714,378	13,091,005
Wales	155,522	166,538	1,297	6,030	73,195	44,702	48,641	394,563	411,619	806,182
Scotland	369,393	502,301	2,568	12,719	196,501	207,250	168,451	1,114,816	1,250,298	2,365,114
Army, Navy, Marines, and Seamen in registered vessels	. .	. .	. .	. .	. .	. .	. .	277,017	. .	277,017
	2,850,937	3,414,175	27,327	132,634	961,134	1,434,873	1,018,168	8,163,023	8,376,295	16,539,318
IRELAND.										
Leinster	292,729	344,314	3,715	7,967	186,177	75,040	83,097	927,877	981,836	1,909,713
Munster	330,444	376,051	3,796	9,553	244,770	62,285	68,996	1,003,411	1,133,741	2,237,152
Ulster	409,005	425,314	3,997	16,607	268,864	88,421	68,029	1,113,004	1,173,528	2,286,532
Connaught	234,638	239,387	3,800	6,527	184,528	23,613	31,246	660,498	683,416	1,343,914
Total of Ireland	1,469,816	1,385,066	15,308	40,654	884,339	249,359	251,368	3,794,880	3,972,521	7,767,401
Total of G. B. and Ireland	4,280,753	4,799,241	42,635	173,288	1,845,473	1,684,232	1,269,536	11,957,903	12,348,816	24,306,719
Island of Guernsey, &c.	3,804	5,333	114	221	1,500	1,827	2,006	11,983	14,145	26,128
Island of Jersey	4,990	7,392	50	115	2,102	3,490	1,700	17,006	19,576	36,582
— Man	6,864	8,250	68	361	3,053	1,976	3,230	19,560	21,440	41,000
Total of British Islands	15,658	20,984	226	697	6,655	7,293	6,936	48,549	55,161	103,710
Total of U. K.	4,296,411	4,820,125	42,861	173,985	1,852,128	1,691,525	1,276,472	12,006,452	12,403,977	24,410,429

MAP EXHIBITING THE
AVIGABLE RIVERS
HE COMPLETED & PROPOSED
LALS & RAIL-ROAD





ERTION of Individuals, principally of Males of 20 Years of Age and upwards, in different Departments of Industry in Great Britain and Ireland, according to the Census of 1831.

Occupation.	England.	Wales.	Scotland.	Ireland.	Total.
s of age and upwards:					
employing labourers	141,460	19,728	25,887	95,339	282,414
itto	94,883	19,966	53,966	564,274	733,089
employed in agriculture	744,407	55,468	87,292	507,441	1,355,608
in manufactures, or making machinery for do.	314,106	6,218	83,993	25,746	430,063
ade, or handicraft, as masters or workmen	964,177	43,226	152,464	298,838	1,458,805
bankers, professional, and other educated men	179,983	5,204	29,203	61,514	275,904
employed in labour not agricultural	500,950	31,571	76,191	89,876	698,588
es 20 years of age, except servants	189,389	11,180	34,930	110,595	346,094
0 years of age (males)	70,629	2,145	5,895	54,142	132,811
ants under 20 years of age	30,777	1,179	2,599	44,600	79,155
vants	518,705	42,274	109,512	253,155	923,646

ulation.—Supposing, which there is every rea- is the fact, that the population of Great Britain s continued to increase since the census of 1831 ame ratio as during the ten previous years, ount to about 27,500,000. Hence the U. King- pect of population, the fourth state in Europe, d only in the number of people by Russia, rance.

To attempt any exposition of the causes that d Great Britain so pre-eminently distinguished ry and progress in the arts, would lead us into reign to the object of this work, and which, were not the case, our limits would hinder our It is sufficient to observe that they are of vari- d that we are not indebted for our superior ivilization to one or a few, but to a number of auses: to the various favourable physical and stances under which we are placed. We have ed at the influence of the first; but that of the of circumstances has not been less powerful. of property and freedom of industry we have in a greater degree than any other European powerfully promoted and stimulated industry, every man with the conviction that he would to enjoy, accumulate, and dispose at pleasure, f his industry and skill: our free institutions, they have done, the highest stations to individ- at and ability, how humble soever their origin, ed through all classes a desire to excel, and a on to rise superior to every difficulty. It is char- Englishmen,

"Contendere nobilitate
Noctes atque dies, niti praestante labore,
Ad summas emergere opes, rerumque potiri."

magnitude of our national burdens, which, to a observer, might appear to be a heavy drawback tions, has really been a means of adding to their Had they been oppressive, their operation would ve been very different; but it was seen that they et by increased exertions, and these have been y have, in fact, operated on the public like an in- he necessary expenses of his family on a private and occasioned efforts of industry, economy, and hat have more than countervailed their influence; we should have in vain attempted to produce by owerful means.

ll accounts will be found in the articles in this opriated to England, Scotland, and Ireland, of the , manufactures, and commerce of each. Here only endeavour to lay before the reader a few sults; and these, we regret to say, are but of com- little importance. Owing to the extreme diffi- btaining accurate returns as to the extent or value nsiderable branch of industry, and the limited at- at has been paid to such subjects, but little informa- been collected on which it would be altogether ly. The following estimates are, therefore, sub- t as being free from error, or wholly to be depend- but as being believed to be better entitled to credit t others that have been put forward.

ulture.—Extent of cultivated and uncultivated land:

	Cultivated.	Uncultivated.	Total.
	Acres.	*Acres.*	*Acres.*
	25,532,000	6,615,680	32,147,680
	3,117,000	1,635,000	4,752,000
	5,043,456	13,900,550	18,944,006*
	14,003,472	5,240,726	19,244,198*
Islands (Jersey, Guernsey, Man, &c.)	389,680	785,469	1,119,159
Totals	48,776,513	28,227,436	77,007,949

* The totals for Ireland and Scotland are exclusive of lakes.

average extent of land, under the different species ps, in England and Wales, their average produce per nd price, have been estimated as follows:

Crops.	Acres.	Produce per Acre.	Total Produce.	Price per Qr.	Value.
			Qrs.	*s.*	*L.*
Wheat	3,800,000	3½ qrs.	12,350,000	50	30,875,000
Barley and rye	900,000	4 —	3,600,000	30	5,400,000
Oats and beans	3,000,000	4½ —	13,500,000	25	16,875,000
Potatoes, turnips, &c.	1,200,000	L.5 5s. per acre.			18,120,000
Clover	1,200,000				
	Totals		29,450,000		86,275,000

The price of beans is here reckoned the same as that of oats; but, being usually 10*s.* a quarter higher, the two may be worth together £17,500,000. Gardens and hop plantations are supposed to occupy about 150,000 acres, producing, at an average, about £15 per acre, or £2,250,000 a year. Hence, the total annual value of crops raised in England and Wales will, on this hypothesis, amount to £72,900,000. (*Statistics of the British Empire*, i., 532, 2d ed.) The land under fallow may be estimated at 1,650,000 acres. The pasture land of England and Wales, estimated at 17,000,000 acres, and supposed to be worth £3 10*s.* an acre a year, will consequently yield a total annual value of £59,500,000, which has been distributed as follows:

	£
Cattle 1,100,000, at £13 each	14,300,000
Calves 200,000, at £3 each	600,000
Sheep and lambs 6,800,000, at £1 10*s.* each	10,200,000
Wool (exclusive of slaughtered sheep) 338,000 packs, at £12 each	4,056,000
Hogs and pigs, 555,000, at £1 16*s.* each	1,000,000
Horses, 200,000, full grown, annually produced, at £15 each	3,000,000
Poultry, eggs, rabbits, deer, &c.	1,344,000
Meadow and grass, for work and pleasure horses	13,000,000
Dairy produce, or milk, butter, and cheese	12,000,000
	£59,500,000

The total annual value of the agricultural produce of England and Wales, exclusive of wood, &c., may, therefore, be estimated at about £132,500,000; and though there must necessarily be a great deal of looseness in such computations, we do not believe that the result involves any very material error.

In Scotland, the extent of land under different crops, and their produce and value, have been thus estimated:

Crops.	Acres.	Produce per Acre.	Total Produce.	Price per Qr.	Value.
			Qrs.	*s.*	*L.*
Wheat	220,000	8 qrs.	660,000	50	1,650,000
Barley	220,000	3½ —	220,000	30	1,470,000
Oats	1,275,000	4½ —	5,737,500	25	7,171,875
Beans and peas	100,000				
Potatoes	120,000	L.5. 5s.			2,500,000
Turnips	350,000				
Flax	16,000	L.8			128,000
Gardens	22,000	L.18.			416,000
			Total		13,365,875

Taking the extent of pasture land in Scotland, exclusive of heaths, wastes, &c., at 2,500,000 acres, and estimating its produce to be worth, at an average, £2 per acre,* its total value will be £5,000,000; but to this has to be added the value of about 14,000,000 of mountain pastures, heaths, woodland, and waste land; the value of this land has been estimated, apparently with great moderation, at 3*s.* an acre, which, if accurate, would make a total sum of £2,100,000. Hence the total value of the land produce in Scotland will be

Value of crops and gardens	£13,355,375
of pasture land	5,000,000
of uncultivated land and wood	2,100,000
	£20,455,375

* In the *Statistical Account of Great Britain*, the value of the pasture is estimated at L.3 an acre (i. 549); but we have since seen statements and details that have convinced us that that was an exaggerated estimate.

There are no means of forming any tolerably correct estimate of the extent of land under different crops in Ireland. Of its 8,000,000 of people, it is supposed that 5,000,000 are mainly supported by the potato, and 2,500,000 of the remainder principally depend on oats. The average produce per statute acre in oats is 44½ Winch. bushels (see *Statist. of the British Empire*, i., 514); and estimating the consumption of each of the 2,500,000 individuals at 2½ quarters, about 1,110,000 acres are employed in raising food for them. Add to this the quantity required for the partial feeding of others, for seed, the feeding of horses, exportation to England, &c., and the whole extent of land under oats may, perhaps, be taken at from 3,000,000 to 3,500,000 acres. The land under wheat and barley does not, probably, exceed 600,000 or 700,000 acres. The whole extent of cultivable land in Ireland, about 14,603,000 acres, being estimated, tillage as well as pasturage, at £3 per acre, will yield an annual value of £43,809,000; or, including the produce of the unimproved mountain and bog land, perhaps £44,500,000 may stand for the sum total of the land produce of that country.

Hence, the aggregate annual value of the agricultural produce of the United Kingdom would be,

England	£139,500,000
Scotland	20,455,375
Ireland	44,500,000
United Kingdom	£197,455,375

Rent.—The only authentic information as to the rent of land in Great Britain was obtained under the Property Tax Act. It appears from the returns made by the property tax commissioners, that the total rental of England and Wales amounted, in 1810, to £29,503,070, and that of Scotland to £4,851,404. Owing to the extraordinary depreciation of the currency and the rapid rise of prices, in the years immediately subsequent to 1810, the gross rental of England and Wales had increased, in 1815, to £34,330,462, and that of Scotland to £5,075,242. Since then we have no authentic information to guide us. We believe, however, that we shall not be far wrong, if we suppose the rental of Great Britain to be, at this moment (1839), about identical with its amount in 1810, or to amount to about £34,000,000. In many districts rents are lower now than in 1810; but this fall is probably more than compensated by their rise in other places, resulting from the rapid spread of improvement, and from the influence of steam conveyance in opening new markets to the produce of the more remote parts of the country.

The property tax did not extend to Ireland, so that our information with respect to the rental of that important part of the empire is less authentic. But Mr. Griffiths, the engineer, whose means of acquiring accurate information on the subject cannot well be surpassed, submitted to a committee of the House of Lords a carefully compiled estimate of the rental of each county of Ireland (*see* IRELAND) in 1832, from which it results that the gross rental of that kingdom then amounted to £12,715,478.

The profits of the farmers have been very variously estimated; but, on the whole, we believe they may be safely taken at about half the rent. But supposing this hypothesis to be a just one, their aggregate amount would not be represented by half the gross rental of Britain or Ireland, inasmuch as that includes the rental of the lands occupied by proprietors, or the rent which it is supposed they would bring, provided they were let.

Manufactures.—The manufactures of Great Britain are by far the most extensive and important that ever have belonged to any nation. We may, indeed, be said to be purveyors of most descriptions of manufactured articles for all the world; and there are but few nations, how remote or barbarous soever, that are not indebted for some considerable portion of their comforts, and sometimes even of their necessaries, to the skill and ingenuity of British artisans. A very large proportion of the people of our own country are engaged in, and directly depend upon, manufactures for support; and they supply the materials of that commerce for which this empire is so peculiarly distinguished; and which extends to, civilizes, and enriches almost every country of the globe.

We regret our inability to lay before the reader any accurate accounts of the value of the gross annual produce of any of the great departments of manufacturing industry. The following estimates must, therefore, be regarded as mere approximations; though we are disposed to think that in most cases they come pretty near the mark:

Cotton	£35,000,000
Woollen	22,000,000
Iron and hardware	17,000,000
Watches, jewellery, &c.	3,000,000
Leather	13,500,000
Linen	8,000,000
Silk	10,000,000
Glass and earthenware	£4,250,000
Paper	1,500,000
Hats	2,400,000

The value of the above articles amounts to a gross sum of £116,650,000. But exclusive of these, there are other departments of manufacturing industry of great value and importance; such, for example, as the manufacture of spirits and beer, cabinet-makers' goods, &c. In point of fact, however, but a small part of the value of spirits and beer is derived from the labour expended upon their preparation, or extraction from the malt used in their manufacture; and there are no means by which to form any estimate, how rude soever, of the value of cabinet-makers' work. Some information will subsequently be given as to shipbuilding.

But these statements, how imperfect soever, are more than sufficient to evince the vast extent and importance of our manufactures. It would be very desirable, on many accounts, to be able to separate the sums mentioned above as constituting the gross annual value of our principal manufactures into their constituent parts, that is, to show how much of the total value of any branch of manufacture is made up of raw produce, or of the value of some other branch of manufacture embodied in it, and how much consists of the wages of labour and superintendence, and how much of the profits and wear and tear of capital. But to do this is, in many cases, next to impossible; and in all cases, the greatest care and circumspection are required to avoid falling into the most serious errors. It is necessary also to observe, that considerable care is always required in drawing conclusions from the gross value of any manufacture as to the addition really made by it to the aggregate wealth of the country. Thus, assuming the gross annual value of the woollen manufacture to be about £22,000,000 a year, we should fall into the greatest imaginable error if we supposed, as is commonly done, that it made an annual addition of that amount to the gross produce of the country. Of this sum of £22,000,000, a third part, perhaps, may consist of the value of the wool; and the value of the British wool, which is by far the largest portion of the whole, being already included in the estimate of the annual produce of agriculture, would be reckoned twice over, were it also included in the estimate of the produce of the woollen manufacture. The same caution must be used in almost every case; and unless it be carefully attended to, none but the most misleading inferences need be looked for.

The progress made by Great Britain in manufactures since the middle of last century has been quite unprecedented. At that period, the quantity of iron produced in England and Wales is not supposed to have exceeded 22,000 tons a year; but the application of pit-coal to the production of iron having soon after become pretty general, the manufacture began gradually to increase, the produce in 1788 being estimated at 68,000 tons, in 1796 at 125,000 tons, and in 1806 at 250,000 tons. Since this last-mentioned period, the progress of the iron trade has been such that at this moment (1839) there are certainly not less than from 950,000 to 1,000,000 tons of iron annually produced in England and Wales, and about 120,000 tons in Scotland. The business has now become of the very highest importance. Iron is employed with the greatest advantage in many ways for which it was formerly supposed not to be at all suitable: so much, indeed, is this the case that iron steam-boats have been constructed for crossing the Atlantic! And it is to the cheapness and abundance of our supply of iron as much as to anything else, that the superiority of our machinery, and consequently of most branches of our manufactures, is to be ascribed.

But the progress of the British cotton manufacture since 1760 is undoubtedly the most extraordinary phenomenon in the history of industry. In 1764 the imports of cotton wool did not amount to four million lbs., whereas they now exceed the prodigious amount of 450 million lbs.! It is difficult to give any very satisfactory explanation of this astonishing progress. Much, no doubt, must be ascribed to the influence of the general causes already specified, but much also has been owing to what may be called accidental circumstances. The cotton manufacture may, in fact, be said to be wholly the result of the inventions and discoveries of Hargreaves, Arkwright, Watt, Crompton, and a few others. And the fact of Hargreaves and Arkwright being Englishmen gave us that early priority and superiority in the manufacture which our favourable situation in other respects has since enabled us to maintain. It is seldom an easy matter for new rivals to come into successful competition with those who have already attained to considerable proficiency in any art or manufacture; and they rarely succeed unless they have some very material advantage on their side. But in this instance, besides having the start of foreigners, the natural and moral circumstances under which our manufactures have been placed have given them advantages not enjoyed in anything like the same degree by the manufacturers of any other country. Were any change

or revolution effected in machinery that should admit of coal being advantageously dispensed with, it is difficult to say what effect it might have in the long run on our manufactures. We believe, however, that our advantageous situation, the magnitude of our capital, the industry of our workmen, and the determination of all classes to advance themselves in the world, would, under any circumstances, ensure our continued prosperity as a manufacturing people. So long, however, as coal continues to be as indispensable in industrious undertakings as at present, and so long as we preserve our free institutions, without the alloy of popular licentiousness and agitation, there is not so much as the shadow of a ground for supposing that our manufacturing prosperity will be impaired. On the contrary, it is reasonable to expect, seeing the increasing wealth of our foreign customers, the greater competition at home and abroad, and the greater attention paid to scientific investigations, that it will go on increasing, and that the discoveries and progress to be made in the next age will surpass those made in the present, wonderful as they have been.

Commerce.—Neither the commerce of Tyre or Carthage in antiquity, nor that of Italy in the middle ages, nor of Holland in the 17th century, could compare for the variety and value of the products which it distributes, and the all but unlimited range which it embraces, to the existing commerce of England. Our products are found in every country, and our flag floats over every sea.

"Quas regio terras nostri non plena laboris?"

And as all commerce is bottomed on a principle of reciprocity, and is sure to stimulate the industry, and to add to the wealth of all who engage in it, we may safely affirm, that while the people of Britain are pursuing only their own interests, they are contributing in the most effectual manner to diffuse the blessings of civilization and a taste for luxury and refinement. It is impossible, indeed, to overrate the beneficial influence of that commerce of which this country is the centre and mainspring. No one aware of its vast extent can have the smallest doubt that it is by far the most important means of civilization and improvement ever brought into active operation. And we may unhesitatingly conclude, that instead of having approached, or, as some suppose, passed, its zenith, it will continue to increase with the increasing wealth, and consequently growing wants, of the various nations it is now rousing to activity and enterprise; and that it will derive new vigour, and have its foundations widened and consolidated, by every circumstance calculated to promote the industry and to add to the riches of those with whom we deal.

When we look a little narrowly into the matter, we find that at bottom society resolves itself into a series of exchanges; that every individual is in some sort a merchant; and that the principal business of life consists in the exchange of one sort of service or article for another. Hence in all countries the mercantile transactions carried on at home, or in the *home trade*, infinitely exceed in number and value those carried on with foreigners, or in the *foreign trade*. The latter, however, is not on that account the less important or valuable. But for the intercourse we carry on with foreigners we should be wholly destitute of many most desirable products—such, for example, as tea, coffee, wine, the precious metals, &c., and of the raw material of many of our most important manufactures, as those of cotton and silk. Generally, too, manufactures are improved and perfected according to the scale on which they are carried on, so that an extensive commerce is at once a consequence and a cause of manufacturing pre-eminence. The cotton-mills of Lancashire and Lanarkshire could not have been constructed had the demand for their produce been confined to the empire only: they have been built not merely to supply the limited consumption of Great Britain and Ireland, but the unlimited consumption of the world!

It is plainly impossible, from the nature of the thing, to form any estimate of the extent of the home trade carried on in any great country, or of the exchanges effected among its citizens. Formerly, accurate accounts were kept of the cross-channel trade between Great Britain and Ireland; but, with the exception of corn, no official account is now kept of the products conveyed from the one to the other. Luckily, however, this is not the case with the trade with foreign countries. Heavy duties being laid on most articles imported from abroad, it is necessary for fiscal purposes that their amount should be ascertained with as much accuracy as possible; and it is believed that the declarations of the real value of the exports made by the exporters do not differ materially from the truth.

The trade carried on with colonies, or the colonial trade, though conducted under different regulations and duties, is substantially the same with the foreign trade; and may be, and indeed generally is, considered as a branch of the latter.

We subjoin a few statements respecting the principal articles imported from and exported to the countries with which we have the greatest intercourse.

Russia.—Imports from: tallow, corn, flax and hemp, flax and linseed, timber, bristles, ashes, hides, iron, and wax. Exports to: cotton twist, woollen fabrics, salt, coal, hardware, colonial products, &c.

Sweden and Norway.—Imports from: timber, iron, and bark. Exports to: cottons and cotton yarn, woollens, earthenware, hardware, coffee, indigo, tobacco, sugar, &c.

Denmark.—Imports from: corn and rape-seed, butter, bristles, wool, hides, and bark. Exports to: coal, salt, iron and steel, earthenware, machinery, coffee, indigo, &c.

Prussia.—Imports from: corn, oak and fir timber, bark, bristles, wool, spelter, flax, &c. Exports to: refined sugar, salt, cottons, hardware, earthenware, &c. Our trade with Prussia is principally carried on through Hamburgh.

Germany.—Imports from: wool, corn, wines, butter, linens, hides, clover, rape-seed, smaltz, speltre, zaffre, furs, wooden clocks, &c. Exports to: cotton stuffs and yarn, woollens, refined sugar, hardware, earthenware, iron and steel, coal, salt, indigo, coffee, rum, tobacco, cotton wool, spices, &c. A good deal of the imports from and exports to Holland and Belgium are on German account.

Netherlands.—Imports from: butter, cheese, corn, madder, geneva, flax and tow, hides, linens, seeds, toys, &c. Exports to: cotton stuffs and yarn, woollens, hardware, earthenware, salt, coal, and colonial produce.

France.—Imports from: brandy, wine, silk (raw and manufactured), gloves, madder, eggs, skins, and fruit. Exports to: wool, linens and linen yarn, brass and copper manufactures, machinery, coal, horses, &c. Large quantities of Nottingham lace are smuggled into France, and brandy into England.

Portugal and Spain.—Imports from: port and sherry wines, barilla, wool, raisins, dried fruits, lemons, oranges, olive oil, quicksilver, &c. Exports to: cotton stuffs, woollens, linens, hardware and cutlery, iron and steel, soap, candles, leather, and cinnamon.

Italy.—Imports from: thrown silk, olive oil, straw for plaiting, straw plait and hats, currants, lemons, oranges, wine, barilla, shumac, bark, cheese, lamb skins, hemp, &c. Exports to: cotton stuffs and yarn, refined sugar, woollen manufactures, hardware and cutlery, iron and steel, coffee, indigo, tobacco, pimento, &c.

Turkey, Greece, &c.—Imports from: silk, opium, madder, figs, raisins, valonea, oil, cotton, currants, senna, &c. Exports to: cotton manufactures and twist, linens, hardware, iron and steel, cordage, woollens, earthenware, indigo, and coffee.

Egypt and Africa.—Imports from: cotton wool, flax, linseed, senna and other drugs. Exports to: cotton manufactures, iron and steel, arms and ammunition, and machinery.

Foreign West Indies.—Imports from: sugar, coffee, cotton, cigars, &c. Exports to: cotton manufactures, earthenware, linen manufactures, hardware, iron and steel, woollens, glass, machinery, &c.

United States.—Imports from: cotton, tobacco, wheat flour, wheat, rice, skins and furs, hides, staves, &c. Exports to: cotton, linen, and woollen manufactures, hardware, cutlery, earthenware, salt, brass and copper, apparel, books, &c.

South American States.—Imports from: cotton, wool, sugar, coffee, bullion and precious stones, cocoa, hides, fruits, bark, dye-woods, furs, &c. Exports to: cotton, linen, and woollen manufactures, earthenware, hardware, soap, candles, &c.

African British Colonies.—Imports from: Cape and Constantia wines, hides, ivory, skins, aloes, palm-oil, teak timber, wax, dye-woods, sugar from the Mauritius, &c. Exports to: cotton, woollen, and linen manufactures, apparel, earthenware, hardware, iron and steel, soap, candles, stationery, fire-arms, salt, machinery, &c.

Asia and Australia.—Imports from: tea, indigo, cotton, sugar, silk, coffee, wool, pepper, saltpetre, piece-goods, rice, lac-dye, cinnamon, mace, cloves, cocoa-nut oil, whale oil, ivory, tin, and the precious metals. Exports to: cotton stuffs and yarn, woollens, linens, earthenware, copper, hardware, iron and steel, leather, glass, machinery, &c.

American British Colonies.—Imports from: furs, fish, ashes, skins, turpentine, &c. Exports to: woollens, cottons, linens, hardware, iron and steel, soap, candles, earthenware, apparel, glass, cordage, coal, butter, cheese, &c.

British West Indies.—Imports from: sugar, coffee, rum, cotton, pimento, molasses, mahogany, logwood, fustic, cocoa, cochineal, ginger, hides, &c. Exports to: cotton stuffs, linens, woollens, apparel, soap, candles, hardware, iron and steel, fish, earthenware, cordage, beef and pork, arms and ammunition, &c.

The subjoined Tables give a pretty complete view of the commerce of the United Kingdom. Those who wish for more ample information may refer to the Commercial Dictionary.

I. Official and Declared Value of Exports of British and Irish Produce and Manufactures; and Official Value of Exports of Foreign and Colonial Merchandise from Great Britain; and Official Value of Imports into the same, for the following Years.—(*Parl. Paper*, No. 943, Sess. 1840, and *Finance Accounts*.)

Years ending Jan. 5.	Exports. British and Irish Produce and Manufactures from Great Britain. Official Value.	Exports. British and Irish Produce and Manufactures from Great Britain. Declared Val.	Exports. Foreign and Colonial Merchandise from Great Britain. Official Value.	Imports. Into Great Britain. Official Value.	Years ending Jan. 5.	Exports. British and Irish Produce and Manufactures from Great Britain. Official Value.	Exports. British and Irish Produce and Manufactures from Great Britain. Declared Val.	Exports. Foreign and Colonial Merchandise from Great Britain. Official Value.	Imports. Into Great Britain. Official Value.
	£	£	£	£		£	£	£	£
1799	18,556,891	31,252,836	8,760,196	25,122,203	1819	41,960,555	45,180,150	10,835,800	35,845,340
1800	22,284,941	35,903,850	7,271,696	24,066,700	1820	32,983,689	34,252,251	9,879,236	29,681,640
1801	22,831,936	36,929,007	11,549,681	28,257,781	1821	37,820,293	35,569,077	10,525,026	31,515,222
1802	24,501,608	39,730,659	10,366,966	30,435,268	1822	40,194,681	35,823,127	10,602,090	29,769,122
1803	25,195,893	45,102,330	12,677,431	28,308,373	1823	43,558,488	36,176,897	9,211,928	29,432,376
1804	20,042,596	38,127,787	8,032,643	25,104,541	1824	43,106,039	34,589,410	8,588,996	34,591,264
1805	22,132,367	37,135,746	8,938,741	26,454,281	1825	48,024,952	37,600,021	10,188,596	36,056,551
1806	22,907,371	37,234,396	7,643,120	27,334,020	1826	46,453,022	38,077,330	9,155,305	42,660,954
1807	25,206,546	39,746,581	7,717,555	25,554,478	1827	40,332,854	30,847,528	10,066,503	36,174,350
1808	22,963,772	36,394,443	7,624,312	25,326,845	1828	51,279,102	36,394,817	9,806,343	43,489,346
1809	24,179,854	36,306,385	5,776,775	25,660,953	1829	52,019,728	36,150,379	9,928,655	43,536,187
1810	32,916,858	46,049,777	12,750,358	30,170,292	1830	55,465,723	35,212,873	10,606,441	42,311,649
1811	33,299,408	47,000,926	9,357,435	37,613,294	1831	60,492,637	37,691,302	8,535,786	44,815,397
1812	21,723,532	30,850,618	6,117,720	25,240,904	1832	60,090,123	36,652,694	10,729,943	45,161,961
1813	28,447,912	39,334,526	9,533,065	24,923,922	1833	64,582,037	36,046,027	11,036,759	43,237,417
1814	*	*	*	*	1834	69,633,854	39,305,513	9,820,586	44,529,287
1815	32,200,580	43,447,373	19,157,818	32,620,771	1835	73,495,536	41,286,594	11,549,913	47,908,931
1816	41,712,002	49,653,245	15,708,435	31,822,053	1836	77,932,616	46,926,370	12,783,802	47,463,610
1817	34,774,521	40,328,940	13,441,665	26,374,921	1837	84,883,276	53,015,431	12,384,538	55,733,419
1818	39,233,467	40,349,235	10,269,271	29,910,502	1838	72,312,207	41,911,898	13,223,331	53,224,874

II. Account of the Declared value of British and Irish Produce and Manufactures exported from the United Kingdom, specifying the various Countries to which the same were exported, and the Values sent to each, in each Year, from 1830 to 1838.

Countries.	1830.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.
	£.	£.	£.	£.	£.	£.	£.	£.	£.
Russia	[illegible]	1,191,565	1,587,260	1,531,002	[illegible]	1,752,775	1,742,433	2,046,592	[illegible]
Sweden	40,498	57,127	64,982	60,549	63,094	106,156	112,308	101,121	[illegible]
Norway	63,926	86,580	84,598	66,038	61,969	79,275	79,409	72,413	[illegible]
Denmark	118,513	92,294	98,396	99,951	94,596	107,979	91,302	103,442	[illegible]
Prussia	177,983	192,816	256,568	144,179	186,423	188,273	160,722	131,536	[illegible]
Germany	4,485,606	5,642,962	5,084,997	4,355,548	4,547,166	4,802,966	4,463,729	4,599,016	[illegible]
Holland	2,082,456 (Holland and Belgium)	2,082,896 (Holland and Belgium)	2,789,398 (Holland and Belgium)	2,181,398	2,470,967	2,648,402	2,500,822	3,040,069	[illegible]
Belgium				886,429	750,050	818,487	880,276	804,947	[illegible]
France	475,884	602,688	674,791	848,333	1,116,885	1,453,636	1,581,381	1,643,204	2,314,141
Portugal Proper	1,105,606	976,991	540,792	967,091	1,000,122	1,554,386	1,095,994	1,079,815	[illegible]
—— Azores	23,829	41,638	77,980	54,490	68,275	49,717	63,574	66,406	[illegible]
—— Madeira	38,444	36,960	28,088	38,411	38,456	40,082	62,183	46,944	[illegible]
Spain and the Balearic Islands	607,068	597,848	442,936	442,897	325,907	406,066	487,076	368,656	[illegible]
—— Canaries	42,690	38,252	21,063	30,507	30,688	24,308	40,370	41,804	[illegible]
Gibraltar	888,760	387,286	461,470	386,460	460,719	602,580	758,411	996,155	[illegible]
Italy and the Italian Islands	3,351,379	2,490,376	2,361,773	2,316,980	3,232,777	2,495,171	2,921,466	2,406,866	[illegible]
Malta	180,126	124,519	96,894	126,438	142,886	136,985	148,015	108,830	[illegible]
Ionian Islands	56,963	80,868	65,785	38,916	94,488	107,804	109,123	134,486	[illegible]
Turkey and Continental Greece (exclusive of the Morea)	1,138,616	888,864	915,319	1,019,804	1,207,941	1,331,689	1,776,894	1,163,426	[illegible]
Morea and Greek Islands	9,894	10,440	10,140	25,914	37,170	28,834	12,003	15,431	[illegible]
Syria and Palestine	- -	- -	- -	- -	- -	- -	38,650	- -	[illegible]
Egypt (Ports on the Mediterranean)	110,227	122,888	118,109	145,647	168,867	229,285	216,980	220,060	[illegible]
Tripoli, Barbary, and Morocco	1,188	496	751	2,350	14,893	29,040	29,282	64,007	[illegible]
Western Coast of Africa	298,129	234,785	290,061	329,210	326,488	292,540	467,165	312,938	[illegible]
Cape of Good Hope	330,036	257,945	282,405	346,197	304,362	326,921	482,315	488,814	[illegible]
Eastern Coast of Africa	- -	- -	- -	- -	- -	- -	- -	- -	[illegible]
African Ports on the Red Sea	- -	- -	- -	- -	- -	- -	- -	- -	[illegible]
Ascension Island	- -	- -	- -	- -	- -	- -	- -	- -	[illegible]
Cape Verd Islands	1,710	215	- -	146	880	575	418	751	[illegible]
St. Helena	38,915	38,431	21,896	30,041	31,615	31,187	11,041	9,646	[illegible]
Isle of Bourbon	10,041	- -	- -	- -	7,081	- -	- -	2,795	
Mauritius	161,089	148,475	168,191	88,494	149,319	196,589	280,856	349,428	[illegible]
Arabia	- -	- -	- -	- -	250	6,049	16,358	787	[illegible]
East India Company's Territories and Ceylon	3,886,830 (with China)	3,877,412 (with China)	3,614,779 (with China)	3,496,301 (with China)	2,578,569	2,192,692	4,285,829	3,612,975	[illegible]
China					842,852	1,074,708	1,326,388	678,375	[illegible]
Sumatra and Java	162,102	285,296	156,606	471,712	410,278	353,893	234,862	313,791	[illegible]
Philippine Islands	71,290	39,513	102,234	185,298	76,518	129,743	51,778	38,208	[illegible]
New South Wales, Van Diemen's Land, and Swan River	314,677	398,471	466,238	558,372	716,014	696,345	835,687	921,568	[illegible]
New Zealand and South Sea Islands	1,296	4,782	1,576	986	- -	2,687	- -	- -	[illegible]
Ports of Siam	10,467	- -	- -	- -	19,742				
British North American Colonies	1,857,138	2,089,327	2,075,725	2,092,550	1,671,069	2,158,158	2,739,291	2,141,035	[illegible]
—— West Indies	2,838,448	2,581,949	2,439,806	2,597,589	2,680,024	3,187,540	3,786,453	3,456,745	[illegible]
Hayti	321,768	376,103	543,101	361,628	287,297	306,798	251,668	171,860	[illegible]
Cuba and other Foreign West Indies	618,039	683,581	638,700	877,228	913,006	787,048	987,122	891,713	[illegible]
United States of America	6,132,346	9,053,583	5,468,272	7,579,699	6,844,989	10,568,455	12,425,605	4,695,225	[illegible]
Mexico	978,441	728,848	190,821	481,457	450,610	402,880	254,822	520,880	[illegible]
Guatemala	- -	- -	- -	2,700	30,368	15,214	794	78	
Columbia	216,751	248,250	283,688	121,925	190,296	188,242	185,172	170,451	[illegible]
Brazil	2,452,103	1,238,371	2,144,208	2,575,880	2,460,679	2,630,767	3,080,882	1,824,883	[illegible]
States of the Rio de la Plata	632,172	339,870	660,158	515,362	831,564	658,596	697,334	696,104	[illegible]
Chili	640,086	651,617	708,193	816,817	826,221	606,176	861,903	695,545	[illegible]
Peru	368,469	409,003	276,610	387,624	380,286	441,324	606,282	476,374	[illegible]
Isles of Guernsey, Jersey, Alderney, and Man	344,006	304,084	317,496	326,394	360,086	351,612	313,609	330,017	[illegible]
Total	38,271,597	37,164,372	36,450,594	39,667,347	41,649,191	47,372,270	53,368,572	42,070,744	[illegible]

* Records destroyed by fire.

† The great increase in the *official*, and the comparatively stationary amount of the real value of the exports, has occasioned a great deal of erroneous discussion. The rates by which the official values of the exports are estimated were fixed in 1696, so that they have long ceased to be any test of their actual value, and are of use only as showing the fluctuations in the quantities exported. To supply this deficiency a plan was set on foot by Mr. Pitt, for keeping an account of the real value of the exports from the declarations of the exporters. Now, it has been contended, that, while the great increase in the official value of the exports since 1815 shows that the quantity of the articles exported has been proportionally augmented, their nearly stationary real value shows that we are selling this larger quantity for about the same price—a result which is said to be most injurious. But the circumstance of a manufacturer or merchant selling a large or a small quantity of produce at the same price, affords no criterion of the advantageousness of the sale; for if, through improvements in the arts or otherwise, a particular article may now be produced for half the cost of its production 10 or 20 years ago, it is obvious that double the quantity may be afforded at the same price without injury to the producers. And this has been most strikingly the case with the great articles of cotton, hardware, &c. The fall in the price of the former enables us to export and sell with a profit, (for, unless such was the case, does any one suppose the exportation would continue?) at the same price, more than double the cotton stuffs and twist that we exported in 1815! Surely, however, this is, if any thing can be, a decisive proof of manufacturing improvement and commercial prosperity.

III. Account of the Quantities of the principal Articles of Foreign and Colonial Merchandise imported into, exported from, and retained for Consumption in, the United Kingdom, with nett Produce of the Revenue accruing thereon, during the years 1837 and 1838.

Description.	Quantities imported.		Quantities exported.		Quantities retained for Consumption		Nett Revenue.	
	1837.	1838.	1837.	1838.	1837.	1838.	1837.	1838.
							L.	L.
Ashes, pearl and pot . . . . . cwt.	147,289	127,101	18,810	5,087	123,098	122,390	198	239
Cocoa . . . . . —	2,855,000	4,096,469	988,278	889,257	1,416,613	1,601,787	13,922	15,836
Husks and shells . . . . . —	841,787	894,942	. .	. .	461,170	421,548		
Coffee, viz.								
British plantation . . . . . —	15,184,413	17,436,623	329,017	93,957	17,128,158	15,423,639		
East India and Mauritius . . . . —	9,990,006	8,415,593	1,340,256	246,678	9,205,634	10,263,843	696,645	685,082
Foreign plantation . . . . . —	11,276,096	14,680,068	6,411,709	10,988,456	3,169	8,191		
All sorts —	36,412,514	39,532,279	8,080,975	11,328,290	26,346,961	25,785,673		
Cork, unmanufactured . . . . . cwt.	60,515	51,522	246	255	60,076	57,532	24,124	23,119
Cotton wool, from foreign countries, viz.								
The U. S. of America . . . . . lbs.	289,651,716	481,427,228						
Brazil . . . . . —	20,949,145	24,464,505						
Turkey, Syria, and Egypt . . . . —	7,381,540	5,412,478						
Other foreign countries . . . . —	4,016,289	4,759,950						
Total from foreign countries	354,080,350	466,074,551						
Cotton wool, from British possessions, viz.								
East Indies and Mauritius, the growth of lbs.	51,577,141	40,229,435						
Foreign —	56	549						
British West Indies, the growth of . —	1,199,162	899,435						
Foreign —	296,440	690,251						
Other British possessions . . . —	23,954	16,606						
Total quantities	407,206,785	507,850,677	39,723,081	30,844,469	368,445,885	455,096,755	469,650	587,988
Indigo . . . . . lbs.	6,545,873	7,504,998	5,587,561	5,143,591	2,296,194	3,008,780	29,889	38,819
Lac dye . . . . . —	1,011,874	1,089,952	128,959	400,897	438,895	575,089	1,140	1,288
Logwood . . . . . tons.	14,699	15,992	3,316	4,987	12,023	13,726	2,948	2,261
Madder . . . . . cwt.	84,841	97,411	382	2,374	78,830	108,921	8,087	10,912
Madder roots . . . . . —	108,235	78,701	6	169	100,508	92,941	2,552	2,076
Flax and tow, or oakum of hemp and flax	1,600,985	1,688,577	6,970	6,292	986,864	1,016,925	4,284	6,867
Cassia . . . . . —	217,392	168,738	17,841	22,921	174,942	168,424	128,289	124,468
Lemons and oranges . . . chests or boxes	349,850	352,107	1,498	1,926	311,480	339,846	62,431	60,989
Raisins . . . . . —	169,860	195,468	11,386	15,669	152,162	155,174	114,095	116,330
Hats of straw . . . . . no.	26,229	14,472	12,714	9,778	6,884	4,822	1,692	1,298
Plaiting of straw . . . . . lbs.	30,882	40,110	7,449	11,689	22,982	34,692	29,003	29,698
Hemp, undressed . . . . . cwt.	773,681	780,976	16,574	30,466	651,813	783,576	2,768	3,178
Hides, untanned, viz.								
Buffalo, bull, cow, ox, or horse . . —	388,682	342,382	48,649	65,492	290,739	316,369	38,692	41,551
Hides, tanned, viz.								
Buffalo, bull, cow, ox, or horse . . lbs.	87,638	165,956	39,998	121,142	69,895	29,962	614	946
Molasses . . . . . cwt.	592,625	640,469	1,641	1,291	592,019	638,210	298,234	322,422
Oil, olive . . . . . gallons	1,721,814	2,008,110	209,472	208,768	1,496,656	2,022,146	34,998	45,416
— palm . . . . . cwt.	225,297	292,312	16,722	3,859	211,919	272,591	13,290	17,102
— train, spermaceti, and blubber . tons.	21,893	22,281	398	1,162	20,578	22,006	14,270	6,805
Saltpetre, and cubic nitre . . . . cwt.	349,998	298,556	26,009	68,169	240,222	230,909	6,230	7,509
Flax and linseed . . . . . bushels	3,321,069	3,304,989	6,879	146,926	3,261,642	3,195,695	21,118	19,981
Tares . . . . . —	130,086	56,015	182	457	107,496	71,355	5,638	4,210
Silk, raw . . . . . lbs.	4,146,431	3,459,959	345,977	134,458	3,260,105	3,325,316	15,454	15,989
Waste, knubs, and hards . . . . —	943,991	945,695	21,989	22,254	897,459	922,935	389	427
Cassia lignea . . . . . —	984,674	860,656	760,141	557,702	185,495	308,957	2,543	2,281
Pepper . . . . . —	5,291,998	5,622,242	4,788,989	5,077,109	2,235,076	. .	65,651	
Pimento . . . . . —	2,113,900	905,898	1,276,845	807,539	325,406	. .	4,193	
Sugar, viz.			Ra w.					
West India, of British possessions . cwt.	2,205,928	2,821,484	445,952	574,697				
East India, of British possessions . —	238,679	422,851	. .	. .				
East India, of Foreign possessions . —	77,687	129,627	. .	. .	2,954,310	3,968,685	4,769,963	4,656,992
Mauritius . . . . . —	657,961	604,471	. .	. .				
			Refined actual weight.					
Foreign . . . . . —	295,073	261,766	27,907	268,946				
Tallow . . . . . —	1,314,649	1,182,449	52,376	19,513	1,262,514	1,163,197	202,977	189,689
Tea . . . . . lbs.	36,973,931	40,413,714	4,716,949	2,577,877	30,886,206	38,251,563	3,223,840	3,992,685
Timber, viz.								
Battens and batten ends . . . gt. hhds.	15,983	18,020	723	95	14,451	17,649	133,808	161,112
Deals and deal ends . . . . —	72,882	72,737	948	1,206	68,651	70,878	560,570	582,261
Masts above 6 and under 8 ins. in diameter . . . . . No.	9,474	11,940	199	303	9,769	10,969	2,695	2,981
Masts above 8 and under 12 ins. in diameter . . . . . —	3,628	3,943	160	121	3,444	3,699	2,313	2,692
Masts above 12 ins. and upwards . —	4,973	4,289	19	76	4,077	4,889	4,971	5,484
Oak planks . . . . . —	1,898	3,996	6	. .	2,196	3,859	3,813	15,562
Staves . . . . . gt. hhds.	85,721	73,181	1,882	1,276	84,454	75,461	51,692	58,788
Fir, 8 ins. sq. and upwards . . . loads	579,980	647,061	546	546	581,089	625,909	456,416	572,602
Oak . . . . . —	31,656	34,390	8	. .	30,940	36,165	41,481	65,766
Unenumerated . . . . . —	43,494	43,416	30	45	48,026	43,523	12,073	10,578
Walnut logs . . . . . —	5,468	5,787	3	. .	4,030	4,518	10,996	12,969
Tin . . . . . cwt.	29,102	30,732	29,216	29,054	2	72	6	61
Tobacco, viz.								
Unmanufactured . . . . . lbs.	27,144,107	30,162,084	17,341,887	11,540,495	22,221,429	23,149,725	2,477,988	2,681,812
Manufactured or cigars . . . . —	692,198	1,446,084	392,989	652,986	144,325	189,716		
Snuff . . . . . —	4,158	857	3,472	791	351	294		
Wine, viz.								
Cape . . . . . galls.	618,105	342,372	6,786	2,712	600,727	538,598	68,394	74,027
French . . . . . —	725,140	544,128	106,986	131,895	438,894	417,951	120,336	113,298
Portugal . . . . . —	2,692,382	3,128,725	195,518	245,168	2,569,352	2,900,457		797,298
Madeira . . . . . —	288,400	264,920	148,107	153,374	111,374	110,294	1,497,987	30,386
Spanish . . . . . —	2,802,898	3,876,847	492,945	608,943	2,278,953	2,497,538		685,812
Other sorts, including wine mixed in bond —	904,386	857,491	381,122	406,368	504,319	598,173		144,645
All sorts of wine	8,035,490	8,519,484	1,334,769	1,498,427	6,391,581	6,990,271	1,697,097	1,846,057

The means of internal communication in Great Britain are probably superior to those enjoyed by any other country. Our high roads, which, during the first half of last century, were execrable, have been signally improved since the close of the American war; and since the general introduction of the practice of *Macadamizing*, they may be confidently pronounced to be the very best in Europe. With the exception of Holland and Belgium no country is better supplied with canals; and by these means, and the aid afforded by our numerous navigable rivers, the conveyance of the bulkiest articles has been rendered both easy and cheap. Railroads seem now, however, to be likely to supersede most other methods of conveyance, in so far at least as the transit of passengers and of the lighter and more valuable species of goods are concerned; and the wonderful speed with which lengthened trains of carriages are impelled by locomotive engines along these roads, is among the most valuable and astonishing results of modern science and discovery. By facilitating travelling to a degree that could not, a few years ago, have been conceived possible; rendering all the great markets of the empire easily accessible to the products of the remotest districts; obliterating local prejudices and customs; reducing the country to a homogeneous mass; and producing everywhere

a spirit of emulation and competition, our improved means of communication are exercising an influence of the most powerful kind, and which cannot be too highly appreciated.

Still, however, it has been doubted whether these extraordinary improvements in the arts, and the vast extension of commerce, has conferred any real and important advantage on the bulk of our people. That they have added prodigiously to the field of employment is certain; but it has been contended that the increase of population and consequently of the demand for labour, has been equal, or nearly so, to the increase of employment; that the condition of the people has not been materially improved; and that their command over the necessaries, conveniences, and enjoyments of life have not been augmented in any thing like the degree in which their numbers have increased. There is really, however, no truth in these representations. The condition of the great bulk of the people of Britain, and especially of the labouring classes, has been signally, and indeed astonishingly improved since the middle of last century. The greatest possible ameliorations have been effected in the interval in the diet, dress, and lodging of all classes. Towards the middle of last century, about half the people of England were consumers of barley, rye, and oat bread; whereas, at present, not a tenth part of the population use any bread unless made of wheat. The consumption of butchers' meat, as compared with the population, has also doubled, or more, in the interval (*Statistics of the British Empire*, ii., cap. 5); and the extraordinary increase in the consumption of tea, sugar, coffee, and such like articles, is too well known to require being pointed out. The improvements that have been made in clothing and lodging are, if possible, still more remarkable. Linen shirts, that were formerly luxuries, used only by the richer classes, are now worn by every body; and the old, coarse, comfortless home-made cloths have been wholly superseded by the better and cheaper products of the factories. The cheapness, to specify one instance, and extraordinary abundance of cotton fabrics, have given the poorest females the means of greater comfort, neatness, and display in dress, than were enjoyed by the highest classes in the first half of last century. And any one who compares the old farm-houses and cottages, or the houses in the old narrow streets and lanes in any one of our great towns, with the farm-houses, cottages, and town lodgings for the poor, built within the last fifty, and still more, the last thirty years, will at once be sensible of a vast improvement. Essential as glass windows may now appear, in the 16th century they were luxuries, all but unknown, in the castles of the principal nobility in England; and in Scotland, in the early part of last century, glass was seldom seen in the windows of the first class of country houses, and never in cottages. (*Statistics of British Empire*, i., 714.) The latter were then, also, almost universally destitute even of chimneys! But the liberal use of these, and of glass, is not the only circumstance in which modern houses excel those built previously to the American war. The former are in all respects superior. They are constructed on a larger scale; the apartments are more spacious and lofty; they are better ventilated; and are supplied with water to an extent of which our ancestors had no idea. It is, in fact, to the better construction of houses, the greater width of streets, and, above all, to the abundant supply of water and the effective system of under-ground drainage that now exists, that the entire freedom of our great towns from epidemic diseases, and the wonderful improvement in the health of the inhabitants are mainly to be ascribed.

Signal as the spread of improvement has been everywhere throughout Great Britain since 1750, it has been greatest in Scotland. This, no doubt, has been principally owing to the fact of Scotland being previously in a comparatively backward state. But its progress since the epoch referred to, or rather since the close of the American war, has been all but unprecedented; and if at all, has only been surpassed by the progress made by Kentucky, and one or two more of the American states.

In Ireland, we regret to say, improvement has been much less rapid than in any part of Great Britain; but even there a considerable advance has been made; and the fair presumption seems to be, now that the civil disabilities under which the Catholics laboured have been removed, that improvement will proceed with an accelerated pace.

If anything more than has been already stated were required to establish the astonishing improvement in the condition of the people of Great Britain during the last fifty years, it would be evinced by the decrease that has taken place in the rate of mortality since 1760 and 1770. The extreme limit of human life assigned by the Psalmist has not, indeed, been extended; but a much larger proportion of those born arrive at or approach to that limit than formerly. The probable life of a male annuitant five years of age (a picked life), at the commencement of last century, has been found to be 39·03 years; whereas it appears that the probable life of a male of five years of age, taken at an average of the mass of the population, from 1813 to 1830, was not less than 49·80, or nearly 11 years greater than the former! This extraordinary improvement must, no doubt, be ascribed to a variety of causes: partly to the drainage of bogs and marshes, by which agues and marsh-fevers have been entirely banished from many districts; partly to improvements in the diet, dress, lodgings, and other accommodations of the mass of the people; partly to the greater prevalence of cleanliness; and partly, and since 1800 chiefly, perhaps, to discoveries in medical science and the extirpation of the smallpox. But, however explained, this, and the facts mentioned above, show conclusively that the beneficial influence of the extraordinary improvements in arts and sciences made during the last 60 or 70 years has not been countervailed by the increase of population, and that it has not been confined to the upper and middle classes. On the contrary, these improvements have been especially beneficial to the labourers. The latter are at this moment incomparably better fed, better clothed, and better lodged, than at any former period of our history; and, in point of fact, daily enjoy, and reckon as indispensable, a great number of articles of convenience and luxury that formerly could rarely be obtained even by the richest lords.

Shipping.—The mercantile marine of Great Britain first began to attain to considerable importance in the reign of Elizabeth; and it has continued progressively to increase with the increasing colonies and commerce of the country. The subjoined Tables give a view of its present magnitude, and of the navigation of the empire:

I. Account of the Number and Tonnage of Vessels, with the Number of their Crews, belonging to the British Empire, on the 31st of December, 1836, 1837, and 1838.

	1836.			1837.			1838.		
	Vessels.	*Tons.*	*Men.*	*Vessels.*	*Tons.*	*Men.*	*Vessels.*	*Tons.*	*Men.*
United Kingdom	19,893	2,312,846	138,136	19,936	2,296,227	139,232	20,300	2,383,484	143,697
Isles of Guernsey, Jersey, and Man	565	36,903	3,995	600	37,294	4,230	612	37,275	4,359
British Plantations . . .	5,432	442,897	28,506	5,501	457,497	30,044	5,697	469,842	31,236
Total	25,890	2,792,646	170,637	26,037	2,791,018	173,506	26,609	2,890,601	178,583

II. Account of the Number and Tonnage of Coasting Vessels, including their repeated Voyages, which entered inwards and cleared outwards, with Cargoes, at the several Ports of the United Kingdom, during 1837 and 1838; distinguishing the Vessels employed in the Intercourse between Great Britain and Ireland from other Coasters.

Coasting Trade.	*Entered inwards.*				*Cleared outwards.*			
	1837.		1838.		1837.		1838.	
	Ships.	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*
Employed in the intercourse between Great Britain and Ireland	10,299	1,202,104	10,312	1,264,975	16,347	1,585,624	15,908	1,556,216
Other Coasting Vessels	117,712	9,207,266	117,859	9,226,777	122,443	9,315,563	121,895	9,269,307
Total	128,011	10,409,370	128,171	10,491,752	138,790	10,901,187	137,803	10,825,523

III. Account of the Number and Tonnage of Vessels employed in the Foreign Trade of the U. Kingdom, distinguishing the Countries to which they belonged, which entered inwards and cleared outwards in the Years 1837 and 1838, exclusive of Vessels in Ballast, and of those employed in the Coasting Trade between Great Britain and Ireland.

Countries to which the Vessels belonged.	Entered inwards.				Cleared outwards.			
	1837.		1838.		1837.		1838.	
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
United Kingdom and its Dependencies	12,252	2,346,300	12,890	2,464,030	10,614	1,861,121	11,471	2,058,240
Russia	221	61,791	249	67,346	119	33,562	124	34,501
Sweden	140	18,354	156	19,861	118	14,511	128	15,891
Norway	723	116,578	867	132,706	208	22,471	243	24,535
Denmark	850	59,077	897	63,990	852	60,576	855	61,545
Prussia	715	142,990	883	169,817	406	71,808	432	76,322
Other German States	872	60,607	913	67,180	581	44,549	637	47,021
Holland	438	38,773	589	50,358	404	41,438	444	42,963
Belgium	311	34,317	279	35,335	345	39,363	361	51,270
France	801	34,537	983	49,776	1,139	87,382	1,600	125,565
Spain	63	7,460	49	5,503	55	6,691	55	6,300
Portugal	75	7,984	46	4,338	29	3,270	23	2,277
Italian States	44	9,756	22	7,961	49	11,093	29	6,301
Other European States	.	.	1	478				
United States of America	606	276,844	803	362,959	611	279,429	799	362,954
Other States in America, Africa, or Asia	2	512	2	386	3	754	3	609
Total	18,113	3,215,819	19,639	3,501,254	15,526	2,578,018	17,204	2,916,302

The following Table exhibits an account of the number and tonnage of the Steam ships belonging to the different divisions of the British dominions in 1838.

	England.		Scotland.		Ireland.		United Kingdom.		Isles of Guernsey, Jersey, and Man.		British Plantations.		Total.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
1838	484	43,877	105	13,113	84	17,694	673	74,684	5	709	44	7,323	722	82,716

Ship-building is principally carried on at the ports of London, Sunderland, Newcastle, Hull, Liverpool, &c. The business has of late increased very rapidly at Sunderland; so much so, that while only 60 ships, of the burden of 7500 tons, were built in that port in 1830, no fewer than 247 ships, of the burden of 59,441 tons, were built in it in 1838! Of late years, many steam-boats and other craft have been built in the Clyde. The ships built in the Thames bear, generally, the highest character. At a rough average, the cost, including outfit, of the new ships annually sent to sea may be estimated at from £10 to 12£ a ton.

Account of the Number of vessels with the Amount of their Tonnage, that were built and registered in the Ports of the British Empire, in 1836, 1837, and 1838.

	1836.		1837.		1838.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
United Kingdom	679	86,509	936	131,171	1,099	157,255
Isles of Guernsey, Jersey, and Man	30	3,127	69	4,751	58	4,204
British Plantations	441	66,604	510	71,306	343*	45,811
Total	1,150	156,240	1,515	207,228	1,490	[illegible]

Money.—The metallic money of the United Kingdom, consists partly of gold, and partly of silver and copper coins. The standard of our gold coin is 11 parts fine to 1 part alloy: a pound troy of this standard gold is coined into 46 sovereigns and $\frac{20}{186}$ths of a sovereign, or into £46 14*s.* 6*d.*; so that the sovereign contains 113.001 grains fine, and 123.274 grains standard gold.

The standard of our silver coin is 11 oz. 2 dwt. fine to 18 dwt. alloy. Since 1816, a pound of this standard silver has been coined into 66 shillings, so that each shilling contains 80.727 grains pure silver, and 87.27 grains standard. Silver coins form a mere subsidiary currency, and are legal tender to the extent only of 40*s.*

Copper coins are much over-valued in our currency, and are legal tender to the extent only of 1*s.*

But by far the greater part of the considerable transactions in the United Kingdom having reference to money, are settled by the intervention of paper; that is, by the agency of the notes of the different banking companies, or of bills. In England and Ireland no bank note can be issued for less than £5, but in Scotland they may be issued so low as £1; they are all made payable to bearer on demand, either in coin or in notes of the Bank of England. The latter, with the banks of Scotland and Ireland, are the principal banking establishments. Bills vary in every possible way, as to amount, time, and place of payment

Constitution.—For full details as to this interesting and important head, the reader is referred to the articles England, Scotland, and Ireland. It is here sufficient to observe, that the British constitution appears to have been at its outset substantially the same with the constitution originally established in most of the other European states formed out of the ruins of the Roman empire.† But it is the peculiar boast and happiness of England that she alone has had the good sense or good fortune to preserve that distribution of power among the different orders of the community which at one time prevailed among the French, Spaniards, &c. Our government is of the species called mixed, being partly monarchical, partly aristocratical, and partly democratical. The executive authority is vested in the sovereign, or, rather, in the ministers chosen by him, while the legislative authority is shared by the sovereign and by the houses of Lords and Commons. The former of these houses consists of dignified clergymen, and of nobles whose dignity is hereditary, and who are generally possessed of large fortunes.

At present (1839) it consists of

Peers of the blood royal	3
Archbishops	2
Dukes	21
Marquises	20
Earls	113
Viscounts	19
Barons	200
Scotch representative peers	16
Irish ditto	28
English bishops	24
Irish representative ditto	4
Total	450

The House of Commons.—The predominating power in the state—consists of 658 representatives chosen by electors in the different counties and represented towns; and though the sovereign be not, his ministers are, responsible to it and to the H. of Lords for all acts done by them in their public capacity. According to the theory of the constitution, the H. of C. is chosen by, and represents the wishes, feelings, and prejudices of, the British people. But if by people be meant the full-grown male pop. of the U. Kingdom, this statement is altogether erroneous. By far the greater portion of the population has not, and never had, anything directly, and but little indirectly, to do with the choice of the members of the H. of C. Down to the passing of the Reform Act in 1832, the members for counties in England were chosen by persons having a freehold or a life interest in freehold property, worth 40*s.* a year; and in towns the right of election was usually in the corporation, or in the corporation and freemen. That hostility to the old system that paved the way for the Reform Act was not occasioned

* Returns defective.

† "Si l'on veut lire," says Montesquieu, "l'admirable ouvrage de Tacite sur les mœurs des Germains, on verra que c'est d'eux que les Anglois ont tiré l'idée de leur gouvernement politique. Ce beau système a été trouvé dans les bois." (*Esprit des Loix*, liv. xi., cap. 6.)

so much by the faulty mode in which representatives were chosen in towns entitled to send them to the H. of C., as by the decayed condition of many of these towns. The parl. boroughs had all been specified previously to the Revolution; and no provision was made in the constitution for admitting representatives for such new boroughs as might afterward attain to importance, or for the disfranchisement of such of the parl. boroughs as might happen to fall into insignificance. Hence it came to pass that many commercial and manufacturing towns, which had attained to vast wealth and importance after the parliamentary boroughs were selected, were excluded from all share in the representation, while, on the other hand, many boroughs that had become quite unimportant continued to enjoy this valuable privilege. A distinction of this sort could not be long endured, and but for the engrossing excitement occasioned by the late French war, it would, most likely, have been obviated some twenty years sooner. The Reform Act, by disfranchising a good many decayed and trifling boroughs, and enfranchising the greater ones, and giving the right of voting at the election of members to the holders of £10 houses, has rendered the H. of C. a good deal more democratical than formerly, and has, consequently, made it correspond better with the theory of the constitution. This tendency has, perhaps, also been strengthened by the changes that were at the same time made in the county representation, though that is more doubtful.

STATISTICAL VIEW of the Representation of the United Kingdom.

Places represented.	Number of Members.	Registered Electors, 1833.	Pop. (exclusive of army and navy.
England.			
40 Counties . . .	144	494,941	6,336,880
2 Universities . .	4		
187 Cities and Burghs .	323	314,946	4,754,743
Wales.			
12 Counties . . .	15	28,306	699,671
58 Cities, Burghs, &c. .	14	11,763	106,314
Scotland.			
33 Counties . . .	30	46,489	1,809,167
66 Cities and Burghs .	23	38,261	986,077
Ireland.			
32 Counties . . .	64	65,533	7,027,509
1 University . . .	2	2,121	
33 Cities and Burghs .	39	32,646	730,582
404	658	973,816	24,029,702

It remains to be seen whether the changes that have been made in the system of representation will turn out in the end to be beneficial. It is obvious that such a modification in our institutions as should admit the great towns that had grown up since the parl. boroughs were selected to a direct participation in the privileges of the constitution, was alike just and indispensable. It was an insult to common sense to pretend that Gatton and Old Sarum should be represented, and that Manchester and Birmingham should not; and the wonder is, that so revolting an anomaly should have been so long maintained. The only question now is, has the franchise been placed in proper hands? Time only can resolve this; but there are, perhaps, some grounds for apprehension. It appears to us that, in a country like Great Britain, with so great a public debt, and where so much depends on the security of property in opinion, as well as in fact, the power to send representatives to the H. of C. should not have been voluntarily conceded, except to those who, from their position in society, might be presumed to have a substantial interest in the support of the existing order of things. But the occupier of a £10 house or of a £50 farm may be, and in fact not unfrequently is, little better than a beggar. And we are not of the number of those who contend that a person with only 5*s*., or without anything, will feel himself as much interested in good government, and in the maintenance of that security so essential to all great undertakings, as the owner of an estate or of a cotton-mill. That such a person has a real interest in the well-being and tranquillity of the empire, is most true; but it is absurd to suppose that he will be so likely to be influenced by a wish for its promotion, or that he will be so little likely to lend a willing ear to the seductive harangues of demagogues, or to give his sanction, in periods of distress or excitement, to dangerous innovations, as a person with some considerable amount of property.

That there are difficulties in the way of the establishment of a *bonâ fide* property qualification is true, but they are far from insuperable; and provided the qualification were of a reasonable amount, it appears to be the most likely means of securing the election of representatives to whom the affairs of the country might be safely entrusted, and of providing for a really responsible, and, at the same time, safe and judicious system of government.

We believe, however, that the objectionable class of electors alluded to above forms in most, if not in all, instances a minority, and that the good sense and obvious interest of the bulk of the people will be sufficient to hinder any rash or dangerous tampering with our institutions. It were well, however, that steps were taken to give the Reform Act fair play, by putting a stop to the manufacture of fictitious votes. In many instances this practice has been carried to a very great height, and threatens, unless put an end to, to subvert every sound principle of representation.

Perhaps the greatest advantage resulting from the free constitution of the H. of C. has been indirect rather than direct. We owe to it what no other European nation has enjoyed—a really free press. According as the people increased in wealth and intelligence, and members for populous places found it necessary to conciliate public opinion, it became of importance to them to have their speeches printed and circulated over the country. Hence, though the reporting of debates be a breach of privilege, it has long been practised, with the consent of all parties. Members, in fact, speak less to the House than to the reporters, and, through them, to the country; and the censures and comments in which they are accustomed to indulge become a warrant and an apology for similar censures on the part of journalists. It would have been subversive of every principle of justice to punish the latter for what had been proclaimed with impunity by the former. Hence it is that we are really indebted for the freedom of the press, that is, for the palladium and only real safeguard of our rights and liberties—not so much to the votes, as to the debates carried on in the H. of C. Freedom of debate produces freedom of printing; and, consequently, gave us the only effectual security for good government, and the only real check upon abuse. It would require a lengthened essay, or rather a large volume, to point out all the advantages we derive from the freedom of the press; but it is not too much to say, that we are mainly indebted to it for the high place we hold among the nations of the earth; and should we ever be deprived of it, our other institutions would, one by one, be subverted, or be rendered of comparatively little importance, and the sun of Britain's glory would set—and forever.

Next to the security afforded by the freedom of the press, *trial by jury* has been the grand bulwark of the liberties of the people of England. This instituiton is of very remote origin, and, like representative assemblies, was at one time introduced into several European countries. Is is expressly laid down by the great charter, that "*nullus liber homo capiatur, vel imprisonetur, aut exulet, aut aliquo alio modo destructur, nisi per legale judicium parium suorum, vel per legem terræ.*" "The founders of the English laws," says Blackstone, have, with excellent forecast, contrived that no man should be called to answer to the king for any capital crime, unless upon the preparatory accusation of twelve or more of his fellow-subjects (the *grand jury*); and that the truth of every accusation, whether preferred in the shape of indictment, information, or appeal, should be afterward confirmed by the unanimous suffrages of twelve of his equals and neighbours (the *petty jury*), indifferently chosen, and superior to suspicion. So that the liberties of England cannot but subsist so long as this *palladium* remains sacred and inviolate, not only from all open attacks, which none will be so hardy as to make, but also from all secret machinations, which may sap and undermine it by introducing new and arbitrary methods of trial by justices of the peace, commissioners of the revenue, and courts of conscience." (Book iv., cap. 27.)

With the exception of England, trial by jury, in most other countries, was not long in being either suppressed or perverted; that is, juries were either entirely dispensed with, and the power to try prisoners entrusted to judges appointed by the different governments, or the institution was kept up in name only, its object and spirit being totally changed. Instead of jurymen being "indifferently chosen, and free from suspicion," which is of the very essence of jury trial, they were not unfrequently selected by the crown, or its creatures! When so perverted, this institution, from being an efficient protection against unjust and unfounded accusations, becomes a most convenient and dangerous instrument in the hands of an unprincipled government. Hence, it is always impossible to form any fair estimate of the judicial systems of any two or more countries, or of the protection afforded by each to life and property, from merely learning that trial by jury is established in them. Everything depends on its organization. If juries be fairly and impartially chosen from the mass of the people, they are the best bulwarks that can probably be devised for the protection of innocence; but if otherwise—if they may be named, or their election influenced, by judges or government officers, they throw a constitutional veil over the acts of the oppressor, and are, in all respects, most inimical to the public interests.

In England, the selection of jurymen having been always, or at least very generally, made on fair principles,

jury trial has been deservedly in the highest degree popular. In most countries, the fact of government bringing a charge against an individual, and his condemnation have been nearly identical; but it has been quite otherwise with us. Here the charge had to be referred to 12 individuals fairly selected from among the freeholders of the neighbourhood; and unless they were *unanimously of opinion that the charge was well founded*, the accusation fell to the ground, and no farther legal proceedings bottomed upon it could be instituted against the accused.

The signal benefits derived from jury trial in criminal cases, and in charges of treason and sedition; and the fact that, were it given up in one class of cases, it might gradually fall into disuse in others, seem to be the principal causes of its being continued as a means of trying all descriptions of civil suits. The fair presumption, however, would seem to be, that a large class of civil cases might be as well, or better decided by a judge or judges appointed for that purpose; and one would be disposed to think that trial by jury might now be advantageously confined to that description of civil cases where the facts are disputed, for the investigation of which it is so peculiarly well fitted.

The vital importance of an indifferent selection of jurymen is obvious; but if any doubt should remain in the mind of any one with respect to it, that will be removed by comparing its influence in England with its influence in Scotland: in the former, it has been the best defence of the liberty of the subject; whereas, in the latter, it was the readiest means government could employ to oppress and get rid of any obnoxious individual! This anomalous result was entirely owing to the fact that, in England, juries were fairly selected; while in Scotland, they were nominated by the sheriffs and judges! Luckily, however, this gross abuse has been at last obviated; and Scotland, as well as England, is now in the *bonâ fide* enjoyment of trial by jury.

Religion.—The most perfect toleration is given to the professors of different religious creeds in the U. Kingdom. But, from the Revolution down to 1829, Catholics were excluded from parliament, and were incapable of holding most offices of trust and emolument. These unjust and degrading disabilities were, however, removed at the epoch referred to; and Catholics may now be elected members of the legislature, and are eligible to almost all offices. The repeal of the test and corporation acts, in 1828, removed sundry disabilities under which dissenters previously laboured.

The established church of England has retained the episcopal form of church government, with its subordination of ranks; and it is a very richly-endowed institution. Its tenets, which are partly Lutheran and partly Calvinistic, are embodied in the famous 39 Articles. The Kirk, or established church of Scotland, which is Presbyterian in form and Calvinistic in principle, is moderately well endowed. The greatest equality subsists among its members; and, on the whole, it may be said to be an extremely useful and an essentially popular body.

These churches respectively enjoy the confidence and support of the great bulk of the people of England and Scotland. But it is quite otherwise with the established church of Ireland. The latter is identical with the church of England. Inasmuch, however, as the doctrines of the Reformation never made any considerable progress in Ireland, and as the great bulk of its inhabitants have always been Roman Catholics, the established church has been that of a small minority only, and has never possessed the esteem of the people. On the contrary, they have always regarded it as a usurpation, as originally forced upon them by the arms, and upheld by the power, of England, and as being hostile alike to their religion and their secular interests. Much of the disturbance and disaffection that always prevail in Ireland are to be ascribed to this unhappy constitution of the established church. It is in truth little better than a contradiction and an absurdity to make the church of a small minority the national church, and to assign to it funds that might amply provide for the religious instruction of the whole people. It is not to be supposed that the majority should tamely acquiesce in such a state of things; and common sense would suggest that the Catholic should be made the established religion of Ireland, or, at all events, that the Catholic clergy should participate, in proportion to the number of their adherents, in the endowments now exclusively enjoyed by the established clergymen.

Revenue and Expenditure.—That portion of the national revenue that is withdrawn from the public by means of taxes, and appropriated to the use of government, amounts at present (1839) to about £50,000,000 sterling, and far exceeds in magnitude the public revenue of any other country. But it must not thence be inferred that taxation is here comparatively heavy. Its pressure is not to be estimated by the actual amount of the sum taken from the people and lodged in the coffers of the treasury; but by the mode in which taxes are imposed, and the ability of the people to bear them. In some countries taxes are imposed on certain classes only; and even where this gross inequality does not exist, they are often imposed on erroneous principles, and in a way that makes their assessment and collection peculiarly difficult and injurious. But in the U. Kingdom taxation presses equally, or very nearly so, on all classes; and, without pretending to say that our system of taxation is perfect, or that it might not be materially improved, it appears, speaking generally, to be founded on sound principles, and is practically as little injurious as it could well be rendered. And if we compare the magnitude of our taxes with that of the national revenue whence they are derived, it will probably be found that the complaints of the peculiarly heavy pressure of taxes in this country are, in a great measure, without foundation. It is not to the influence of taxation, but to the expensive style of living, which prevails among us, and which luckily (for it is the grand incentive to industry and invention) pervades all classes, that the difficulty many individuals have in preserving their places in society is to be ascribed. Far, indeed, from supposing that the influence of taxation in Great Britain has been hostile to the increase of public opulence and private comfort, we believe it has had a precisely opposite effect. To the desire of rising in the world the increasing pressure of taxation during the late war superadded the fear of being thrown down to a lower station and the two together produced results that we should in vain have looked for from the unassisted agency of either. Oppressive taxes would have had an opposite effect; and instead of producing new displays of industry and economy, would have produced only despair and national impoverishment. But it was seen that the increase of taxation might be met by increased exertion and economy; and this increased exertion has, in fact, led to the production of a far greater amount of wealth than was required to meet the increased demands of the revenue collectors.

About three fourths of the public revenue are derived from duties of customs and excise; and the rest from duties on stamps, the assessed taxes and the post-office. With few exceptions, the duties seem to be judiciously selected; and though it be true that some of them, as those on foreign brandy, tobacco, &c., would be more productive were they materially reduced, the defect is not in the selection of the articles on which to impose duties, but in the too great height to which they have been carried; a defect that admits of being easily obviated.

Account of the Public Income of the United Kingdom, in 1836, 1837, and 1838.

	1836.		1837.		1838.	
	£	£	£	£	£	£
Customs and excise:						
Spirits: foreign	1,462,573	. .	1,399,868	. .	1,389,371	
Spirits: rum	1,496,156	. .	1,432,920	. .	1,411,067	
Spirits: British	5,503,477	. .	5,015,071	. .	5,467,201	
Malt	5,848,950	. .	5,952,410	. .	4,932,080	
Hops	402,290	. .	344,364	. .	302,906	
Wine	1,794,033	. .	1,687,901	. .	1,846,057	
Sugar and Molasses	4,479,809	. .	5,096,888	. .	4,893,684	
Tea	4,674,535	. .	3,923,840	. .	3,302,035	
Coffee	691,606	. .	696,644	. .	684,979	
Tobacco and snuff	3,397,108	. .	3,417,663	. .	3,561,812	
		29,750,537		27,496,878		27,851,192
Butter	238,306	. .	285,563	. .	251,665	
Cheese	105,087	. .	120,034	. .	113,907	
Currants and raisins	311,916	. .	307,928	. .	300,898	
Corn	149,661	. .	582,371	. .	186,760	
Cotton wool, and sheep's imported	622,293	. .	571,080	. .	725,445	
Silk	294,768	. .	218,375	. .	254,874	

Continued.

Hides and skins	67,171	. .	52,856	. .	61,478	
Paper	712,119	. .	554,497	. .	541,788	
Soap	756,138	. .	730,788	. .	810,813	
Candles and tallow	207,788	. .	208,977	. .	183,669	
Coals, sea-borne	8,667	. .	8,910	. .	7,632	
Glass	652,225	. .	637,947	. .	688,837	
Bricks, tiles, and slates	474,921	. .	439,264	. .	418,335	
Timber	1,537,468	. .	1,369,381	. .	1,572,618	
Auctions	294,803	. .	274,264	. .	285,186	
Excise licences	1,018,002	. .	1,019,431	. .	1,022,292	
Miscellaneous duties of customs and excise	1,633,921	. .	1,501,173	. .	1,596,366	
		9,014,554		8,898,799		9,023,403
Total customs and excise	. .	38,765,091	. .	38,255,677	. .	38,874,595
Stamps:						
Deeds and other instruments	1,621,741	. .	1,603,207	. .	1,663,720	
Probate and legacies	2,049,298	. .	2,185,800	. .	2,192,231	
Insurance { marine	252,712	. .	260,512	. .	251,856	
Insurance { fire	831,367	. .	894,128	. .	891,704	
Bills of exchange, bankers' notes	739,957	. .	714,703	. .	734,100	
Newspapers and advertisements	466,701	. .	328,661	. .	341,974	
Stage coaches	514,698	. .	498,943	. .	494,284	
Post horses	228,049	. .	240,263	. .	241,206	
Receipts	172,093	. .	172,260	. .	173,825	
Other stamp duties	482,001	. .	436,506	. .	468,784	
		7,350,377		7,985,123		7,453,733
Assessed and land taxes:						
Land taxes	1,199,609	. .	1,192,635	. .	1,184,830	
Windows	1,254,395	. .	1,257,878	. .	1,262,561	
Servants	207,311	. .	201,044	. .	201,018	
Horses	390,228	. .	380,293	. .	377,477	
Carriages	449,792	. .	441,173	. .	442,757	
Dogs	158,190	. .	155,931	. .	156,260	
Other assessed taxes	262,056	. .	260,802	. .	278,942	
		3,921,505		3,890,146		3,903,685
Post-office	. .	2,350,602	. .	2,339,739	. .	2,246,278
Crown lands	. .	361,593	. .	419,780	. .	388,642
Other ordinary revenues and other resources	. .	146,130	. .	322,188	. .	312,575
Total income	. .	52,895,298	. .	50,592,653	. .	51,278,926
Excess of expenditure over income	. .	. .	. .	726,460	. .	441,819
		52,895,298	. .	51,319,113	. .	51,720,747

The following is an account of the nett amount (including the expenses of collection) contributed by each of the three great divisions of the U. Kingdom to the principal branches of the public revenue in 1838:

	England.	Scotland.	Ireland.	U. Kingdom.
	£	£	£	£
Customs	18,902,169	1,518,881	1,944,190	22,365,240
Excise	10,577,600	2,199,855	1,974,656	14,750,581
Stamps	6,214,624	626,115	461,747	7,312,486
Taxes	3,696,809	236,377	. .	3,932,186
Post-office	1,906,355	211,543	229,460	2,346,378
Totals	41,396,461	4,791,271	4,609,983	50,577,715

The expense per cent. of collecting the gross public revenue in 1838 was:

	Great Britain.	Ireland.	U. Kingdom.
	Per cent.	Per cent.	Per cent.
Customs	L. 5 0 5	L. 11 19 3	L. 5 12 1
Excise	6 6 4	9 16 2½	6 14 0
Stamps	2 1 7¼	4 18 2½	2 5 2
Taxes	5 19 6	. .	5 19 6
Post-office	25 13 9½	30 16 4¼	27 2 11

In the following page will be found a detailed account of the expenditure of the United Kingdom in the years 1836, 1837, and 1838.

Defence—Army.—The formation of a standing army was long regarded by our ancestors with extreme jealousy and aversion, so that its establishment in England is of comparatively modern origin, not dating farther back than the reign of Charles II. It is annually provided for by a vote of the H. of C.; so that it is always in the power of the latter at any time to reduce, or, if it see cause, totally to disband, the army. But the old jealousies of which it was the object, no longer exist; and there can be no doubt that the establishment of a properly trained regular military force is not only indispensable to guarantee the national independence from hostile attack, but that it is also by far the best force that can be employed to maintain internal tranquillity and order. It would be worse than useless to waste the reader's time by dwelling on the transcendant merits and services of the British army. It has been employed in every quarter of the world, and has everywhere exhibited all those qualities that go to form a perfect military force—the most unflinching courage, combined with the greatest patience and fortitude under privations and hardships, and the constant observance of the strictest discipline.

We subjoin an account taken from official documents of the regular troops (exclusive of the ordnance) at home, in the colonies, and in foreign countries, in 1792, 1815, and 1834.

At Home and in the Colonies.	1792.	1815.	1834.
Household cavalry	779	1,804	1,311
Foot guards	2,705	9,612	5,253
Cavalry of the line	5,469	16,477	7,882
Infantry of the line	36,506	124,701	69,365
Garrison battalions	. .	1,983	
Veteran battalions	. .	2,822	
West India regiments	. .	5,795	1,822
Miscellaneous and colonial corps	. .	7,147	3,727
Fencibles	. .	9,265	
Foreign corps	. .	21,314	
Augmentations in progress	. .	9,148	
	45,452	220,714	89,810
In India.			
Cavalry of the line	512	5,534	3,198
Infantry of the line	10,188	24,045	17,660
Totals	57,252	250,314	108,672

The number and description of the land force embodied during the year ending the 31st of March, 1837, were as follows:

	Horses.	Officers.	Non-commissioned Officers and Troopers.	Rank and File.	Total.
Life guards and horse guards	822	39	149	1,043	1,311
Cavalry of the line	7,896	712	986	8,876	10,138
Foot guards	.	218	395	4,640	5,253
Infantry of the line	200	4,619	6,236	81,407	92,265
Totals	8,718	5,630	7,766	95,675	109,071
But there were wanting to complete the full number of men	. .	. .	. .	. .	8,[illegible]
Making the total force					101,[illegible]
Ordnance	. .	527	. .	7,45[illegible]	

The British army is recruited by means of voluntary enlistment only, and it is to be hoped that all attempts to introduce the conscription into this country will meet with no better success in future than that which has hitherto attended them. If soldiers could not be procured by other means, we should then admit that necessity formed a valid excuse for the introduction of a conscription. But no such necessity has ever existed. No country that chooses to pay fair wages to its troops, and which treats them as men employed in the service of their country should be treated, will ever want for a supply of voluntary recruits. If we ever be forced to resort to the oppressive and odious resource of conscription, the necessity will have arisen from the adoption of some spurious system of economy, or from something wrong in the treatment of the troops, or both.

The annual Mutiny Act, and the Articles of War issued by the crown, and subjoined to that act, constitute the code of martial law in force in the British army:

Account of the Public Expenditure of the United Kingdom in the Years 1836, 1837, 1838.

HEADS OF EXPENDITURE.	1836.		1837.		1838.	
	£	£	£	£	£	£
REVENUE.—*Charges of Collection.*						
Civil Department. Customs	647,198	. .	695,842	. .	636,847	
Civil Department. Excise	869,191	. .	802,080	. .	851,494	
		1,516,389		1,497,922		1,488,341
Preventive Service, Land Guard, Revenue Police Cruisers, and Harbour Vessels	. .	562,219	. .	561,066	. .	570,129
		2,078,543		2,059,018		2,058,470
Stamps	. .	169,324	. .	158,055	. .	154,213
Assessed Taxes	. .	176,211	. .	165,150	. .	209,268
Other ordinary revenues	. .	47,687	. .	49,457	. .	48,213
Superannuation and other allowances	. .	269,485	. .	281,162	. .	274,401
Total Charge of Collection	.	2,261,225	. .	2,213,792	. .	2,245,500
PUBLIC DEBT.						
Interest of Permanent Debt	24,158,654	. .	24,215,779	. .	24,212,580	
Terminable Annuities	4,224,427	. .	4,195,745	. .	4,183,696	
Management	129,968	. .	132,482	. .	123,566	
	28,508,049	. .	28,544,006	. .	28,520,112	
Interest on Exchequer Bills	726,924	. .	936,659	. .	730,888	
Total Debt		29,234,973		29,480,664		29,251,049
CIVIL GOVERNMENT.—*Civil List—Privy Purse.*						
Salaries of the Household, Tradesmen's Bills	411,860	. .	391,972	. .	371,800	
The allowances to the several Branches of the Royal Family, and to his Royal Highness Leopold Prince of Coburg (now King of the Belgians)	208,000	. .	378,857	. .	208,000	
The Lord Lieutenant of Ireland's Establishment	32,245	. .	31,268	. .	33,269	
The Salaries and Expenses of the House of Parliament (including Printing)	127,731	. .	137,889	. .	142,195	
Civil Departments, including Superannuation Allowances	508,982	. .	492,902	. .	489,064	
Other Annuities, Pensions, and Superannuation Allowances on the Consolidated Fund and on the Green Revenue	325,654	. .	322,681	. .	327,576	
Pensions, Civil List	75,000	. .	71,999	. .	691	
Total Civil Government		1,689,472		1,721,084		1,674,195
JUSTICE.						t.2.
Courts of Justice	390,297	. .	404,992	. .	454,802	t.2.
Police and Criminal Prosecutions	332,580	. .	482,772	. .	562,191	
Correction	289,357	. .	428,711	. .	455,326	
Total Justice		1,010,194		1,326,435		1,472,319
DIPLOMATIC.						t.2.
Foreign Minister's Salaries and Pensions	198,301	. .	188,142	. .	182,088	
Consul's Salaries and Superannuation Allowances	94,689	. .	99,960	. .	148,806	
Disbursements, Outfit, &c.	22,515	. .	28,840	. .	62,198	
Total Diplomatic		315,496		316,982		392,832
FORCES.						
Army. Effective. Number of Men	(90,557)	. .	(78,080)	. .	(82,745)	
Army. Effective. Charge	3,882,908	. .	3,941,996	. .	4,203,541	
Army. Non-effective. Number of Men	(67,132)	. .	(85,965)	. .	(90,914)	
Army. Non-effective. Charge	2,648,280	. .	2,679,719	. .	2,568,100	
Total Army	6,473,183	. .	6,621,716	. .	6,816,641	
Navy. Effective. Number of Men	(29,076)	. .	(30,985)	. .	(30,399)	
Navy. Effective. Charge	2,610,229	. .	2,716,075	. .	2,046,987	
Navy. Non-effective. Number of Men	(26,327)	. .	(25,829)	. .	(24,880)	
Navy. Non-effective. Charge	1,589,507	. .	1,534,584	. .	1,473,561	
Total Navy	4,205,736	. .	4,750,659	. .	4,520,428	
Ordnance. Effective. Number of Men	(8,287)	. .	(8,668)	. .	(9,012)	
Ordnance. Effective. Charge	1,274,442	. .	1,290,258	. .	1,219,633	
Ordnance. Non-effective. Number of Men	(1,403)	. .	(1,513)	. .	(622)	
Ordnance. Non-effective. Charge	159,617	. .	154,165	. .	165,048	
Total Ordnance	1,434,059		1,444,423	. .	1,384,681	
Total Forces		12,112,968		12,716,897		12,720,750
Army, and Ordnance, Insurrection in Canada	. .	. .	. .	. .	. .	500,000
Bounties, &c., for promoting Fisheries	. .	15,468	. .	12,468	. .	13,454
Public Works	. .	316,841	. .	304,896	. .	322,569
Payments out of the Revenue of Crown Lands for improvements and various Public Services	. .	327,459	. .	324,451	. .	144,731
Post-office; Charges of Collection and other Payments	. .	712,204	. .	698,704	. .	676,825
Quarantine and Warehousing Establishments	. .	111,563	. .	121,700	. .	134,584
Miscellaneous Services not classed under the foregoing Heads	. .	2,254,298	. .	1,491,112	. .	1,569,048
Total expenditure	. .	50,312,305	. .	51,316,113	. .	51,720,747
Surplus	. .	2,075,008				
	. .	52,395,308	. .	51,316,113	. .	51,720,747
Memorandum:						
The Amount of Terminable Annuities on 5th of Jan. was	. .	4,220,817	. .	4,208,042	. .	4,292,173
In corresponding Perpetuities, as estimated by Mr. Finlaison	. .	1,988,155	. .	1,870,745	. .	1,830,654
Difference	. .	2,232,662	. .	2,331,297	. .	2,461,519

The charge for the above forces, exclusive of the ordnance, was £4,151,588, of which £891,133 were to be defrayed by the East India Company. The charge for the ordnance during the same year was £1,963,449; making the total expense of the *effective* military force in 1836–37, £5,415,087. But to this has to be added the charge for *non-effective* services, that is, for half-pay and pensions to officers and men, which amounted, during the same year, to £2,523,578; making the total cost of the army, including the sum to be repaid by the East India Company, £7,938,665.

The forces embodied in 1836–37, exclusive of the ordnance, were distributed as follows:

Great Britain	25,583
Ireland	18,871
Abroad (not in India)	35,865
India	19,710
Total	101,039

The pay and other emoluments of the officers and men depend partly on the length of their service and partly on the department of the service to which they belong. In the household troops, the pay of privates varies from 1*s.* 9½*d.* to 2*s.* 0½*d.* a day; in the cavalry of the line it is 1*s.* 4*d.*; in the foot guards, 1*s.* 2*d.*; and in the infantry of the line, 1*s.* 1*d.* Soldiers, however, are not entitled to receive the whole of this sum in money: when at home and in barracks, they are supplied with certain rations, for which 6*d.* a day, and not more, is to be deducted from their pay. The greater part of their clothes and accoutrements are furnished at the public expense; but certain deductions are made from their pay on that account. Pensions are granted for casualties in action, &c., and to soldiers discharged after certain periods of service. (The regulations relating to pay, half-pay, pensions, &c., may be seen in the *Army List.*)

Exclusive of the regular troops, there is also the militia, yeomanry, and police. The first has not been embodied since 1815. The yeomanry is a species of volunteer cavalry that formerly was much more considerable than at present. It is a description of force of which the utility is very doubtful; and it appears to us that wherever a military force has to be employed, the preferable plan is to employ regular troops. Under the new organization, the police has become a valuable species of force, and is extensively employed in Ireland, and in London, and several towns in England.

Navy.—The naval service has always been exceedingly popular in this country; and the navy has long been reckoned the pride and best bulwark of the empire. The H. of Lords, in an address to Queen Anne, in 1707, laid it down as "a most undoubted maxim, that the honour, security, and wealth of this kingdom does depend upon the protection and encouragement of trade, and the improving and right encouraging its naval strength . . . . therefore we do in the most earnest manner beseech your majesty that the sea affairs may be always your first and most peculiar care." And there cannot be a doubt that, in this instance, the lords gave expression to what were then, and have ever since continued to be, the sentiments of the great majority of the British nation.

The Battle off Cape La Hogue, in 1692, gave the British navy an ascendancy over that of France, the only other great naval power, it has ever since preserved. During the last war with France, our navy was prodigiously augmented; and the victories of the 1st of June, 1794, of St. Vincent, Camperdown, the Nile, Copenhagen, and Trafalgar, left us the undisputed masters of the ocean.

The ships in commission and in ordinary in 1792, 1815, and 1835, were:

		1st Rate.	2d.	3d.	4th.	5th.	6th.	Small Vessels, &c.
Ships in commission.	1792	. .	2	10	5	14	12	61
	1815	1	2	22	5	50	21	113
	1835	1	3	5	8	6	15	136
Ships in ordinary.	1792	7	19	102	16	79	30	179
	1815	12	15	178	13	100	80	167
	1835	14	16	60	14	75	13	80

The number of seamen and marines, and the sums voted at different periods for the service of the navy have been:

Years.	Seamen.	Marines.	Total Men.	Sums.
1792			16,000	*L.* 1,986,482
1815	. .	For 3 Mon.	70,000	17,032,700
	. .	10 do.	90,000	
1825	20,000	9,000	29,000	5,963,126
1830	26,000	9,000	35,000	5,595,855
1831	22,000	10,000	32,000	5,875,096
1832	22,000	10,000	32,000	4,878,634
1833	18,000	9,000	27,000	4,658,194
1834	*18,500	9,000	27,500	4,478,009
1835	17,500	9,000	26,500	4,345,724
1836	24,700	9,000	33,700	4,689,651
1837	24,700	9,000	33,700	4,788,761
1838	25,165	9,000	34,165	4,811,880

* 1000 first-class boys were first voted this year, and subsequently increased to 2000 in the following years.

The navy is governed by the lord high admiral for the time being, or by a body of commissioners called the Board of Admiralty, of which the power is, in fact, vested in the First Lord. This board has the superintendence of all naval matters: all appointments, &c., of commissioned officers, and warrant officers with some exceptions; promotion, honours, pensions; and the general control of every thing relating to the discipline of the fleet.

Those who enter the service with a view to obtain commissions, begin as volunteers, and then serve as midshipmen: after six years in the latter character, and attaining the age of 19, they *pass* an examination for the rank of lieutenant—the lowest commissioned officer. But the attainment of a commission, and subsequent promotion, are entirely at the disposal of the admiralty. Certain advantages are enjoyed by those who have completed their education as students at the naval college of Portsmouth. The discipline of the navy is maintained by articles embodied in acts of parliament. Sailors enter the navy by voluntary enlistment; but in cases of emergency they may be obtained by impressment. Of the antiquity and legality of this practice, no doubt can be entertained; but very grave doubts have been entertained as to its necessity and expediency.

King's ships are now classified according to a system of rating adopted in 1816. There are six classes of what are termed rated ships; all three-deckers ranking as first rates; and the following five rates comprising ships whose complements of men are above 700, under 700, 600, 400, and 250 men respectively. Ships of war carrying less than 74 guns are usually styled frigates; less than 20, sloops of war, &c.

The navy estimates for the year 1837–38 were as follows:

Wages for seamen and marines	1,051,916
Victuals for ditto	452,898
Wages to artificers, &c.	432,870
Naval stores, &c.	359,897
Miscellaneous	335,564
	2,736,075
Half-pay, pensions, &c.	1,548,165
For the service of other departments	237,241
	£4,521,481

For an account of the pay, half-pay, pensions, &c., of the different descriptions of officers and men in the sea-service, the reader is referred to the *Navy List.*

Public Debt.—Exclusive of the large sums raised by taxes, the British government has borrowed immense sums. Of the total expenditure of the United Kingdom, during the year 1838, amounting to £51,720,747, no less than £29,251,040 were required to defray the interest and expense of managing the national debt! Many conflicting opinions have been entertained as to the policy of the borrowing or funding system, and as to the preference to be given to different methods of borrowing; the stating of which would be inconsistent alike with our objects and limits. It is sufficient for our purpose to remark that the public debt has grown up, almost entirely, since the Revolution, and principally during the American and late French wars, especially the latter. Individuals lending money to the public, or, as it is said, contracting for a loan, receive a certain specified amount of government stock, or *funded property*, bearing a specified rate of interest, or, as it is called, *dividend*, payable quarterly at the bank of England. A lender to the public is not entitled to demand repayment of the principal sum lent; all that he has a right to claim is the regular payment of the interest or dividend on that sum; but he is at liberty to dispose of his right to this dividend, or, in other words, to sell or transfer his stock to any one else. Such transfers or sales are usually effected at the Stock Exchange, in the city of London, and their negotiation affords employment to a considerable number of brokers. The price of stocks is liable to much variation, being necessarily affected by all those circumstances that affect the peace and prosperity of the empire; the abundance or scarcity of money; the rate of profit, &c. Contrary to what is usually believed, a large proportion of the public debt is held by individuals in the lower and middle walks of life. A large proportion is also held by bankers and other individuals, whose business requires that they should be able readily to command their capital.

It is needless to occupy the reader's time by details as to the various schemes that have been proposed for paying off the national debt, by means of sinking funds and such like devices. Notwithstanding the high patronage under which some of these schemes have been brought forward, and the encouragement they have met with, the reader may be assured that they are universally bottomed on delusion or quackery, or both. "The increase of revenue, or the diminution of expense, are the only means by which the sinking revenue can be enlarged and its operations rendered more efficient; and all schemes for discharging the national debt, by sinking funds operating at compound interest, or in any other manner, unless in so far as they are founded on this principle, are completely illusory." (*Hamilton on the National Debt.*)

ACCOUNT of the Principal and Annual Charge of the Public Debt at different Periods since the Revolution.

	Principal, Funded and Unfunded.	Interest and Management.
	L.	L.
Debt at the Revolution, in 1689	664,263	39,855
Excess of debt contracted during the reign of William III. above debt paid off	15,730,439	1,271,087
Debt at the accession of Queen Anne, in 1702	16,394,702	1,310,942
Debt contracted during Queen Anne's reign	37,750,661	2,040,416
Debt at the accession of George I., in 1714	54,145,363	3,351,358
Debt paid off during the reign of George I. above debt contracted	2,053,125	1,133,807
Debt at the accession of George II., in 1727	52,092,238	2,217,551
Debt contracted from the accession of Geo. II. till the peace of Paris in 1763, three years after the accession of George III.	86,773,192	2,634,500
Debt in 1763	138,865,430	4,852,051
Paid during peace, from 1763 to 1775	10,281,795	380,480
Debt at the commencement of the American war in 1775	128,583,635	4,471,571
Debt contracted during the American war	121,267,993	4,980,201
Debt at the conclusion of the American war, in 1784	249,851,628	9,451,772
Paid during peace, from 1784 to 1793	10,501,380	243,277
Debt at the commencement of the French war, in 1793	239,350,148	9,208,495
Debt contracted during the French war	601,500,343	22,829,679
Total funded and unfunded debt on the 1st of February, 1817, when the English and Irish exchequers were consolidated	840,850,491	32,038,291
Debt cancelled from the 1st of February, 1817, to the 5th of January, 1836	48,544,049	2,576,763
Debt, and charge thereon, 5th of Jan., 1836	792,306,442	29,461,528

AN ACCOUNT of the Total Number of Persons to whom a Half Year's Dividend was due at the last Half-yearly Payment thereof, on each description of Public Stock, and on each Description of Terminable Annuities; distinguishing the Number respectively of those whose Dividends for the Half Year did not exceed £5, £10, £50, £100, £200, £300, £500, £1000, £2000, £3000, £4000, £5000, and the Number of those whose Dividends exceed £5000; distinguishing also, in those above £1000, the Dividends due to any Public Company, or to more than a single name. (*Parl. Paper*, No. 202, Sess. 1833.)

Number to whom dividends were payable.	5l.	10l.	50l.	100l.	200l.	300l.	500l.	1,000l.	2,000l.	Co. & Joint Accts., 3,000l.	3,000l.	Co. & Joint Accts., 3,000l.	4,000l.	Co. & Joint Accts., 4,000l.	5,000l. and upwards.	Total.
On 3l. per cent. reduced annuities	10,347	4,745	11,681	3,478	2,175	742	453	231	53	24	9	5	5	3	12	33,956
On 3l. 10s. per cent. reduced annuities	7,019	4,862	10,173	2,909	1,661	411	251	112	15	21	6	4	nil	1	5	26,849
On 3l. 10s. per cent. annuities, 1818	* 198	162	399	211	127	57	28	20	3	3	nil	nil	nil	1	3	1,232
On 4l. per cent. annuities, 1826	1,801	998	2,044	512	812	92	59	15	4	1	2	1	nil	nil	nil	5.636
On long annuities	9,978	4,212	8,261	1,516	725	187	99	34	4	1	1	1	1	1	nil	24,221
On annuities for terms of years	1,519	787	1,682	261	178	56	32	20	4	nil	2	nil	nil	nil	2	4,563
On 3l. per cent. consolidated annuities	28,722	13,749	28,891	9,612	6,296	2,141	1,424	709	153	18	16	20	7	13	21	95,556
On 3l. per cent. annuities, 1726	190	74	180	40	27	4	2	nil	nil	nil	nil	nil	nil	nil	nil	447
On new 3l. 10s. per cent. annuities	†26,861	14,698	29,370	6,645	3,129	765	431	204	25	20	4	1	2	4	9	82,194
On new 5l. per cent. annuities	35	31	107	36	20	3	4	nil	1	nil	nil	nil	nil	nil	nil	237
On annuities for terms of years	1,656	883	1.753	333	161	37	24	12	1	nil	1	3	nil	1	8	4,839
Totals	87,176	44,648	98,305	25,641	14,701	4,496	2,827	1,367	266	151	40	36	15	24	60	279,571

* Dividends payable 10th of October.

† Dividends payable on 5th of January.

Literature.—Some remarks as to the language and literature of England, will be found under the head ENGLAND. Here it is sufficient to observe that the basis of the English language is essentially Saxon, intermixed, however, with a great number of words derived from the Latin, and other languages of Latin origin. It is needless to say that the English have attained to the highest distinction in every department of literature. But in modern times, the distinguishing feature of our literature is undoubtedly the periodical, and especially the daily, press. To such perfection has the method of conducting the daily journals been carried, that debates that occur in either house of parliament, are accurately and very fully reported in the morning papers of the ensuing, or it may be, of the same day. These, indeed, are not unfrequently published within two or three hours of the termination of the debate; and being carried to the country by the rail-way coaches, and other speedy conveyances, the report of a debate ending in the H. of Lords or Commons at 4 o'clock in the morning, may be perused at Birmingham or Bristol, above 100 miles off, by 1 or 2 o'clock of the same day! The other departments of the daily journals; such as communications from foreign parts; criticisms in various branches of science and literature; and the comments of the editors on the events of the day, are, for the most part, written with great ability; and though strongly tinctured with party prejudices, and but little to be depended on when party interests are concerned, they discover a grasp of mind, and an extent and accuracy of information, that are really astonishing, considering the haste with which they have to be composed, and the little time given for correction. Generally speaking, the periodical press of Great Britian is decidedly superior to that of every other country, and displays much practical good sense, and with some few exceptions, the most praiseworthy respect for the decencies of private life, and for the great principles that form the foundations of society.

The Colonies and Foreign Dependencies belonging to the U. Kingdom, and forming part of the British empire, are of great extent and importance. They consist principally of our dominions in N. America and the West Indies, the Cape of Good Hope, Australia, and India. The reader will find in the table on the next page statements of the population, trade, &c. of the greater number of these colonial possessions, and detailed accounts of each will be found under its peculiar head in this work. The common opinion is, that the U. Kingdom is indebted for a large portion of its wealth and power to the possession of these distant territories; but we are disposed to believe that there is but little if any real ground for this opinion. It is true that England, in common with all Europe, has derived infinite advantage from the discovery and settlement of America, and from the intercourse with India by the Cape of Good Hope. But the question is, have we derived greater advantages from retaining the countries we settled in a state of dependance, after they were able to govern themselves, than we should have done by making them free? We are well convinced that those who dispassionately inquire into the matter will find that this is a question which must be answered in the negative. Our colonies in America and the West Indies have never furnished one farthing towards defraying any part of the general expenditure of the United Kingdom; they are, indeed, exempted, by express statute, from any such charge; at the same time that the fleets and armies required for their protection in war, and their security in peace, are all supplied by the British nation, and cost them nothing. The only advantage, in a national point of view, derivable from them must, therefore, if it exist at all, be found in the trade or intercourse we carry on with them. But it has been shown, over and over again, that the trade with colonies differs in no important respect from that with foreign countries; that, unless it be naturally advantageous for both parties, it cannot be for the advantage of the mother country to engage in it; and that if it be naturally advantageous, it will be carried on to the same or a greater extent, were the colony an independent state. The great and growing intercourse we have continued to keep up with the U. States since they achieved their independence, is a practical proof of the truth of what has now been stated. Our trade with Canada is, on the other hand, a proof of the mischief occasioned by forcing an intercourse where there is no natural aptitude for one. That colony, of the value of which the most ludicrously absurd notions have been entertained, has not, we believe, a single commodity to export which we might not obtain better and cheaper elsewhere. It is true it supplies us with large quantities of timber, but why? Because, while timber from the N. of Europe is charged, on importation into this country, with a duty of 55*s*. a load, timber from Canada is charged with a duty of only 10*s*. This *felo de se* regulation, besides forcing the use of an inferior article, imposes a burden on the people of Britain of about £1,500,000 a year. Surely, therefore, it were for our advantage that it were repealed; and if so, there would be an end of nine tenths of our trade with Canada. While, however, the forcing a trade with colonies is no advantage, but the reverse, the effort to keep them in a state of unwilling de-

Returns relative to the Population and Trade of the Colonies or Foreign Possessions of the British Crown.

Table of Returns from each Colony or Foreign Possession of the British Crown, stating the Date at which each Colony or Possession was captured, ceded, or settled; the Number of the Population, distinguishing white from free coloured, and apprenticed Labourers at the Latest Period; and whether having Legislative Assemblies, or governed by Orders of the King in Council; stating, also, the Value of Exports from, and Imports into, each of these Colonies in 1834.

Colonies.	Date of Capture, Cession, or Settlement.	Whether having Legislative Assemblies, or governed by Orders in Council.	Population, 1833, or latest Census.		Trade with Great Britain. Imports into the United Kingdom. Official Value. 1834.	Exports from the United Kingdom. Official Value. 1834.	Number and Tonnage of Vessels to and from U. K. and the Colonies. Inwards. Ships. 1834.	Inwards. Tons. 1834.	Outwards. Ships. 1834.	Outwards. Tons. 1834.
North America.										
Lower Canada	Capitulation, 18th Sept., 1759	Governor, Council, and Assembly		549,005						
Upper Canada	Ditto, 8th Sept., 1760, and cession by treaty, 1763	Ditto Ditto Ditto		405,910	£.613,583	£.1,339,534	959	220,551	966	228,139
New Brunswick	Fisheries and settlements established soon after their discovery, in 1497	Ditto Ditto Ditto		119,457	289,416	519,951	613	177,129	495	134,970
Nova Scotia		Ditto Ditto Ditto		142,548	88,614	295,944	161	37,925	149	35,739
Cape Breton		Ditto Ditto Ditto		32,175						
Prince Edward's Island		Ditto Ditto Ditto		74,510	181,568	339,281	137	17,139	222	43,756
Newfoundland		Totals			1,165,566	2,497,910	1,959	552,045	1,977	508,515
West Indies			Blacks according to last Slave Registration.							
Antigua	Settlement, 1632	Governor, Council, and Assembly	29,457	32,330	446,746	159,288	67	15,992	69	14,166
Barbadoes	Ditto, 1625	Ditto Ditto Ditto	82,507	103,912	646,446	394,764	79	21,387	113	30,299
Dominica	Ceded by France, 1763	Ditto Ditto Ditto	14,214	15,880	126,286	35,700	12	2,760	9	2,565
Grenada	Ditto, 1763	Ditto Ditto Ditto	29,536		314,611	80,712	49	10,976	36	9,909
Jamaica	Capitulation, 1655	Ditto Ditto Ditto	311,892		3,246,260	2,199,246	289	76,602	295	72,040
Montserrat	Settlement, 1632	Ditto Ditto Ditto	6,355	7,639	42,880	7,212	5	1,281	4	1,256
Nevis	Ditto, 1628	Ditto Ditto Ditto	8,722	11,452	20,464	12,169	19	2,689	14	3,729
St. Kitt's	Ditto, 1623	Ditto Ditto Ditto	20,660	23,488	168,709	77,432	22	5,265	19	3,062
St. Lucia	Capitulation, 23d June, 1803	Governor and Council, and Orders of the King in Council	12,348	16,017	110,814	33,884	14	3,009	22	2,747
St. Vincent	Ceded by France, 1763	Governor, Council, and Assembly	22,987	26,538	261,467	110,309	39	10,509	49	11,583
Tobago	Ditto, 1763	Ditto Ditto Ditto	11,621	13,895	129,660	49,122	30	4,814	22	5,249
Tortola	Settlement, 1666	Ditto Ditto Ditto	5,188	7,731	31,719	2,077	5	1,011	4	920
Anguilla	Ditto, 1666	Ditto Ditto Ditto		2,024						
Trinidad	Capitulation, 18th Feb., 1797	Governor and Council, and Orders of the King in Council	22,909	45,236	695,897	288,435	57	20,012	88	19,845
Bahamas	Settlement, 1629	Governor, Council, and Assembly	9,765	21,794	67,726	51,577	27	4,515	15	2,606
Bermudas	Ditto, 1609	Ditto Ditto Ditto	4,825	5,777	6,710	28,209	1	89	6	1,262
British Guiana (Demerara, Essequibo, and Berbice)	Capitulation, 19th Sept., 1803	Governor and Council, and Orders of the King in Council	84,915	100,275	1,416,286	451,294	169	46,904	169	48,165
Honduras	Ditto, 22d Sept., 1803	Ditto Ditto Ditto			223,985	55,786	22	5,786	22	6,074
	Treaty, 1670	Superintendent and Magistrates	1,939	2,289	325,432	672,289	43	11,165	44	12,013
		Totals			5,410,107	4,315,295	518	346,605	590	346,609
Gibraltar	Capitulation, 4th Aug., 1704	Governor and Orders of the King in Council		15,068	47,864	1,423,168	58	5,760	100	12,985
Malta and Gozo	Ditto, 5th Sept., 1800	Governor and Council, and Orders of the King in Council		122,149	14,286	549,495	9	1,319	88	13,008
Cape of Good Hope	Ditto, 10th Jan., 1806	Ditto Ditto Ditto	26,627	156,808	245,760	849,153	27	5,566	47	9,145
Sierra Leone	Settlement, 1787	Governor and Council		28,941	456,016	794,979	136	32,213	150	35,358
Gambia	Ditto, 1631			3,208						
Ceylon	Capitulation, 17th Sept., 1796	Governor and Council, and Orders of the King in Council		1,943,066	289,917	95,957	10	2,774	13	4,318
Mauritius	Ditto, 3d Dec., 1810	Ditto Ditto Ditto	68,613	89,207	782,148	307,848	75	20,909	33	9,193
New South Wales	Settlement, 1787	Governor and Council, and British Acts of Parliament	45,995	77,096	152,040	735,825	42	12,400	90	29,567
Van Diemen's Land	Ditto, 1803	Ditto Ditto Ditto	27,931 convicts. 35,104	42,697	95,349	336,539				
Western Australia	Ditto, 1829	Ditto Ditto Ditto	17,565 convicts.	2,025	69	5,989				
Heligoland	Capitulation, 1807	Governor and Orders of the King in Council		2,200	11	203	1	56	1	53
St. Helena				4,977						
Ionian Islands under protection of Great Britain				204,120						
		Totals			2,096,620	4,938,164	529	78,557	580	118,524
		General Totals			11,669,523	12,254,709	3,146	949,517	3,297	468,369

pendence, after they are desirous to be independent, entails a very heavy expense on the mother countries. Our ascendancy in Canada, at this moment, is wholly dependant on the presence of a large military force, occasioning, one way and another, a direct outlay of little less than £2,000,000 a year; and all this enormous direct and indirect expense is incurred without any equivalent advantage, and with a full conviction in the mind of every man of sense in the empire that, in some ten or twenty years, Canada will be independent, or an integral portion of the United States.

It is said that the West Indian colonies are advantageous, because they supply us with sugar, which yields a large amount of revenue! But in this respect they are merely on a level with China and Virginia, which supply us with tea and tobacco, which also yield a large amount of revenue. Every one, in fact, must see that it is the people of Britain, and not the West Indian islands, that pay the sugar duties. And as sugar could be imported from Brazil and Cuba quite as cheap as it can be imported from the British West Indies, or rather, we believe, decidedly cheaper, it is clear the emancipation of the latter could not be any very material public loss.

Nothing, therefore, can be a greater error than to suppose that we are indebted for any considerable portion of our national greatness to the extent of our colonial dominion. If rightly examined, we apprehend it will be found to be a source of weakness rather than of strength. We derive our superior wealth and civilization from totally different sources—from the physical and moral advantages enjoyed by the U. Kingdom; and while we possess these, we need not fear that any serious injury will result from the loss of colonial dominion.

Our Indian empire is a foreign dependancy, not a colony; it does not enjoy that exemption from taxation, for the benefit of the U. Kingdom, enjoyed by our colonial possessions; and it has occasionally remitted considerable sums as tribute to England. But the magnitude of these sums has been grossly exaggerated; and it has been doubted by various well-informed parties whether, at an average of years, we have received anything from India.

Malta, Gibraltar, and such like strongholds, are valuable, because they afford convenient and secure asylums for our ships of war and merchantmen, serving also as depôts for our produce; and arsenals, whence we may send out cruisers and expeditions to annoy our enemies in war. They are, as it were, a species of foreign bulwarks, and are of high importance and value, as means of defence and aggression.

For accounts as to the population, revenue, &c. of India, the reader is referred to the articles HINDOSTAN and BENGAL (Presidency of), BOMBAY, &c.

History.—A sketch will be given in the article ENGLAND of the principal events in the history of that most important part of the empire. The leading epochs in the history of the latter are:

I. The invasion and establishment of the English power in Ireland during the reign of Henry II.

II. The union of the crowns of England and Scotland in 1604, on the accession of James, king of Scotland, to the throne of England, vacant by the death of Elizabeth.

III. The great civil war in the reign of Charles I., followed by the execution of that monarch in 1649; the establishment of the Commonwealth; and the restoration of Charles II. in 1660.

IV. The Revolution, justly styled "glorious," of 1688, which expelled the family of Stuart from the throne; defined and firmly established the principles of the constitution; and introduced a liberal, tolerant, and really responsible system of government, under our great deliverer, William III., prince of Orange.

V. The establishment of the legislative union of England and Scotland, in 1707.

VI. The accession of the House of Hanover, 1714.

VII. The American war, 1776–1784.

VIII. The war with revolutionary France, 1793–1815.

IX. The legislative union of Ireland with England and Scotland, 1799.

X. The passing of the Reform Act, 1832.

BRITTANY, or BRETAGNE, one of the most considerable of the ancient provinces of France, occupying the peninsula of that name on the Atlantic. It is now distributed among the depts. of Loire Inférieure, Ille-et-Vilaine, Finisterre, Morbihan, and Côtes-du-Nord.

BRIVE, a town of France, dep. Cortèze, cap. arrond., in a beautiful and fertile plain, on the Corrèze, 15 m. S.W. Tulle. Pop. (ex cant.) 6062. It is well built, the houses being all of hewn stone, and covered with slates. It has a fine hospital, an *église curieuse*, a shady promenade along the river, and is encircled by planted boulevards, which have replaced the ancient ramparts. There is here a tribunal of original jurisdiction, a departmental college, a secondary ecclesiastical school, and a public library. It manufactures various descriptions of woollen goods, with muslins, silk handkerchiefs, &c., and has in its vicinity a *vaste filature* of cotton. It has also a considerable trade in wine, chestnuts, and cattle, and is the centre of the trade in truffles and *volailles truffées*. The famous Cardinal Dubois was a native of Brive. (*Huge*, art. *Corrèze.*)

BRIX, a vil. of France, dep. Le Manche, 6 m. N.W. Valognes. Pop. 3055.

BRIX (ST.), a neat town of France, dep. Yonne, on the road from Paris to Lyons, 7 m. S.S.E. Auxerre. Pop. 1948. Louvois, the minister of Louis XIV., whose property it was, and his descendants, have attempted, but without success, to introduce manufactures into this town. It has some trade in white wines, produced in the vicinity, which are held in considerable estimation.

BRIXEN, a town of the Austrian empire, prov. Tyrol, at the confluence of the Rienz and the Eisach, 40 m. S.S.E. Innspruck. Pop. 3600. It has a cathedral, an episcopal palace, and a college.

BRIXHAM, a sea-port and par. of England, co. Devon, hund. Haytor, 166 m. W.S.W. London, just within Berry head, which forms the W. point of Torbay. Area of par. 5610 acres. Pop. of par. in 1831, 5015. The town is built in a narrow ravine opening towards the sea, and on the cliffs impending over it on either side, and is divided into the upper and lower towns. In the latter the buildings are much crowded, in narrow irregular streets and alleys; but the upper town contains many good houses, as does also the immediate neighbourhood, which is remarkably picturesque. The church in the upper town is an ancient structure, with some interesting monuments: in the lower town is a chapel of ease, which has 300 free sittings: the living is a vicarage (with the perpetual curacies of Churston and Kingswear annexed), in the gift of the crown. It has also a Baptist and a Wesleyan chapel, and a national school, incorporated with an endowed one founded in 1624, which educates about 400 boys and girls. There is a pier harbour at the end of the lower town, consisting of an inner and outer basin, which communicate with each other, and are safe and commodious: the latter was formed at a recent period by the inhab. at the cost of £5300. The spring tide rises about 24 ft. at the pier-head. The principal trade of the place is connected with the Torbay fishery, in which about 120 vessels, of 20 to 45 tons, and 70 smaller boats, are engaged; the greater part of the fish being forwarded to the London, Bath, and Exeter markets: there are also upwards of 120 vessels, of 60 to 120 tons, belonging to the place, chiefly engaged in the coasting trade of the Channel. There are extensive marble quarries in the neighbourhood; and also an iron mine, whence, of late years, several thousand tons of ore are annually shipped at Brixham for the Welsh furnaces. The market (estab. 1799) is held on Thursdays and Saturdays; a fair on Whit-Tuesday and two following days. By far the most remarkable historical event connected with this place, or with Torbay, is the landing of our great deliverer William III. at this pier, on the 5th of November, 1688.

BROADALBIN, t., Fulton co., N.Y., 42 m. N.W. Albany, 423 W. Several creeks afford water-power. It contains four churches, one Methodist, two Presbyterian, and one Christian; nine stores, three fulling-mills, one woollen factory, three grist-mills, twenty-eight saw-mills, four paper-mills, one furnace, six tanneries, one printing-office, thirteen schools, 635 scholars. Pop. 2738.

BROAD CREEK, hundred, Sussex co., Del. Bounded N.W. by Nanticoke river, by branches of which it is watered. It contains ten stores, one furnace, ten grist-mills, fourteen saw-mills, two schools, 111 scholars. Pop. 2640.

BROAD, river, Ga., one of the western branches of Savannah river, which it enters at Petersburgh.

BROAD, river, S.C., an arm of the sea, between Port Royal isl. and the main land, on which Beaufort is situated.

BROAD, river, S.C., rises in N. Carolina, and unites with Saluda river, above Columbus, to form Congaree river.

BROAD KILL, hundred, Sussex co., Del. Bounded E. by Delaware bay, and watered by creeks flowing into it. It contains twenty-eight stores, five grist-mills, six saw-mills, three tanneries, two printing-offices, one weekly newspaper, three academies, 108 students, four schools, 116 scholars. Pop. 3741.

BROADSTAIRS, a small sea-port and watering-place of England, co. Kent, E. coast, isle of Thanet, half way between the N. foreland and Ramsgate, 66 m. E. by S. London. There are several good lodging-houses, warm baths, two public libraries, good hotel, assembly-room, &c., and an episcopal chapel, built in 1828. There is a wooden pier (formed in the reign of Henry VIII.), which is accessible for small vessels. Two small fairs are held, April 8 and July 10. There are many vestiges which prove the ancient importance of the place; but it had dwindled to an inconsiderable fishing village, when (within a comparatively recent period) it came into favour as a sea-bathing place.

BROAD TOP, t., Bedford co., Pa. It contains one store,

one flouring-mill, one saw-mill, one school, 22 scholars. Pop. 987.

BROCHHAGEN, a village of the Prussian States, prov. Westphalia, reg. Minden, 4 m. S. Halle. Pop. 2500. It has a gin distillery and a thread manufactory.

BROCKPORT, p. v., Sweden t., Monroe co., N.Y., 20 m. W. by N. Rochester, 235 m. W.N.W. Albany, 384 W. Incorporated in 1829. Situated on the Erie canal. It is handsomely built, chiefly on one street, and contains four churches, mostly of brick or stone, with steeples, one Methodist, one Presbyterian, one Episcopal, and one Baptist; eleven stores, two grist-mills, six saw-mills, one carding machine, one carriage-factory, two tanneries, one distillery, six schools, 485 scholars, 200 dwellings, many of them neat, and 1249 inhabitants.

BRODY, a town of the Austrian States, N.E. part of Galicia, circ. Zloczow, near the confines of Russia, 52 m. E. by N. Lemberg; lat. 50° 7′ N., long. 25° 18′ E. Pop. 25,000, of whom 18,000 are Jews. It is situated in a marshy plain; and the houses being mostly of wood, and the streets unpaved and filthy, it is well entitled to the name it bears, *brody* meaning a dirty place. But, notwithstanding its unpromising appearance, it enjoys a very considerable trade. In 1779 it acquired the privilege of a free commercial town; that is, a town into which commodities may be imported, and from which they may be exported free of duty. This franchise has rendered it an important emporium; and its fairs are attended by dealers from the Ukraine and Odessa, Moldavia, Wallachia, &c., as well as the contiguous Austrian and Russian provinces. The principal articles brought from the S. are cattle, especially horses, with hides, tallow, wax, &c., which are exchanged for colonial produce, manufactured goods, hardware, particularly scythes, furs, jewelry, &c. It is a constant practice in the transit trade between Odessa and Brody, to offer as security for the duty on the articles so conveyed, a certain number of serfs, or Russian slaves, taken at a valuation of 100 silver roubles (£16) a head. This security is preferred to a guaranty on land, from its being more convertible. There is a regular exchange with Odessa. The greater part of this important trade is in the hands of Jewish merchants settled at Brody, of whom 40 are said to be opulent, while about 200 more possess smaller capitals. It is the seat of a mercantile tribunal: has a Catholic and three Greek churches; one large and two or three smaller synagogues; a convent and hospital of the Sisters of Charity; grammar and commercial schools, with peculiar schools for Christians and Jews; a theatre, in which, during the fairs, plays are alternately represented in the German and Polish languages; a Jewish hospital, &c. The town is on the estate of Count Potocki, who has a large castle within its precincts. (*Austrian Encyc.; Hagemeister on the Trade of the Black Sea, passim*; and *Private Com.*)

BROEK, a village of Holland, 6 m. N.E. Amsterdam. Pop. 800. It is celebrated for the wealth of its inhab., but more for the extreme cleanliness of its houses and streets, the attention to which has been carried to an absurd and ridiculous excess. There is a good description of this village in Chambers's *Tour to the Rhine*.

BROKEN STRAW, t., Warren co., Pa., 10 m. W. Warren. Watered by Broken Straw creek. It contains three stores, five grist-mills, seventeen saw-mills, two furnaces, ten schools, 220 scholars. Pop. 1149.

BROMBERG, a town of the Prussian States, prov. Posen, cap. circ. same name, on the Brsa, 6 m. from its confluence with the Vistula. Pop. 8000. The canal joining the Vistula with the Netz, an affluent of the Oder, runs between this town and Nakel on the Netz. It has a court of appeal for the circ., a gymnasium, and other literary establishments, several distilleries and breweries, and a considerable and increasing trade.

BROMLEY, a par. and town of England, co. Kent, lathe Sutton-at-Hone, hund. Bromley and Beckenham, 10 m. S.E. London. Pop. (1821) 3147; (1831) 4092: houses at the latter date, 733; area, 4630 acres. The town is on the N. bank of the Ravensbourne, and chiefly consists of one street of neat, respectable houses, extending for some distance along the line of road from the metropolis to Tunbridge; it is lighted, and partially paved. The church is a spacious structure, with an embattled tower; the Independents and Wesleyans have each a chapel; a national school for both sexes is supported by subscription; there is an almshouse for old people, rent free; a charitable estab., called Bromley College, founded in 1666, and enlarged and endowed by many subsequent benefactors, supports 40 clergymen's widows, who each receives £38 a year, with coals and candles: the edifice encloses two quadrangular areas, and has a chapel, the minister of which receives £150 a year; the charity is under the direction of 14 trustees. There is a weekly market on Thursday, a monthly one, for cattle, every third Thursday, and ann. fairs, Feb. 14, Aug. 4, chiefly for live stock. Ann. val. prop. in 1815, £14,796. It is the central town of a poor law union of sixteen pars.; its own rates average £1294. The inhab. are chiefly engaged in agriculture. From the 8th century the manor has vested, with little interruption, in the bishops of Rochester. The present palace was rebuilt on an ancient site in 1777; it is a plain brick building, on an eminence 1·4 m. from the town; an ancient spring in its gardens has medicinal properties similar to those of Tunbridge: after being neglected two or three centuries, it was reopened in 1756, and continues to be much resorted to; its weekly market was granted to the town in 1477.

BROMSGROVE, a par. and town of England, co. Worcester, hund. Half-shire, 100 m. N.W. London. Pop. (1821) 7519; (1831) 8612: houses at the latter date, 1862. The town is situated on the W. bank of the Salwarp, in a fertile and well-wooded vale, and chiefly consists of one spacious street about a mile in length, paved and lighted. Its church, on a gentle rise, has a tower and spire, together 189 ft. in height, and considered the finest in the co. There are three dissenting chapels; a free grammar school, founded by Edward VI. (in which 12 boys are clothed and educated, with seven scholarships and six fellowships in Worcester College, Oxford); and a town-hall, with a market-place under it. The weekly market is on Tuesday; two annual fairs are held, June 24th and Oct. 1st. Nail making is the chief business of the place; there is also a large button manufactory. In the adjoining parish of Stoke Prior there are large salt and alkali works, in which some of the inhab. of Bromsgrove are employed: the linen manufacture was formerly carried on, but is now extinct. The line of the Birmingham and Gloucester railway passes near the town. The annual value of its real prop. in 1825 was £36,661. It is the central town of a poor law union of nine parishes; its own rates average £1859: it has five guardians. A court of requests for debts under 40s. is held in the town every third Wednesday. Bromsgrove Lickey, a lofty range, in which the Salwarp, Rea, and some other streams, have their source, lies on the N. of the town.

BROMYARD, a par. and town of England, co. Hereford, hund. Broxash, 110 m. N.W. London. Pop. in 1821, 2767; 1831, 3051; houses, 596; area, 9310 acres. The town, situated near the Frome, in an orchard district, consists of several irregular streets, which are paved and lighted; many of its houses are of wood. There is a spacious church, in the Norman style; an Independent chapel; a free grammar school, founded by Elizabeth; a national school for 120 children; and almshouses for 7 old women. The weekly market is Monday: corn, cheese, and butter are the chief articles. Petty sessions for the hund. are held in the town. The par. comprises three townships and one chapelry.

BRONNITZY, a town of Russia in Europe, gov. Novgorod, on the road from St. Petersburg to Moscow, 15 m. E. Novgorod. Pop. 1200. The Msta is here crossed by a floating bridge of considerable dimensions. In the environs is a conical mound, which appears to be artificial; and with respect to which several curious traditions are current. It was formerly surmounted by a wooden chapel, which has recently been replaced by one of stone. (*Schnitzler, La Russie, &c.*, p. 175.)

BRONSON, p. t., Huron co., O., 2 m. S. Norwalk, 162 m. N. by E. Columbus, 395 W. Watered by branches of Huron river. It contains eleven schools, 378 scholars. Pop. 1281.

BRONTE, or BRONTI, a town of Sicily, Val di Catania, cap. cant., near the Giaretta, at the W. base of mount Ætna, 22 m. N.N.W. Catania. Pop. 8871, having declined 282 between 1798 and 1831, when the last census was taken. It has several churches and convents; is healthy; has manufactures of woollens and paper; and the adjacent territory produces corn, wine, silk, pistachio nuts, almonds, &c. Lord Nelson was created duke of Bronte in 1799, with an income of 6000 onzie a year.

BROOKE, county, Va. Situated in the extreme N.W. part of the state, and contains 150 sq. m. Bounded N. and W. by Ohio river, into which flow Indian, Horman's, Cross, and Buffalo creeks. Some iron ore and bituminous coal are found. It contained, in 1840, 5430 neat cattle, 33,948 sheep, 11,322 swine; and produced 139,933 bushels of wheat, 4629 of rye, 135,246 of Indian corn, 9351 of buckwheat, 63,140 of potatoes, 194,574 of bituminous coal, 3614 pounds of sugar. It had fifteen stores, two fulling-mills, two woollen-factories, one cotton-factory with 1300 spindles, twenty-six flouring-mills, one grist-mill, twenty-nine saw-mills, one paper-mill, one glass factory with glass cutting, four tanneries, three potteries, one distillery, two printing-offices, one weekly newspaper, one periodical, four academies, 140 students, twenty-two schools, 600 scholars. Pop.: whites, 7060; slaves, 91; free coloured, 77; total, 7948. Capital, Willsburg.

BROOKFIELD, p. t., Carroll co., N.H., 46 m. N.E. Concord, 527 W. Separated from Middleton and incorporated in 1794. Cook's pond, 1 m. long and 3·4 m. wide, is the source of the W. branch of Salmon-fall river. It contains

two stores, two saw-mills, one tannery, four schools, 172 scholars. Pop. 553.

BROOKFIELD, p. t., Worcester co., Mass., 60 m. W. Boston, 268 W. Incorporated in 1673. It was attacked and burned by the Indians in 1675, and afterward, until 1710, suffered severely. Watered by Quaboag river, issuing from Quaboag pond, in the S. part, and flowing into Chicopee river. It contains six churches, one Methodist, three Congregational, one Baptist, and one Universalist; seven stores, one fulling-mill, one furnace, three grist-mills, three saw-mills, one printing-office, one academy, 35 students, fourteen schools, 667 scholars. Pop. 2472.

BROOKFIELD, p. t., Orange co., Vt., 17 m. S. Montpelier, 504 W. Incorporated in 1781. Watered by a branch of White river, and by several small mill-streams, issuing from ponds. In the W. part of the town is an inexhaustible bed of marl, around a small pond, from which lime is made. It contains four churches, one Methodist, one Congregational, one Baptist, and one Universalist; two stores, one fulling-mill, one grist-mill, five saw-mills, one academy, 50 students, eighteen schools, 626 scholars. Pop. 1789.

BROOKFIELD, p. t., Fairfield co., Ct., 8 m. N.N.E. Danbury, 60 m. S.W. Hartford, 299 W. Housatonic river bounds it on the N.E. Watered by Still river. It contains one Congregational and one Episcopal church, a town-house, four stores, one grist-mill, two saw-mills, eight schools, 317 scholars. Pop. 1255.

BROOKFIELD, p. t., Madison co., N.Y., 68 m. W. by N. Albany, 363 W. Watered by Beaver creek and other branches of Unadilla river, which bounds it on the E. It contains seven stores, two fulling-mills, six grist-mills, nineteen saw-mills, one oil-mill, four tanneries, twenty-nine schools, 1519 scholars. Pop. 3095.

BROOKFIELD, p. t., Tioga co., Pa., 174 m. N. by W. Harrisburg, 288 W. It has one saw-mill, three schools, 107 scholars. Pop. 431.

BROOKFIELD, t., Morgan co., O., 85 m. E. by S. Columbus. Watered by branches of Duck creek. It contains two stores, one fulling-mill, two grist mills, four saw-mills, one distillery, eight schools, 296 scholars. Pop. 1496.

BROOKFIELD, t., Stark co., O. Pop. 315.

BROOKFIELD, p. t., Trumbull co., O., 183 m. N.E. Columbus, 295 W. Bounded E. by Pa. Watered by a branch of Chenango river. The village, 2½ m. W. of Pa. line, contains two churches, two stores, and twenty or thirty dwellings. Pop. of the township, 1302.

BROOKFIELD, t., Milwaukie co., Wis. Ter. It has one school, 16 scholars. Pop. 148.

BROOKHAVEN, t., Suffolk co., N.Y. It extends across Long Island from N. to S., having the sound on the N. and Great south bay, which communicates with the Atlantic on the S. It has good harbours and a light-house on Old Field point on the sound. Ronconcoma pond, 2 m. in circumference, on its W. border, is nearly the middle of the island. South bay, nearly 100 m. long and from 2 to 5 wide, abounds with fish, clams, and oysters. The town contains several villages, thirty-three stores, one fulling-mill, two woollen-factories, two cotton-factories with 1032 spindles, two paper-mills, eleven grist-mills, five saw-mills, two academies, 85 students, thirty-six schools, 1960 scholars. Pop. 7050.

BROOKLINE, p. t., Windham co., Vt., 110 m. S. Montpelier, 439 W. Incorporated from Athens and Putney in 1794. Grassy brook passes through a deep valley from N. to S. and enters West river. It contains two Baptist churches, one close and one open communion; one grist-mill, one saw-mill, four schools, 114 scholars. Pop. 398.

BROOKLINE, p. t., Hillsborough co., N.H., 50 m. S. by W. Concord, 455 W. Nissitisset river, passes through it into Potanipo pond, in its S. part, and thence into Nashua river. Incorporated in 1769. It contains a Congregational church, two stores, five schools, 145 scholars. Pop. 652.

BROOKLINE, p. t., Norfolk co., Mass., 4 m. W. by S. Boston, 440 W. Separated from Boston and incorporated in 1705. Bounded N.E. by Charles river. It has a direct communication with Boston by the Western avenue, or Milldam. The soil is highly cultivated, and it contains a number of beautiful country seats of gentlemen in Boston. It contains two churches, one Congregational and one Baptist; two foreign commercial and four commission houses, nineteen retail stores, one grist-mill, one saw-mill, two tanneries, five academies, 62 students, five schools, 171 scholars. Pop. 1365.

BROOKLYN, p. t., capital of Windham co., Ct., 44 m. E. by N. Hartford, 371 W. Watered by Quinnebaug river and its branch, Blackwell's stream. It contains a court-house, jail, four churches, one Congregational, one Unitarian, one Episcopal, and one Baptist; a bank, a printing-office, seven stores, one cotton-factory with 1500 spindles, two grist-mills, two saw-mills, two tanneries, one academy, 26 students, ten schools, 356 scholars. Pop. 1488. The county seat was removed from Windham to this place in 1820. Major-Gen. Israel Putnam, of the Revolutionary army, died here at his residence, May 29, 1790, aged 72 years.

BROOKLYN, city, cap. of King's co., N.Y., is situated in 40° 41′ 50″ N. lat., and 73° 59′ 30″ W. long., at the W. end of Long Island, opposite to the S. part of the city of New-York, 146 m. S. Albany, 228 W. The population in 1810 was 4402; in 1820, 7175; in 1830, 15,396; in 1840, 36,233; of whom 1673 were employed in commerce; 4666 in manufactures and trades; 978 in navigating the ocean; 302 ditto rivers and canals; 307 in the learned professions and engineers. It is the second place in population in the state, and the seventh in the United States. It is separated from the S. part of the city of New-York by the East river, a strait of the ocean, which connects Long Island sound with the bay and harbour of New-York, ¾ m. wide. It is connected with the city of New-York by four steam ferries, well provided with numerous and commodious boats, which render the communication as easy as it would be by bridges. The ferry from Fulton-street, Brooklyn, to Fulton-street, New-York, is 731 yards wide; that from Main-street, Brooklyn, to Catharine street, New-York, is 736 yards wide; the Navy-yard ferry, from Jackson-street, Brooklyn, to Walnut-street, New-York, is 707 yards wide; the South ferry, from Atlantic-street, Brooklyn, to Whitehall, in the S. part of New-York, is 1300 yards wide. Three boats constantly ply at the same time on each of the three principal ferries, and the time of crossing is generally from four to five minutes. The fine water, pure air, and delightful prospects of Brooklyn, render it a favourite place of residence to persons doing business in New-York, and it is nearer to the business centres of the latter than residences in the upper part of the city; and these things have contributed to give it a very rapid growth. The increase of population from 1830 to 1840 was 20,837.

The ground on which Brooklyn is built is more elevated than that of the city of New-York. On the "Heights," on the East river, it presents a bold front, elevated 70 ft. above tide-water, affording a delightful view of the city and harbour of New-York, the islands in the bay, and particularly Governor's island, with its fine fortifications, and the shore of New-Jersey, furnishing a prospect unequalled in the vicinity, and scarcely surpassed in the country. In the S. part of the city the land attains a considerable elevation, and presents many fine sites for buildings; and to the E. of the thickly-settled parts, the ground is elevated, and the prospect commanding. The city is regularly laid out, and the streets, with the exception of Fulton-street, the oldest in the city, are generally straight, crossing each other at right angles, and are from 50 to 60 ft. wide, and a number of them have a greater width. A large number of the streets, including all within the thickly-settled parts, are paved and lighted. Many of the streets are bordered with trees, giving the place a peculiarly rural aspect. Fulton-street, originally narrow in its lower parts, has been amply widened, and is bordered with ranges of lofty brick stores, and presents a commanding entrance to the city. No city in the country, of its extent, is better built than Brooklyn, and many of its houses are distinguished for a chaste elegance, and some of them are splendid. Brooklyn, as laid out by the commissioners appointed by the state legislature, is sufficiently large to become another London; and if the spirit of speculation could have been quiet, it is questionable whether it would not have been better to have left many of its original farms, for the present, undisturbed. The city, as chartered, has the same extent as the original township of Brooklyn, which is 6 m. long, and 4 m. wide at its greatest breadth; and all this great extent has been laid out into streets, the corner-posts of which have been permanently fixed. But many of the streets are not opened and regulated, though this has been done to quite as great an extent as the present necessities of the city require. The thickly-settled parts have no public squares or open grounds; and, though some have been laid out within the city bounds, they are not in such a situation as to add, at present, to its beauty or its comfort. Many of its principal avenues, however, have a commanding width, and its whole appearance is open and airy; and its great extent, and the many fine situations presented in its outer parts, will probably long prevent it from being uncomfortably crowded in the portions now most thickly settled. None of the public buildings of Brooklyn have a very commanding appearance, though many of them are neat and commodious, and some of the churches have some claim to architectural elegance. A city-hall was projected a number of years since, on a magnificent plan, to be built of white marble. A substantial and durable foundation was laid, and the basement story erected, at a great expense. But the location was unhappy, and the plan altogether beyond the present wants of the city; and whether the original design will ever be carried out is questionable. It would undoubtedly be a splendid ornament to the city, but could never cease to excite regret that a more favourable location

had not been chosen for the expenditure of so much money. The estimated cost of the edifice was over half a million of dollars. The common council and the city officers are well accommodated in the City buildings (formerly the Apprentices Library), near the centre of business, which have been purchased, and conveniently fitted up for the purpose. The jail is a substantial and handsome building of free-stone in the E. part of the city, and the county clerk's office is a fire-proof brick edifice, near the City buildings. The Lyceum in Washington street is a fine granite building, with a spacious and commodious lecture-room. The City Library contains 3000 volumes of well-chosen and valuable books, and has a reading-room, well furnished with periodical literature and newspapers, and both are open daily. The Hamilton Literary Association is composed chiefly of young men, and is a highly respectable and flourishing institution; and supports annually an able course of lectures, which are numerously attended. The Brooklyn Collegiate Institute for Young Ladies, which cost over $30,000, has been converted into an elegant hotel and boarding-house, and is one of the finest buildings in the city. The Brooklyn Orphan Asylum is under the management of ladies, and supports, and trains up for usefulness, a large number of indigent orphan children. They have a spacious and commodious building in the E. part of the city, surrounded by convenient grounds.

The United States Navy Yard is situated on Wallabout bay, and covers 40 acres of ground, enclosed by a high wall, on the land side. It contains two large ship-houses, sufficient to contain vessels of the largest class while in process of construction; seven extensive timber sheds of brick, for the preservation of timber; several workshops, for making sails, rigging, blocks, spars, boats, &c.; offices for the officers, and a number of extensive storehouses. Connected with the Navy Yard is the United States Naval Lyceum, a literary institution, formed in 1833, by officers of the navy connected with the post. They possess a valuable library, and have a museum formed by donations of its members. About ¼ m. E. of the Navy Yard is the Naval Hospital, with a fine building in an elevated and commanding situation, surrounded by 33 acres of ground, highly cultivated, and surrounded by a high brick wall. It is in contemplation by the government of the United States to construct a dry dock at the Navy Yard, which will cost $1,200,000.

The Greenwood Cemetery is situated in the S. part of the city, and contains 200 acres of land, in an elevated situation, with a great variety of surface, and in its more elevated parts commanding a fine view of the harbour and city, and extending on the S. to a part of the Atlantic ocean. It has already extensive avenues, and it is designed to embellish the grounds, to make it an attractive spot, an ornament to the city, and a cemetery not only for Brooklyn but for the city of New-York. The Atlantic Dock Company has been chartered for the purpose of constructing an extensive basin for the reception of shipping. It will contain 42½ acres, within Red-hook point, and the outside pier will extend 3000 ft. on Buttermilk channel. It will have a sufficient depth to accommodate the largest ships, and be furnished with spacious storehouses. This improvement is already necessary by the crowded state of the docks of New York, and the work is in forwardness. The whole is estimated to cost $624,527. The Long Island rail-road commences at the South ferry, Atlantic street, and extends 37 m. to Hicksville, and is designed to be extended in the whole 100 m. to Greenport, forming part of a chain of communication to Boston.

Brooklyn contains thirty churches: seven Methodist, seven Presbyterian, seven Episcopal, three Dutch Reformed, two Baptist, one Unitarian, one Friends, and two Roman Catholic. There are three banks, with an aggregate capital of $1,000,000, and three insurance companies, with a total capital of $452,000.

The harbour of Brooklyn is extensive, and capable of being made more so, by an increase of its wharves. Vessels of the largest class come to its wharves, which contain extensive storehouses. The commerce and manufactures of Brooklyn are both considerable. There were in 1840 five foreign commercial houses, with a capital of $109,500; 154 retail stores, with a capital of $353,000; several lumber-yards, with a capital of $40,000; machinery was produced to the amount of $182,000; hats and caps were manufactured to the amount of $102,000: one tannery, and various manufactures of leather produced $162,600; five distilleries and one brewery employed a capital of $357,000; paints, drugs, &c., employed a capital of $322,000; one glass-house employed 190 persons, and a capital of $15,000; four rope-walks employed a capital of $65,000; the products of the dairy were $197,000; three printing-offices issued one daily, two weekly, and one semi-weekly newspapers. Total capital employed in manufactures, $1,386,500. It had nineteen academies and high schools, male and female, with 1121 students; thirty-eight schools, with 4683 scholars.

Brooklyn was incorporated as a village in 1816, and as a city, with greatly extended limits in 1834. It is divided into nine wards, and is governed by a mayor and a board of eighteen aldermen, two from each ward, all elected by the people.

Brooklyn was first settled in 1636, but it did not choose regular magistrates until 1746, though some kind of authority was previously established. The first house for public worship, which was a Dutch church, was erected in 1666. Six years previous to this, the Rev. Henricus Selwyn had been installed in Brooklyn, with a salary of 600 guilders, or $240, one half of which was paid by the inhabitants, and the other half by Fatherland, or Holland. An Episcopal church was established in 1766, and St. Ann's church, its successor, was first occupied in 1795. The first Methodist church was incorporated in 1794; the first Presbyterian in 1822; the first Baptist in 1822; and the first Roman Catholic in 1822. The first printing-office was established, and the first newspaper printed, in 1799.

Brooklyn was the theatre of many interesting events during the war of the Revolution. It was occupied by the American army before the battle of Flatbush, which occurred Aug. 27, 1776, and there are now to be seen the remains of the American fortifications, erected at that period, though most of them have been obliterated by the regulation of streets. Until recently, fort Green, in the E. part of the city, remained, in a great measure, entire; but this also is destined soon to pass away. After the fatal battle of Flatbush, the Americans retreated from Long Island, and it was in possession of the British. At the Wallabout, near the Navy Yard, were moored the British prison-ships, where the American prisoners were confined; and multitudes, after suffering all that human nature could bear, from scanty and unwholesome provisions, impure water, a pestilential atmosphere, and a want of medical attendance, yielded up their lives to British cruelty. Eleven thousand five hundred American prisoners thus miserably perished in these prison-ships. In 1808, the bones of these martyrs to liberty, which had been washed out from the bank, where they had been slightly buried, and were bleaching in the sun, were collected, and deposited in thirteen coffins, inscribed with the names of the thirteen original states, and placed in a vault beneath a suitable building, erected for the purpose, in Jackson-street, opposite to Front-street, near the Navy Yard. On the point of the roof of the building, which is a small square edifice, is an American eagle. On a row of posts and rails, in front of the tomb, are inscribed the names of the thirteen original states, and the tomb is surrounded by a fence. Over the entrance of the enclosure in which the building is situated is the following inscription: "Portal to the tomb of 11,500 patriot prisoners, who died in dungeons and prison-ships, in and about the city of New-York, during the Revolution." An imposing ceremony took place when the bones were deposited; and 15,000 persons were supposed to have been present on the occasion. These remains deserve a removal to the Greenwood cemetery, in a conspicuous place, and a national monument commemorating the important battle of Flatbush, the interesting localities of which are in view from its more elevated portions.

BROOKLYN, p. t., Susquehanna co., Pa., 171 m. N.N.E. Harrisburg, 278 W. Bounded E. by Martin's creek. It contains two stores, one woollen-factory, one grist-mill, five saw-mills, one paper-mill, two tanneries, one academy, 19 students, ten schools, 280 scholars. Pop. 1474.

BROOKLYN, p. t., Cuyahoga co., O., 145 m. N.N.E. Columbus, 360 W. Ohio city, opposite to Cleveland, formerly belonged to this town. Bounded N.E. by Cuyahoga river, across which is a bridge connecting it with Cleveland. It contains one grist-mill, eight saw-mills, one academy, 40 students, eleven schools, 562 scholars. Pop. 1409.

BROOKNEAL, p. v., Campbell co., Va., 122 m. W.S.W. Richmond, 209 W. Pleasantly situated on the N. bank of Staunton river, and contains a Baptist church, two stores, one tannery, several mechanic shops, and fifteen dwellings. Pop.: whites, 61; blacks, 48; total, 109.

BROOKS, p. t., Waldo co., Me., 45 m. N.E. Augusta. Incorporated in 1816. It contains four stores, two grist-mills, four saw-mills, five schools, 373 scholars. Pop. 910.

BROOKVILLE, p. t., Hancock co., Me., 79 m. E. Augusta, 675 W. Bounded W. by Penobscot bay, and consists partly of a peninsula extending into it. It is finely situated for navigation, and contains one fulling-mill, three grist-mills, two saw-mills, eleven schools, 583 scholars. Pop. 1208.

BROOKVILLE, p. b., capital of Jefferson co., Pa., 167 m. N.W. Harrisburg, 256 W. Situated at the head of Redbank creek, at the union of three branches, by which it is formed. The first building was erected in August, 1830. It contains a brick court-house and county offices, eight stores, one grist-mill, one saw-mill, one tannery, one distillery, one printing-office, one weekly newspaper, one academy, twenty-five students, one school, 60 scholars. Pop. 276.

BROOKVILLE, p. v., capital of Franklin co., Ia., 69 m. S.E. Indianapolis, 519 W. Situated at the junction of the E. and W. forks of Whitewater river. It contains five stores, several mills, one cotton factory, and 600 inhabitants.

BROOME, county, N.Y. Situated in the S. part of the state, and contains 627 sq. m. Watered by Susquehanna, Chenango, and Tonghnioga rivers and Nanticoke creek. The Chenango canal connects Binghamton with the Erie canal at Utica. It contained, in 1840, 23,546 neat cattle, 80,669 sheep, 12,890 swine; and produced 66,360 bushels of wheat, 26,443 of rye, 84,033 of Indian corn, 31,259 of buckwheat, 303,812 of potatoes, 62,054 pounds of sugar. It had forty-nine stores, nine fulling-mills, twenty-three grist-mills, 144 saw-mills, fourteen tanneries, one distillery, two printing-offices, two weekly newspapers, three academies, 165 students, 167 schools, 6697 scholars. Pop. 22,338. Capital, Binghamton

BROOME, t., Schoharie co., N.Y., 38 m. W. Albany. Bounded W. by Schoharie creek, by branches of which it is drained. It contains eight stores, two grist-mills, eleven saw-mills, two tanneries, seventeen schools, 730 scholars. Pop. 2404.

BROSELEY, a market town and parish of England, co. Salop, hund. Wenlock, 127 m. N.W. London, on the Severn, by which it is separated from Madely. Area of parish 1550 acres. Pop. (1831) 4999. The town consists principally of one long street, with smaller ones branching off to the different collieries and other works. It has a parish church, and chapels for different denominations of dissenters; and there is a chapel of ease at Jackfield, within the parish. It is within the jurisdiction of the bor. of Wenlock. Courts leet for the manor are held in the town-hall in April and October, at the latter of which four constables are appointed; and a court of requests for the recovery of small debts is held, generally every alternate Wednesday. There are here extensive coal and iron mines, with large iron-foundries; and it is celebrated for its extensive manufacture of tobacco-pipes and garden-pots. A burning spring or well was discovered here in 1711, which disappeared on the sinking of a coal-mine in 1755. Owing to the depression of the iron trade, the town declined considerably previously to the last census (1831), there having been a falling off in the pop., since 1811, of nearly an eighth part; the pop. at that period being 4850. Market-day, Wednesday; fairs, Easter-Monday and Oct. 29.

BROTHERS' VALLEY, t., Somerset co., Pa., 8 m. S.E. Somerset. Watered by Castleman's river. It contains two stores, three fulling-mills, one flouring-mill, six grist-mills, ten saw-mills, one oil-mill, four distilleries, five schools, 125 scholars. Pop. 1548.

BROU, a town of France, dep. Eure-et-Loire, cap. cant., on the Ozanne, 24 m. S.W. Chartres. Pop. 2389. It manufactures serges, and has a foundry and tanneries.

BROUAGE, a fortified town and sea-port of France, dep. Charente inférieure, on the strait dividing the island of Oleron from the mainland, 8 m. S.S.W. Rochfort; lat. 45° 52′ 13″ N., long. 1° 3′ 45″ W. Its port admits only of vessels of small burden; but it is strong by nature as well as art, and is of importance from its defending the approaches to Rochfort, and the left of the Charente. Around the town are extensive salt marshes, from which salt is obtained in great quantities, and of an excellent quality. To facilitate its shipment, the marshes are traversed by a canal running from the Charente above Rochfort to a little below Brouage. (*Dict. Géog., &c.*)

BROWN, county, O. Situated in the S. part of the state, and contains 470 sq. m. Bounded S. by Ohio river. Watered by Eagle, Whitecak, and other creeks flowing into Ohio river. Organized in 1818. It contained, in 1840, 16,316 neat cattle, 25,775 sheep, 39,784 swine; and produced 294,019 bushels of wheat, 2384 of rye, 757,284 of Indian corn, 1919 of barley, 212,448 of oats, 62,964 of potatoes, 63,920 pounds of tobacco. It had two foreign commercial houses, sixty-three stores, one fulling-mill, one woollen-factory, forty-two flouring-mills, twenty-eight grist-mills, thirty-eight saw-mills, four oil-mills, fifteen tanneries, two distilleries, one brewery, two printing-offices, three weekly newspapers, one college, 22 students, one academy, 45 students, thirty-three schools, 1352 scholars. Pop. 22,715. Capital, Georgetown.

BROWN, county, Ill. Situated in the W. part of the state, and contains 300 sq. m. Bounded E. by Illinois river and N.E. by Crooked creek. It contained, in 1840, 4875 neat cattle, 3733 sheep, 10,278 swine; and produced 15,791 bushels of wheat, 128,105 of Indian corn, 1216 of buckwheat, 17,417 of oats, 10,735 of potatoes, 3030 pounds of tobacco, 14,993 of sugar. It had thirteen stores, six grist-mills, twelve saw-mills, four tanneries, two distilleries, two potteries, eleven schools, 344 scholars. Pop. 4183.

BROWN, county, Ia. Situated in the central part of the state, and contains 310 sq. m. Drained by Salt creek and its tributaries. It contained, in 1840, 2261 neat cattle, 2635 sheep, 6687 swine; and produced 3328 bushels of wheat, 66,578 of Indian corn, 9375 of oats, 3539 of potatoes, 3562 pounds of tobacco, 23,215 of sugar, skins and furs to the amount of $47,611. It had six grist-mills, two saw-mills, one school, 24 scholars. Pop. 2364.

BROWN, county, Wis. Situated in the N. part of the ter., and contains 1150 sq. m. It is bounded E. by lake Michigan, and lies on both sides of Green bay. Watered by Fox river. It contained, in 1840, 1053 neat cattle, 85 sheep, 1280 swine; and produced 7614 bushels of wheat, 3696 of Indian corn, 13,674 of oats, 27,506 of potatoes, 30,460 pounds of sugar. It had three foreign commercial houses, forty-two stores, eight lumber-yards, three grist-mills, twenty-five saw-mills, one printing-office, one weekly newspaper, three schools, 46 scholars. Pop. 2107. Capital, Green Bay.

BROWN, t., Lycoming co., Pa. Drained by Pine creek. It contains two grist-mills, four saw-mills, three schools, 60 scholars. Pop. 268.

BROWN, t., Mifflin co., Pa. It contains two stores, three grist-mills, five saw-mills, four schools, 115 scholars. Pop. 902.

BROWN, t., Montgomery co., Ia. It has four schools, 82 scholars. Pop. 1452.

BROWN, t., Hancock co., Ia. It contains one grist-mill, one saw-mill. Pop. 749.

BROWN, t., Washington co., Ia. It has one store, five grist-mills, six saw-mills, three tanneries, two schools, 60 scholars. Pop. 1451.

BROWN, t., Athens co., O. Watered by Raccoon creek. It contains two stores, two grist-mills, four saw mills, two schools, 30 scholars. Pop. 257.

BROWN, t., Carroll co., O. Watered by Sandy creek. It contains six schools, 185 scholars. Pop. 2165.

BROWN, t., Dark co., O. Pop. 294.

BROWN, t., Franklin co., O. Pop. 425.

BROWN, t., Delaware co., O. Watered by Alum creek. It has seven schools, 130 scholars. Pop. 906.

BROWN, t., Knox co., O. It has five schools, 200 scholars. Pop. 1230.

BROWN, t., Miami co., O. Watered by branches of Miami river. It contains one saw-mill, four schools, 194 scholars. Pop. 1938.

BROWN, t., Paulding co., O. Pop. 180.

BROWNFIELD, p. t., Oxford co., Me., 78 m. S.W. Augusta, 563 W. Incorporated in 1802. Bounded N.E. by Saco river. It contains two stores, three grist-mills, six saw-mills, two academies, 94 students, thirteen schools, 460 scholars. Pop. 1360.

BROWNHELM, p. t., Loraine co., O., 124 m. N.E. Columbus, 348 W. Watered by Vermilion river. It contains two stores, one grist-mill, three saw-mills, one extensive lumber-yard, four schools, 134 scholars. Pop. 934.

BROWNINGTON, p. t., Orleans co., Vt., 49 m. N.N.E. Montpelier, 565 W. Chartered in 1790. Drained by a branch of Barton river, which affords water-power. It contains two stores, one grist-mill, two saw-mills, one academy, 46 students, three schools, 65 scholars. Pop. 486.

BROWNSBURG, p. v., Rockbridge co., Va., 139 m. W. by N. Richmond, 180 W. Situated on the S. side of a branch of Cowpasture river. It contains one large church, three stores, one flouring-mill, one grist-mill, twenty dwellings, and 120 inhabitants.

BROWNSTOWN, p. t., Wayne co., Mich., 25 m. S.S.W. Detroit, 564 W. Situated on Brownstown creek, which flows into lake Erie. It contains four stores, one flouring mill, one grist-mill, two saw-mills, four schools, 69 scholars. Pop. 793.

BROWNSTOWN, p. v., capital of Jackson co., Ia., 71 m. S. Indianapolis, 507 W. Situated on a branch of the E. fork of White river.

BROWNSVILLE, p. t., Piscataquis co., Me., 102 m. N.E. Augusta, 699 W. Watered by a branch of Piscataquis river. Incorporated in 1824. It contains one store, one flouring-mill, one grist-mill, one saw-mill, six schools, 254 scholars. Pop. 568.

BROWNSVILLE, p. t., Jefferson co., N.Y., 168 m. N.W. Albany, 490 W. Drained by Black and Perch rivers. It contains ten stores, five fulling-mills, one woollen-factory, two furnaces, one flouring-mill, two grist-mills, seven saw-mills, one oil-mill, one distillery, twenty schools, 1387 scholars. Pop. 3068. The village is on the N. side of Black river, 3 m. from its mouth, and 4 below Watertown. Incorporated in 1829. It contains three churches, one Methodist, one Presbyterian, and one Episcopal; eight stores, one cotton-factory with 1500 spindles, two satinett-factories, two machine-shops, two iron-foundries, one whitelead-factory, several mills, 195 dwellings, and about 1000 inhab.

BROWNSVILLE, p. b., Redstone t., Fayette co., Pa., 191 m. W. by S. Harrisburg, 207 W. Situated on the E. bank of Monongahela river, at the mouth of Redstone creek. Incorporated in 1815. The National road passes through the principal street, and crosses the river by a bridge, 620 f.

long, which cost $50,000. It contains five churches, seventeen stores, one forge, one glass factory, one grist-mill, one saw-mill, one brewery, one printing-office, one weekly newspaper, three schools, 113 scholars, and 250 dwellings. Pop. 1362.

BROWNSVILLE, p. v., Licking t., Licking co., O., 40 m. E. Columbus, 353 W. Situated on the National road. It contains two churches, five stores, numerous mechanic shops, seventy-five dwellings, and about 400 inhabitants.

BROWNSVILLE, p. v., capital of Edmonson co., Ky., 128 m. S.W. Frankfort, 663 W. Situated on the N. side of Green river, at the junction of Nolin creek. It contains a court-house, jail, several stores, and 112 inhabitants.

BROWNSVILLE, p. v., capital of Jackson co., Ill., 177 m. S. Springfield, 842 W. Situated on the N.W. side of Big Muddy river, which flows into Mississippi river, and is 25 m. by water from its mouth. It contains thirty dwellings and about 200 inhabitants.

BRUCE, p. t., Macomb co., Mich., 58 m. N. Detroit, 563 W. Watered by the N. branch of Clinton river. It contains two saw-mills, one academy, 15 students, four schools, 150 scholars. Pop. 1128.

BRUCHSAL, a town of the G. D. Baden, cap. bailiwick, on the Salza, 12 m. N.E. Carlsruhe. Pop. 7200.

BRUGES, a city of Belgium, cap. W. Flanders, and of an arrond. and five cantons, in a vast level plain of sandy soil at the junction of the canals from Ghent, Ostend, and L'Ecluse; 7 m. from the N. sea, 12 m. E. Ostend, 94 m. W.N.W. Ghent, and 60 m. N.W. Brussels; lat. 51° 13' N., long. 3° 13' E. It is the seat of an episcopal see under the archbishop of Mechlin; the seat of a court of assize, of a high court of justice, and of a court of commerce. Pop., in 1830, 42,198; in 1838, 44,374. The records of births and deaths from 1700 to 1814 show a natural increase of only 8214 in 114 years; that is, an average annual increase of 3 in 1000. The city has a circumference of nearly 4½ m., and is entered by six gates. It has six large squares, in which are held weekly markets and annual fairs, and above 200 streets and lanes; some are wide and handsome, and all are generally clean. Many large and noble ancient mansions, and spacious public edifices, present their pointed gables to the streets, and afford interesting specimens of the ornamental Gothic architecture of the middle ages: they induce the contemplative spectator to revert to the grandeur and opulence of Bruges in the days of chivalry, when its gorgeous halls and courts were scenes of regal pomp and pageantry, and impress him with a feeling of sadness in contrasting its ancient prosperity with its present comparative desolation. Bruges, in common with all the towns of W. Flanders, is destitute of spring-water, so that the inhab. are obliged, as were their ancestors in the time of Pliny, to have recourse for supplies from the clouds. For this purpose, every house is provided with a cistern for collecting rain from its roof; and that which gathers in the ditches of the ramparts is conveyed, by means of hydraulic machinery, to public fountains and tanks, whence it is distributed in pipes throughout the city. There are fifty-four bridges across the numerous canals by which the streets are intersected, of which twelve are of wood, and rotatory, and forty-two of stone or brick: hence the Flemish name of the place—Brügge, that is, *bridges*; in French, Bruges. The Ostend canal presents an expanse of surface that resembles a stately river, and is sufficiently wide and deep to admit the passage of ships of 500 tons from the sea. The canal to Ghent is also navigable for large and heavy vessels. Its *trekschuit*, or passage-boat, is a huge floating hotel, affording every accommodation; but delicate passengers are liable to much annoyance from the state of the nearly stagnant water, which often is nearly black with putridity, and covered with dead fish, owing, it is said, to the extensive steeping of flax in the river Lys, which joins the canal at Ghent. The level character of the country is shown by the fact, that between Bruges and Ghent, a distance of nearly 35 m., this great canal has not a single lock. The central basin or dock of Bruges is capable of containing above 100 vessels always afloat; and the convenient quays, stores, and spacious warehouses by which it is surrounded, afford great facilities for the despatch of business. The city is advantageously situated for both maritime and inland commerce; and though its commercial transactions are now infinitely inferior to those of which it justly boasted in the 15th century, they are perseveringly carried on with most of the principal ports of France, Spain, Holland, Italy, England, Sweden, Denmark, Norway, and Russia. "Besides the facilities for internal commerce afforded by excellent roads to the other principal towns of the kingdom, Bruges possesses an important advantage in being traversed by the great national line of railway from Ostend to Ghent, Mechlin, &c."

The leading manufactures of Bruges consist of lace, linens, woollen and cotton goods, and of salt and sugar-refining. Breweries are numerous; and several establishments are in operation for the manufacture of soap, pottery, leather, tobacco, and especially for bleaching, distilling, and dyeing. The blue dyes of the stuffs of Bruges are believed to derive their peculiar excellence from the quality of the canal water in which they are scoured. The lace manufacture is the most important. It employs 7400 persons, or more than one-sixth of the whole population. Children are taught to make lace in at least 200 schools established for this purpose. The exports comprise corn, cattle, and other agricultural produce of the soil, and the products of the various manufactories. The imports consist of wool, cotton, metals, dyewoods, drugs, wines, and miscellaneous foreign productions.

Among the most remarkable public edifices are the cathedral of Notre Dame (Onser Vrouw), the tower of which is so lofty, that when the atmosphere is particularly clear, it is visible from the mouth of the Thames. The interior contains an exquisitely carved pulpit; a marble statute of the Virgin and Child, attributed to Michael Angelo, and for which Horace Walpole offered 30,000 florins; and two costly old monuments of Charles the Bold, Duke of Burgundy, and his daughter, the wife of the Emperor Maximilian, in richly gilded bronze and silver. The old Gothic hospital of St. John, and the elegant cathedral of St. Sauveur, have several celebrated pictures by Hans Hemling, Van Dyke, and others. In the great hall of the Hôtel de Ville is the public library, containing many curious illuminated MSS., a missal of the 14th century, and the scheme of a lottery drawn at Bruges in 1445. These, and other Gothic buildings in the city, belong generally to the 14th century, and are ornamented with windows of rich coloured glass, sculptured monuments, and paintings by the old Flemish masters. In the great square is a lofty Gothic tower or belfry, the most beautiful in Europe, and its chimes or *carillons* are esteemed the most complete and harmonious in the Netherlands, where only superior qualities are approved in this species of musical instrument, or rather machine. In this tower there are forty-eight bells, some weighing six tons: they are played upon every quarter of an hour, commonly by means of an immense copper cylinder communicating with the clock, and weighing about nine tons. Its surface is pierced by 30,500 square holes, so that an infinite variety of airs may be set upon it, by merely shifting the iron pegs that lift the hammers. On particular days a paid professor of music performs the finest pieces by striking with great effort upon huge keys with well-guarded fists, and upon pedals with his feet. Watchmen are constantly posted at the top of this tower to make alarm signals of fire, by ringing a loud bell, and exhibiting, in the day, a flag, and in the night, a lantern, towards the point whither the engines are required to hasten, which is further indicated by a speaking-trumpet. The city fire establishment consists of nine engines and 140 men. The ancient abbey of the Dunes is a vast and solid building, in which is held the episcopal academy. The Jerusalem church is a fac-simile of the Holy Tomb. There is a Béguinage, or convent of Béguin nuns, and also a convent of English Augustin nuns, possessing a richly ornamented church. The city is divided into seven Catholic parishes, and contains one Protestant church. Several other public edifices are worthy of notice, as well as ancient private mansions interestingly associated with important historical events and personages. The council chamber of the Palais de Justice contains an immense chimney-piece of wood beautifully carved, in 1529, with figures of Charles V. and his family, as large as life. There is a small theatre, a botanic garden, a museum of natural history, several literary and scientific societies, a well-attended athenæum or collegiate school for the higher degrees of education, receiving annually from government 6350 fr.; a good surgical school, attended commonly by 2[illegible] students; and a very flourishing academy of painting and sculpture, in which, besides the student's course, gratuitous instruction is given to others in architecture, design, and drawing. Its gallery of paintings comprises several by the celebrated Van Eyck.

Few cities are better provided with endowed charities and asylums for the destitute and afflicted, and with schools for instructing the children of the poor. The average number of persons in a state of indigence within the city is estimated at 5000. The poor-house is a central establishment for the two Flanders, and will contain 550 paupers: the number of inmates is generally about 500. The prison is kept remarkably clean, and the walls of its cells are rendered dry and secure by a casing of thick boards of oak. There is a *mont-de-piété*, or benevolent institution for lending money upon pledges. In 1832 the number of pledges deposited was 106,371, and the amount lent upon them was 780,891 fr. The city authorities exercise a vigilant superintendence in matters affecting the public health, and gold medals are awarded to those medical gentlemen who have manifested a benevolent zeal in gratuitous vaccination. The number of children who were vaccinated in 1832 was 10,968, and of 183 who took the smallpox, 12 died. The

temperature of the atmosphere about Bruges is subject to sudden and extreme transitions; and oppressive heat of the mid-day sun in summer is often succeeded by very chilling evening damps. Health and longevity appear, however, to be kept up to the average points, and those who possess the means of choosing their place of residence often prefer this locality; so that the spacious mansions of the opulent burghers of former times are now tenanted by many of the highest families of Flanders, and by retired independent merchants, for whom this old city would seem to have peculiar attractions. The adjacent rural districts to the W. display the most exuberant specimens of the Flemish farmeries; and orchards, which abound in every part of W. Flanders, are especially numerous in the vicinity of Bruges, producing excellent cherries, apples, pears, walnuts, plums, and, less commonly, apricots and peaches.

The history of Bruges commences at a very early date. It was a prosperous seat of manufacturing and commercial industry long before Ghent and Antwerp rose to the same distinction. In the 7th it was rapidly acquiring importance, and under Charlemagne, at the end of the 8th century, its weavers were highly distinguished. During the government of the rich and powerful counts of Flanders, who resided at Bruges from the 9th to the 15th centuries, its woollen manufactures grew and flourished to an amazing extent, so that Philip le Bon, in 1430, to commemorate its great prosperity, instituted the chivalric order of the Golden Fleece. At the Flemish court of this ostentatious Duke of Burgundy, whose hypocrisy, and not his exemption from pride and cruelty, procured him the cognomen of Good, a sumptuous splendour of pageantry was displayed, which no European monarch could imitate, and an absolute power was exercised, which none dared dispute. The records of luxurious banquets and apparel at this period are almost incredible. Not only the dresses of men and women, but the housings of their horses, were of velvet, satin, and gold, profusely spangled with brilliant jewels, an extravagance which Charles V., in the following century, was obliged to suppress by enacting sumptuary laws. The wealth and splendid attire of the citizens of Bruges had long been subjects of wonder; for when the queen of Philip le Bel, of France, visited this city in 1300, she is said to have exclaimed with astonishment, "I here see hundreds who have more the appearance of queens than myself." The public and private buildings of the city were worthy to display such courtly magnificence; so that Southey, judging from the existing architectural remains of that ancient grandeur, says, in his "Pilgrimage to Waterloo,"

> "When I may read of tilts in days of old,
> Of tournays graced by chieftains of renown,
> Fair dames, grave citizens, and warriors bold—
> If fancy would pourtray some stately town
> Which of such pomp fit theatre might be,
> Fair Bruges! I shall then remember thee."

This noble city, throughout the 14th and 15th centuries, was the central emporium of the whole commercial world, and had resident consuls and ministers from every kingdom in Europe. In the Hanseatic League, or confederacy of the great European ports for the promotion of commerce, Bruges was the leading city, and the grand depôt of naval stores. Her quays were crowded with foreign ships and merchants, and her piles of magnificent warehouses were filled with the wool of England, the linen of Flanders, and the silk of Persia. Her weavers were celebrated for making the most beautiful description of tapestry more than a century before the Gobelins manufacture was commenced under the direction of their descendants. The wealth of the citizens of course was enormous: a single merchant gave security for the ransom of Jean sans Pour, the last Count of Flanders, to the amount of 400,000 crowns of gold. The annual exports merely of stuffs manufactured from English and Spanish wool amounted to 8,000,000 florins, and the florin was then quadruple its present value. This amazing prosperity continued undiminished during the dominion of the dukes of Burgundy; but under the Austrian dynasty, at the close of the 15th century, the rebellious conduct of its inhabitants, in forcibly imprisoning the Archduke Maximilian, induced his father, the Emperor of Germany, to visit the city with such destructive vengeance that henceforth its greatness died away, its trade was transferred to Antwerp, and the religious persecution and brutal ferocity of the Spanish under Philip II. and the Duke of Alva completed the process of its ruin, at the end of the 16th century, by compelling its artizans to escape for their lives to England, where they found a hearty welcome from Queen Elizabeth, and became the means of establishing the woollen manufactures for which this country has since become so distinguished. The subsequent history of Bruges, under the dominion of the Spanish, French, and Austrians, is comparatively of little interest.

In glancing over the records of the old cities of Flanders, we find a reckless passion for freedom developing itself in a long succession of obstinate and sanguinary conflicts between the people and their rulers, and often between different towns and parties. By turns we find the victorious citizens, enjoying a short interval of intemperate and insolent triumph, abusing the blessings procured by the death of thousands of their compatriots, and then find them ruinously defeated, and suffering long periods of abject slavery and financial exhaustion under the despotism of their haughty and ambitious conquerors.

Bruges, during its golden age of commercial ascendancy in the middle ages, was the native place of numerous eminent scholastic and philosophic authors, classical commentators, mathematicians, jurisconsults, theologians, physicians, and painters. A list of these persons is given in the first of the following works, on the authority of which the statements of the present article principally depend. (*Vander Maelen's Dict. Géog. de la Flandre Occidentale; Guide Books by Caplen, Boyce, &c.; Murray's Hand-Book; Délices du Pays Bas; Grattan's Hist. of the Netherlands, &c.*) A plan of the city of Bruges, on a large scale, has been published by the Geograph. Estab. of Brussels.

BRUGGEN, a town of the Prussian states, prov. Rhine, reg. Dusseldorf, on the Schwalmen, 10 m. S.W. Kempen. Pop. 750. It has a fine Catholic, and a Calvinist church, with linen fabrics, bleach-fields, oil-mills, and a tannery.

BRUGUIE'RE, a town of France, dep. Tarn, cap. cant., on the Thoré, 4 m. S. Castres. Pop. 4000. It manufactures flannels, coverlets, and other descriptions of woollen goods.

BRUHL, a town of the Prussian states, prov. Rhine, reg. Cologne, 4 m. W. the Rhine, and 9 m. S. Cologne. Pop. 1700. It is surrounded by walls, is well built, and has a seminary for the instruction of schoolmasters; but it derives its principal consequence from the magnificent castle in its vicinity, commenced in 1725 by the elector Clement Augustus, of Bavaria, and finished by Maximilian Frederick. It is splendidly fitted up, and has extensive pleasure-grounds and gardens. (*Schreiber.*)

BRUMATH, a town of France, dep. Bas-Rhin, cap. cant., on the Zorn, 12 m. N.N.W. Strasburg. Pop. 4131. It is supposed to occupy the site of the ancient *Brucomagus*; and the medals, marbles, urns, &c., which have been found here prove, at least, that it had been inhabited by the Romans. Some hard fighting took place in its vicinage, in 1793, between the French and Austrians. (*Dict. Géog.*)

BRUNN, a town of the Austrian states, cap. Moravia, at the confluence of the Schwarza and Zwittawa, 70 m. N.N.E. Vienna, lat. 49° 11′ 28″ N., long. 16° 36′ 35″ E. Pop. 38,000, exc. garrison of 3000 or 4000. It is built on the declivity of a hill, having the cathedral on its summit and the suburbs at its foot; is encircled by walls, bastions, and trenches, and was formerly defended by the citadel of Spielberg, on the hill of that name to the W. of the town; but the defences of the latter having been destroyed by the French, it is now used as a state prison and house of correction; Silvio Pellico was shut up in it for above eight years. Though narrow and crooked, the streets are well paved, lighted, and provided with foot pavements. Among the public buildings are—the cathedral, remarkable for the height of its nave; St. Jacob's church, built in 1315, with a tower 276 ft. in height, a bell weighing 115 centners, and some monuments; the episcopal palace; the *Landhaus*, formerly a rich Augustine convent, now the residence of the governor, and the place of meeting of the states of the prov.; the town-house, a Gothic structure, built in 1511; the barracks, an enormous pile, formerly the Jesuits' college, having seven courts, a fine church, and a riding-school; the theatre, with its assembly-rooms; the Maria school for young ladies, &c. Many of the nobility belonging to the prov. have here fine palaces, which give an air of grandeur to the town. The quarter called the Franzensberg is very picturesque; in the gardens a marble monument was erected in 1818, in honour of the late emperor Francis I. The Ausgarten, a park laid out as a garden, was opened to the public by Joseph II. Brunn is the seat of a bishopric and of the government of Moravia and Austrian Silesia, of a Protestant consistory, a court of appeal, high criminal and military courts, the *landrecht*, or nobles' court for the prov., and is the place of meeting of the provincial estates, and the residence of their standing committee. It has a philosophical institute, a gymnasium, a principal normal school; schools for young ladies, tradesmen, and mechanics; a theological seminary, and numerous parish and infant schools; an imperial society for the encouragement of agricultural and of the natural history and geography of Moravia, to which is attached a valuable museum, a botanical garden, and a public library. It has general, orphan, and lying-in hospitals; a lunatic asylum; with numerous institutions for the relief of the poor. The manufactures of Brunn are of very considerable value and importance. Those of woollen goods are the most extensive in the empire; and the town has thence been called the Austrian Leeds. Latterly, however, the cloth trade has been represented as not

in a very prosperous state. The cotton manufacture has been introduced, and has made considerable progress; and silk, glass, soap, tobacco, and machinery, are extensively produced. Its trade is very extensive; and it will be still farther promoted by the branch which is to be carried to it from the railway now being made from Vienna to Galicia. (*Osterreischen Encyc.*; *Murray's Handbook, &c.*)

BRUNSWICK (Ger. *Braunschweig*), THE DUCHY OF, in Germany, consists of five detached portions of territory on the rivers Weser, Seine, Ocker, and Aller, between lat. 51° 38′ and 52° 50′ N., and long. 9° 10′ and 11° 22′ E. It occupies part of the vast plain which stretches from the foot of the Harz mountains, and their continuation (the Solling) to the German ocean and the Baltic, with a portion of the rise of those chains on the N. side. The largest portion contains the districts of Wolfenbuttel and Schöningen, in which the cities of Brunswick and Wolfenbuttel, and the towns of Konigsbutter and Helmstadt, are situated. The district of Wolfenbuttel is traversed by the Ocker, which rises in the Harz mountains, and is not navigable. The Aller traverses the district of Schöningen, but is not navigable in that part of its course; nor is the Seine navigable, which traverses the district of that name. The Weser, which forms the boundary of the duchy towards Prussian Westphalia for a considerable distance, affords an excellent water communication with the sea, and the harbour of Bremen on the one side, and with the states of Hesse and Thuringia, in the heart of Germany, on the other, by means of the Werra and the Fulda, which unite near Minden, and thence take the name of Weser. This river, which forms the main outlet for the waters falling from the N. and W. sides of the Harz, and the Thuringian forest ultimately receives all the smaller streams which previously unite with the Aller, excepting the Bode, which falls into the Saale, a tributary of the Elbe, and which traverses the third and most southern detached portion of territory, the district of Blankenburg. Of the Harz mountains, which, with the Thuringian forest, separate the tributaries of the Elbe from those of the Weser; a considerable portion, valuable for minerals and forests of vast extent, belongs to Brunswick. The summit of the Brocken, and the rude and almost impassable Central Harz, in which granite, mica slate, and primitive formations predominate, belong to Hanover, while the E. and W. falls of the range, in which the transition and secondary formations prevail, form part of the duchy of Brunswick. A portion of this mountain chain belongs jointly to the two governments, and is distinguished by the denomination of *Communion Harz*. The highest summits within the duchy are the Wormberg, 2880 feet, and the Ackermanshöhe, 2706 feet in height. The next considerable mountain, or, rather, forest range, is the Solling, which lies between the rivers Seine and Weser, and is covered with extensive and valuable woods of oak and beech. The summits of this chain are of no great elevation. Iron is found, and sandstone, known under the name of Sollinger stones, is quarried in them. The Elm, a slight range of heights between the Ocker and the Aller, is covered with woods of oak and beech, and contains veins of iron and beds of coal, with occasional mineral springs.

Two small detached portions of territory, viz., the circuit of Thedinghausen on the Weser, to the N.W. of Hameln, and that of Badenburg, are enclosed by the Hanoverian territory, and form part, the former of the Weser district, the latter of the Seine district. Finally, the detached circuit of Kalvorde, inclosed within the Prussian province of Saxony, belongs to the district of Schöningen. According to the latest official returns, the population, in 1832, amounted to 245,783 inhabitants, comprised in 41,609 families. The Weimar Almanack gives the following survey for 1833:

Districts.	Area in sq. m.	Pop.	Towns.	Villages.	Houses.
1. Wolfenbuttel .	460	109,000	3	122	12,200
2. Schoningen .	290	40,000	5	73	4,300
3. Harz . .	304	41,500	7	78	4,650
4. Weser . .	280	37,500	6	70	4,050
5. Blankenburg .	170	20,000	6	64	2,500
Total.	1,504	248,000	27	407	27,700

The three cities contained:

Brunswick . . . . 33,340 inhabitants.
Wolfenbuttel . . . . 8,310 do.
Helmstadt . . . . 6,273 do.

The various religious denominations are thus classified: Lutheran, 242,700, in 238 parishes, with 398 churches and chapels, directed by 29 superintendents, and 7 general superintendents; the Calvinists have but one parish, and the Catholics three parishes. The most perfect toleration and equality of civil and religious rights are shared by all the Christian persuasions. The Jews, 1500 in number, have four synagogues. The number of Hernhutters (a kind of Quakers) is stated at 100.

A census of the pop. in 1814 gave 207,000 as the number of the inhab., which consequently increased down to 1832 in the proportion of about 1 per cent. per annum; and, supposing the same rate of increase to have continued down to the present time (1839), the pop. will now be nearly 263,000. We have stated that the hilly parts of the duchy are covered with forests of fir, oak, and beech. According to Dr. Volger, about 390,000 acres are arable and meadow land, 294,000 acres forests, and 296,000 uncultivated moors, water, &c. The plain at the N. fall of the Harz is mostly of a limestone soil, alternating with beds of loam, and is fertile; the districts along the Weser and Seine are also fertile; but the predominant feature is sand in these parts. Towards the N. part of the duchy, these fruitful plains merge into the arid and unproductive sandy heaths of Dolgen and Lüneberg. The average produce of corn, of all descriptions, is estimated, by Veilguth at about 575,000 qrs.; oil from linseed, rape, and poppies at 1900 tons, flax 4500 tons, besides tobacco, madder, and hops, in each of which articles, the produce considerably exceeds the consumption. Cattle-breeding is carried on successfully in the river districts; and improved breeds of cattle and sheep are found on all the larger estates. Hogs are very extensively reared; but the sausages and hams of Brunswick enjoy so much reputation, that a large importation of hogs takes place from the neighbouring states, the produce of which is sent to all parts of the Continent. Horses are not reared in sufficient numbers to supply the wants of the duchy, and are annually brought from Holstein and Mecklenburg.

The extensive forests, which had suffered, from many years of neglect and wasteful management, have of late been improved under scientific direction, and are divided into four inspectorships (*Forstmeistereien*), and sixty-one forester's districts. Timber, of valuable quality, is annually floated down the Ocker, Seine, Innerste, and Weser, especially from the Harz and the Solling forests, and forms a considerable object of export trade. The game in these forests is not very abundant, consisting of red deer, roebucks, hares, and rabbits, with occasional wild boars. A species of throstle (*Krammtsvogel*) caught by thousands in the winter season, is esteemed a great delicacy. Fish not very abundant, nor of rare sorts. The mineral riches of the Harz mountains, although no longer so prolific as reported in former times, afford employment to a number of industrious individuals, and are managed partly in conjunction with Hanover, and partly by Brunswick alone. The Rammelsberg, near Goslar, of which 3-7ths is the share of Brunswick, and 4-7ths that of Hanover, produced, in two recent years, the following quantities:

Gold.		Antimony.	Lead.	Zinc.	Copper.	Sulphur.	Vitriol.	Alum.
mks.	loth.							
10	18	608,790	606,100	12,750	423,780	157,000	[illegible]	[illegible]
11	6	615,340	616,[illegible]	13,606	492,923	173,910	734,[illegible]	[illegible]

Iron is the chief produce of the mines worked separately by Brunswick in the three districts of the Harz, Weser, and Blankenberg. They are all worked on government account, and as well as the salt mines, stone-cutting mills, four glass-houses, and the porcelain manufactory at Fürstenberg, are under the direction of a mining board at Brunswick. The salt works are very considerable; they are established at Salzdahlum and Salzliebenhall, in the district of Wolfenbuttel, and at Schöningen. That at Salzdahlum has been worked since the 13th century. The brine spring at Juliushall is worked jointly with Hanover. In the Brunnenholz, near Helmstadt there is a coal-mine with two shafts, and another near Walkenried, where alabaster and agates are found. Mineral springs occur in several parts; those near Helmstadt and Seesen are frequented by invalids. Asphaltum and other bituminous substances are found in many parts of the Harz mountains, especially at the Rammelsberg and Iberg.

Besides the iron-works, linen weaving is the chief article of manufacture. According to Becker, it is mostly woven in the towns of Schöningen, Konigsbutter, Schoppenstadt, Langelsheim, and in several towns of the Harz and Weser districts. Large bleaching-grounds are found at Hockelbeck. Camlets are the only descriptions of woollens woven within the duchy; a spinning-mill for woollen yarn has been established at Bevern; and spinning is a great source of industry among the inhabitants of Lutter and Barenberge, and at Lesse. Dyeing is carried on at Schoppenstadt, Kalvörde, and Vorsfelde. Brewing is extensively carried on in all the principal towns, but the beer is bad, and does not prevent the universal use of brandy among the lower classes. The Mumme, a heavy draught extracted from malt, is now principally used by persons in delicate health, and is exported for that purpose to all parts of Germany. Oil and sawing mills are found on nearly all the principal streams, and the preparation of the root of chicory as a substitute for coffee, which attained to a great extent during the exclusion of colonial produce under the continental system, is still favoured by high duties on such produce within the

limits of the customs' league. Becker estimates the quantity annually prepared at 6,750 tons. The price of labour is usually 6 gg. (about 9d.) per diem, in the country, and something more in towns. Trade, especially the transit trade, is a great source of emolument both to the town and duchy of Brunswick, and is principally transacted at its ancient fair, which still keeps up all its importance, and bids fair to succeed to Leipzig as soon as the railway which is now constructing from the Harz shall be continued to some navigable point of the Aller or the Elbe. Brunswick is engaged by treaty in a customs' league with Oldenburg and Hanover (*See* GERMANY), which opens to her the communication with the German ocean by means of the Elbe and Weser, while the credit and ancient trading connexions of the Brunswick mercantile houses fill up a blank which would otherwise be very sensible in that league. The government wisely directs its attention to the encouragement of the different industrial resources, and has preferred establishing a liberally-endowed and well-conducted system of education to the imposition of protecting duties, by which one class of the people is aided at the cost of the others. The foundation of the "Real Institute," which unites with practical instruction in agriculture and the management of forests the scientific information on which the higher branches of these occupations, as well as mining, and the mechanical and chemical arts, ought to be founded, marks an epoch, even in Germany, where so much care is shown for intellectual improvement. Nor are the higher branches of knowledge by any means neglected. The Lyceum, formerly the Caroline College; two normal schools for teachers; and six gymnasia, afford ample means of cultivating them. The university formerly existing at Helmstadt, the revenues and library of which were transferred during the Westphalian régime to Göttingen, has not been re-established, but Göttingen is regarded as the university of the duchy. There are sixty-three burghers' schools, and 369 elementary schools, giving one to nearly every village. The revenues of nine secularized convents and religious foundations are applied to support a number of unmarried young women and other persons on the presentations of the patrons. The charitable foundations are fifty-two in number.

The inhabitants of the duchy are mostly descendants of the ancient "Brokmanner," a branch of the Sassen or Saxons, and the low German language is universal among the villagers, except on the Harz, whose mining population was drawn from Upper Germany, and speaks high German. The names of some villages, as Wenden, &c., are perhaps the sole remains of the ancient Wendish or Slavonian inhabitants of the north-eastern parts of the duchy. The higher classes of the towns speak high German, which, as all over Germany, is the language of public business and of the schools. Personal courage and open-heartedness are the leading characteristics of the Brunswickers, and, until the feeling was on a recent occasion wantonly trifled with, and abused, they were distinguished by an unshaken attachment to the reigning house. They are allowed to be the best situated, in point of comfort and village economy, of all the Germans, and the aspect of the whole country is indicative of good order and prosperity. The discontent of the oppressed inhabitants who, being long accustomed to the mild rule of wise princes, found the tyrannical innovations of the late Duke Charles insupportable, led, in 1830, to the expulsion of that prince, and the transfer of the sovereignty to his second brother William, who has since been recognised as reigning duke by the great powers of Europe. One of the first acts of this prince's sovereignty was, in conjunction with the "Landstande," or estates, to remodel the constitution which had been given in 1820 under the direction of Count Munster during the minority of the former duke. Instead of two chambers the representation of the people is now confided, agreeably to the old German fashion, to one house of assembly, but which is composed of elected members; ten deputies being taken from among the owners of the seventy-eight knight's estates within the duchy, twelve from the principal towns, ten from the villages and peasantry of the open country, whether holding freehold or copyhold property, and sixteen chosen from all classes indiscriminately by electors named by each class. With the exception of two members of the higher clergy, which must be chosen, no distinction of rank or property influences or limits the choice of this last portion of the assembly. The members chosen for the towns and for the country must, however, belong to that class of each which pays the highest amount of taxes, and which is fixed to include one-tenth of the houses in town, and one-fourth of the landed holdings. The chamber meets every three years, and renews one-half of the members of each class by a new election. The budget is voted for three years, and the chamber has the right of controlling the expenses of the state, under acknowledgment of the obligation to provide for the dignity and power of the government. This new constitution, which was proclaimed 19th Oct., 1832, provides for many rights of the subject, which are not acknowledged in other German states, among others—that every person who is arrested be brought up for examination within twenty-four hours, and then delivered over to his proper judge; where the course of justice is impeded by government influence, recourse lies to the chambers; the right of emigration and removal to any other country unimpeded is acknowledged. Two of the counsellors (judges) of the court of the duchy, are to be chosen by the chamber; all privileges of various classes of the community are abolished, and perfect equality before the law is established. In the first sittings of the new chamber the manorial dues and services of all emphyteutic fiefs were declared redeemable; the dues in money and kind at twenty-five years' purchase, the service dues at eighteen times their estimated value. The municipal institutions were modified at the same period, and the freedom of the cities rendered easy of acquisition. The magistracy is composed partly of salaried and partly of honorary officers, dependent on the sanction of a council of freemen chosen by the citizens at large, and who vote the sums requisite for the service of the city. The official published statement of the revenue and expenditure for the period 1837 to 1839 gives the following results:

Revenue.	Doll.	Expenditure.	Doll.
Land tax	987,000	Department of justice	470,671
Personal tax	331,560	Do. finance	211,819
Indirect taxes	976,707	Do. war	385,775
Stamps	114,000	Do. police	134,446
Fees of courts	54, 00	Pensions	277,436
Post-office and tolls	192,339	Extraordinary building expenses	4' 4,760
Lottery	31,147	Interest of public debt	494,760
Domains and other branches	690,912	Salaries in various departments and sinking fund	346,920
			396,156
Total	3,257,664	Total	3,287,694

This estimate contains only the surplus revenue of the domains left after defraying the civil list of the duke, which amounts to 237,000 dollars annually. The duke farther derives a revenue of 170,000 florins from the duchy of Oels, in Silesia, and a mediatized principality under the sovereignty of Prussia, which is an appanage of the second branch of the house of Brunswick. Finally, the estates of the convents and religious foundations secularized at the period of the reformation, and then destined to support the clergy and institutions of education, form a separate fund, which does not enter into the budget, yielding the sum of 340,605 dollars annually. A resolution of the chamber fixed the lowest amount of salary of a parish minister at 400 dollars, and that of a village schoolmaster at 80 dollars per annum, the amount required to make up these sums being chargeable on the budget. The public debt is stated not to exceed 2,300,000 florins, and is being rapidly reduced. On the whole, this little state is one of the best managed in Europe in every department of administration. Respecting the principles upon which taxes are imposed, we have collected the following particulars. For the land tax, the ground is rated according to four classes, and a separate assessment is laid on each. The personal tax is a capitation assessment on all persons who are of age, and is divided into ten classes, whose contribution varies from about 3*s.* 2*d.* to about £3 16*s.* per annum. The indirect taxes are levied in conjunction with Hanover and Altenburg, according to a moderate tariff, which affords encouragement to native industry, without aiming at forcing precocious manufactures. A tax is levied upon houses, and some tolls on provisions carried into towns for sale; but these are local assessments for municipal purposes.

The present duke of Brunswick is the lineal descendant of Henry the Lion, the last of the house of Welf, who held the united duchies of Bavaria and Saxony. In their rivalry with the Suabian house of Hohenstaufen in the 12th century, the party of the powerful Welfs was stronger in Italy than in Germany, and the jealousy entertained of their power in the former country caused all the princes of the empire to unite with the Emperor Frederic Barbarossa in humbling them. Henry the Lion having refused to aid that emperor in his wars with the free Italian cities and the pope, was deprived, by a decree of the diet in 1180, of both duchies, and only left the possession of his allodial domains of Brunswick and Lüneburg, which were subsequently split into numerous branches, but merged finally in the still reigning lines of Lüneburg (or Hanover) and Brunswick, which is the elder branch. As such, the crown of England would have devolved to this line, which claims descent from the daughter of Henry II. on the extinction of the house of Stuart, had not the duke of Lüneburg, afterward George I., by marrying the daughter of Elizabeth, Countess Palatine, the daughter of James I. of England, procured a prior claim to the younger line. Treaties of mutual inheritance exist between the houses of Hanover and Brunswick, and the succession only passes to the female side when legitimate

male heirs fail. The intimate family connexion which in the last century subsisted between the house of Brunswick and the reigning families of Great Britain and Prussia, engaged the princes of Brunswick in political alliances with these two powers, in opposition to France, and occasionally to Austria. The Prussian army, at the outset of the disastrous campaign of 1806, was commanded by the Duke Charles William Ferdinand of Brunswick, who fell in the battle of Jena. Although he had declared his duchy neutral, and no Brunswick troops were with the Prussian army, yet his lands were immediately seized by the conqueror, and incorporated with the kingdom of Westphalia. His youngest son, Frederic William, after the death of his eldest, and the abdication of his second brother, the sole remaining heir, served for some time in the Prussian, and afterward in the Austrian army. In 1809, this adventurous prince raised a small corps, and attempted, in co-operation with the grand Austrian army, to excite a diversion in the north of Germany; but finding his cause ruined by the victory of the French at Wagram, he crossed the whole of Germany, at the head of a small body, not exceeding 2000 men, and marched from the Bohemian frontier to the sea-coast near Bremen. Eluding and alternately fighting the various French corps which crossed his passage with equal good fortune and bravery, he succeeded in embarking for England, where his troops joined the British army, with permission to retain the black uniform which their bravery had rendered celebrated, and served until 1814 in the peninsula. Having regained his dominions, under the stipulations of the treaty of Vienna, Frederic William fell at the head of his troops while maintaining the position of Quatra Bras, two days before the battle of Waterloo. In the Germanic Confederation, Brunswick ranks as the thirteenth voice, conjointly with Nassau, and has two voices in the Plenum. The contingent to the confederate army is 2096 men, consisting of 1625 infantry, 299 cavalry, and 172 artillery and pioneers.

Brunswick, a city of Germany, cap. of the above duchy, on the Ocker; lat. 52° 18′ N., long. 10° 39′ E. Pop. 36,000. Bruno, who appears about the year 849 as duke of Ostfalen, is said to have first built walls round the little town of Brunswick, to protect it from the incursions of the Normans. Henry the Lion, duke of Saxony and Bavaria, and the grand champion of Christianity and Germanic civilization, against the Slavonic nations on the Elbe and the Baltic sea towards the close of the 12th century, made Brunswick his place of residence, and extended and adorned the city. He finished the cathedral church of St. Blaize, an interesting monument of the Byzantine Gothic style, endowed it with lands and relics brought from Constantinople and the Holy Land, and erected a bronze figure of a lion, said to have been cast in the Greek capital, upon a pedestal in front of his palace, on the site of which a barrack now stands. From this period Brunswick became one of the most important cities in N. Germany; and the wealth of its dukes, who were owners of the extensive mines and salt works in the Harz mountains and in the vicinity, was principally expended in the cities of Lüneburg and Brunswick, the seats of the chief lines of the Welf family. In the 13th century Brunswick, which, owing to these resources, had advanced in commercial prosperity, became a member of the Hanseatic league, and flourished as one of the leading cities of lower Germany. On the decline of the league, the increased power of the territorial princes exposed the city to the vicissitudes which their political speculations drew upon the country; and Brunswick suffered in common with other N. cities upon the advance of the Imperial armies under Tilly and Wallenstein, in the thirty years' war. The division of the reigning house into many branches was also, at that period, disadvantageous to Brunswick, which saw the rival cities of Wolfenbuttel, Celle, Hanover, Göttingen, &c., spring up and prosper as so many diminutive capitals, each the seat of a petty court. The city was farther almost drained of its small remains of wealth during the French occupation; but through the industry of its inhabitants, and the celebrity of its fair, held in February and August, and frequently visited by 20,000 strangers, it keeps up its importance as a commercial city. An iron railway has been commenced from Brunswick to the foot of the Harz mountains, of which a portion as far as Wolfenbuttel (about 9 miles), was opened in 1839, having cost 300,000 dollars. Should this undertaking be continued through Hanover to the Elbe, or the Weser, Brunswick will bid fair to succeed to Leipzig and Frankfort, as the staple mart of English manufactures and colonial wares for the N., and perhaps E. parts of Europe. The fortifications of the city have been levelled since the peace, and converted into agreeable plantations, with walks and drives; and the city, although bearing rather an antiquated appearance, has some good streets, and abounds in interesting remains of the middle ages. The cathedral, and church of St. Giles, which has lately been repaired and fitted up as a repository for works of art, the bronze lion before mentioned, and the town-house with a curious gallery, adorned with the statues of many of the dukes in niches, and the bronze fountain in its vicinity, are justly deserving of notice. The principal streets are the Bohlweg, in which the new palace, a tasteful Greek structure, is built to replace the old residence, burned by the mob in 1830, the Fallersteben and Wenden streets. The church of St. Andrews, with its steeples, one of which is 318 feet in height; and that of St. Catherine, with paintings by Diebrich, and stained glass windows from designs by Cranach and Durer, as well as the church of St. Martin, in the pointed Gothic style, are interesting to lovers of the fine arts. Nor is the museum less worthy of attention, in which, among a number of inferior paintings, are some of high value of the Flemish and Dutch schools, by Rembrandt, Jan Steens, Vandyke, and Rubens, together with a portrait of Raffaelle, said to be by his own hand; and others by Guido, Giorgione, &c. An Ecce Homo, by Albert Durer, a crucifix, by Benvenuto Cellini, with a collection of antique statues, coins, &c., are worthy of inspection. The celebrated Onyx vase, purchased by one of the dukes of Brunswick, who secured it as his share of booty when Mantua was sacked, in the course of the thirty years' war, together with several other objects of value, were carried off, and are still retained by Duke Charles. The Caroline college, now divided into a lyceum or classical college, with a gymnasium or grammar school, and a "real schule" or mechanics' and commercial institute, with a branch for agriculturists and foresters, a college for teachers, several elementary schools, a general and a lying-in hospital, with schools of surgery, orphan and deaf and dumb asylums, are the public institutions for education. It has also manufactures of linen and woollen stuffs, hardware, &c.; and numerous charitable institutions.

Brunswick, county, Va., situated in the S. part of the state, and contains 676 sq. m. Nottaway river bounds it on the N.E., and Roanoke river crosses its S.W. corner. Drained by Meherrin river and its branches. It contained in 1840, 10,801 neat cattle, 6279 sheep, 18,950 swine; and produced 26,936 bushels of wheat, 328,801 of Indian corn, 115,842 of oats, 15,711 of potatoes, 2,140,813 lbs. of tobacco, 12,699 of cotton. It had nineteen stores, one furnace, four flouring-mills, nineteen grist-mills, two saw-mills, five tanneries, seven academies, 156 students, seven schools, 196 scholars. Pop.: whites, 4978; slaves, 8805; free coloured 563: total, 14,346. Capital, Lawrenceville.

Brunswick, county, N. C., situated in the S. part of the state, and contains 1344 sq. m. Cape Fear river crosses its N. part, and bounds it on the E.; Waccawaw river runs on its W. border; bounded S. by the Atlantic. It contained in 1840, 7237 neat cattle, 1889 sheep, 9512 swine; and produced 36,357 bushels of Indian corn, 47,426 of potatoes, 949,755 lbs. of rice, 7868 of cotton, 4867 barrels of tar, pitch, and turpentine. It had four stores, seventeen grist-mills, four saw-mills, seven schools, 106 scholars. Pop.: whites, 2772; slaves, 2119; free coloured, 374: total, 5265. Capital, Smithville.

Brunswick, p. t., Cumberland co., Me., 30 m. S. by W. Augusta, 7 m. W. Bath, 26 m. N.E. Portland, 141 m. N.N.E. Boston, 570 W. Bounded N. by Androscoggin river, which here has falls, affording extensive water-power. The river is navigable for gondolas to Bath. Incorporated in 1739; first settled in 1627. A bridge connects it with Topsham. It contains thirty stores, one fulling-mill, one woollen-factory, one cotton-factory, with 4000 spindles; one flouring-mill, five grist-mills, thirteen saw-mills, two tanneries, one pottery, one printing-office, one periodical, two academies, 66 students, thirty-two schools, 1065 scholars. Pop. 4252.

It is the seat of Bowdoin college, which was founded in 1794, and organized in 1802; has a president and seven professors or other instructers, 749 alumni, 110 of whom have been ministers of the Gospel; 190 students, and 21,950 vols. in its libraries. The commencement is on the first Wednesday in September. Attached to the institution is Maine Medical School, founded in 1820, which has four professors, 80 students, and 464 graduates. The lectures commence on the 15th of February, annually. The philosophical apparatus and cabinets of mineralogy and natural history, belonging to the college, are very complete. It is the principal literary institution in the state, and among the most respectable in New England. It received a donation of $10,000 from James Bowdoin, Esq., its principal benefactor, from whom it was named. The state has granted to it five townships of land, and $3000 annually. Its principal edifice, which is spacious and commodious, has been several times burned, but has been rebuilt.

Brunswick, p. t., Essex co., Vt., 86 m. N.E. Montpelier, 583 W. Bounded E. by the Connecticut river; Nulhegan river crosses its N. and Paul's stream its S. part, both flowing into the Connecticut. It has three schools, 47 scholars. Pop. 130.

Brunswick, t., Rensellaer co., N. Y., 4 m. E. Troy, 10 m. N.E. Albany. Drained by the Poestenkill river and its branches. It contains four stores, one fulling-mill, one

woollen-factory, one flouring-mill, one grist-mill, six saw-mills, two tanneries, fifteen schools, 599 scholars. Popul. 3951.

BRUNSWICK, p. v., port of entry, and capital of Glynn co., Geo., 233 m. S.E. Milledgeville, 742 W.; situated on the N.E. side of Turtle river, 10 m. W. of the entrance of St. Simon's sound, through which it flows into the Atlantic. It has a spacious and safe harbour, with 13 feet of water on the bar at the lowest tide. It is 8 m. above the light-house on St. Simon's island. It contains a court-house, jail, and about thirty dwellings and stores. The tonnage in 1840 was 1494.

BRUNSWICK, p. t., Medina co., O., 25 m. S.W. Cleaveland, 120 m. N.E. Columbus, 355 W. It contains four stores, four saw-mills, eight schools, 297 scholars. Pop. 1110.

BRUNSWICK (NEW). A territory belonging to England in N. America. *See* NEW BRUNSWICK.

BRUSH CREEK, t., Highland co., O. Drained by Brush creek. It contains eight schools, 400 scholars. Pop. 1502.

BRUSH CREEK, t., Jefferson co., O. Pop. 757.

BRUSH CREEK, t., Muskingum co., O. It contains one church, four flouring-mills, four saw-mills, and several salt-factories. Pop. 1606.

BRUSH CREEK, t., Scioto co., O. Pop. 401.

BRUSH CREEK, t., Washington co., Ark. It has one school, 9 scholars. Pop. 296.

BRUSSELS (Lat. *Bruxellæ*, Flem. *Brussel*, Fr. *Bruxelles*), capital of the k. of Belgium, and of the prov. of Brabant, about 50 m. E. by S. from the sea, lat. 50° 50′ N., long. 4° 22′ E.; on the Senne, a small river, which, rising near Soignies, in Hainault, and flowing N., falls into the Scheidt, through the Rupel, about 2 m. N. W. of Mechlin. The scenery of the adjacent country is beautifully diversified by sloping heights, and green valleys refreshed by the waters of the Senne. A large portion of the city being built on the acclivity of a hill, it presents, when viewed from the W., a picturesque amphitheatre of houses; and the great inequality of the elevation of its site has often induced a comparison with Naples and Genoa. The figure described by the outline of the surrounding wall resembles that of a pear, the smallest part pointing S.S.W. The greatest extent of the city, from N.N.E. to S.S.W., is about 3 m.; and the extreme width, from N.W. to S.E., about 2½ m. Brussels, a century ago, was completely surrounded by strongly fortified ramparts, with salient angles, and ditches or moats, supplied from the river Senne. These fortifications are now almost wholly removed, and their site is formed into spacious boulevards, planted with rows of stately linden-trees, that encircle two thirds of the city, on the N., the E., and the S. The city wall is overlooked by the boulevards, which command extensive views of the country, and afford an agreeable promenade, extending about 5 m. from the Porte au Rivage on the N., to the Porte de Hal on the S. There are nine of these *portes* or mural gates, several of which are fine old architectural arches of great strength. They communicate with, and bear the names of, the high roads that traverse the kingdom and centre in the capital.

The Senne enters the city on the N.W. side by two branches, and forms, within the walls, four islands, of which the principal are named St. Gery and Bon Secours. This rivulet is only about 30 feet in width, and from 4 to 6 feet in depth, and is not navigable in any part of its course. Brussels, however, possesses the advantage of water communication with Charleroy on the S., and with Mechlin, Antwerp, and the ocean, on the N., by means of two capacious and well appointed canals. The width of the Antwerp canal is 45 feet. It was opened in 1551, and cost nearly 2,000,000 of florins (£166,000). Five locks overcome a descent of 50 feet, in a course of 17 miles, between Brussels and the town of Boom, where the canal joins the Rupel, a large affluent of the Scheldt. The head of this canal, in the N.W. quarter of the city, is furnished with several commodious basins and quays, whence passengers and goods are conveyed in large and handsome barges to the junction of the Rupel. The Charleroy canal cost 4,350,205 florins, and was first opened in 1830. It is carried along the W. boundary of the city in the ancient ditches of the fortifications to the Porte au Rivage, where it communicates with the canal to Antwerp. Fifty-five locks obviate a fall of 432 feet, in its course of 45 miles to Brussels. It passes through a tunnel of 1175 yards, and is crossed by fifty-five aqueducts and thirty-six bridges. The soil of the elevated ground, occupied by the S. and E. portions of the city, is sand, interspersed with fossils, marine substances, calcareous stones, and layers of ferruginous earth; and that of the lower N. and W. section consists of a sandy marsh, mixed with marine substances, and covered with a deep bed of peat or turf. The highest part, on the S. extremity, between the portes of Hal and Namur, is about 220 feet above the level of the sea. The upper town contains the royal court and government offices, the park, the finest squares, streets, and hotels, and the mansions of the higher classes. The central and lower town comprises chiefly the trading and operative population of the population, and has generally a more crowded and mean appearance, though it still abounds in fine old ornamented buildings, once occupied by the ancient nobles of Brabant. The *Rivage*, at the N. extremity, is inhabited by rich merchants, and presents a constant scene of commercial activity. The total number of houses is about 15,000, of which 700 are inns or hotels; and there are nearly 300 streets, many of which are wide and regular, besides lanes and blind alleys almost innumerable. All are generally paved with large flint stones, and are lighted by about 1300 lamps, both of gas and oil. The city is abundantly supplied with spring-water, by means of pipes and powerful hydraulic engines, from three subterranean caves at Etterbeeck, a beautiful village in the southern vicinity. There are, besides, ten springs within the walls, thirty fountains, and about ninety pumps. Several fountains are ornamented by elegant obelisks and groups of exquisite bronze and marble sculptures. The most remarkable are, *Les Fontaines des Fleuves*, in the court of the Hôtel de Ville, formed of river gods in white marble, and dolphins in bronze; the *Fontaine de Minerve*, in the Place du Grand Sablon, consisting of a beautiful group of figures in white marble, erected in 1741, by the Earl of Aylesbury, in attestation of his respect for the inhabitants, after residing among them forty years; and the *Mannikin Pis*, near the Hôtel de Ville, in the centre of the city. This is an exquisite bronze figure, about 2 feet in height, of an urchin boy, who discharges a stream of water in a natural manner. Great value and historical interest are attached to this antique little figure by the old citizens of Brussels, who regard it with peculiar solicitude as a kind of municipal palladium. The ancient part of Brussels is ornamented by many fine specimens of the florid style of Gothic architecture of the sixteenth century; and the modern part exhibits numerous excellent buildings, erected about fifty years ago; but the newly-built dwelling-houses have commonly the uncouth form and fashion of granaries or manufactories, and are often constructed with very inferior bricks, and with timbers too slender for the lofty tiled roofs. The uniformity of appearance, too, is destroyed by the custom of painting the fronts with strongly contrasted colours—as yellow, green, white, &c.—which often produces a glaring effect, more suitable for isolated inns or fancy cottages than the streets of a metropolitan city. In the Rue de la Madeleine and Rue Montagne de la Cour, are many elegant shops, and these are accounted the liveliest and most frequented streets in Brussels, though in appearance and business they are certainly dull, compared with Paris and London; indeed, dullness in general forms a common subject of querimonious remark among the French and English residents in the capital of Belgium. Four uniformly built streets surround the large palace garden called the park, namely, the Rue Royale, which will admit of comparison with some of the finest streets of the European capitals; the Rue Ducale, in which are the palace of the Prince of Orange and the grand concert-room; the Rue Bellevue, containing the king's palace; and the Rue Brabant, in the centre of which is the palace of congress, or houses of parliament. The Grande Place, or great market-place, in the centre of the city, is a noble and very interesting square, containing the gorgeous old Gothic Hôtel de Ville, the Maison du Roi, and many other rich specimens of the ancient ornamental architecture. Here, in 1568, counts Egmont and Horne were beheaded by the Spanish viceroy the Duke of Alva, whose persecutions brought ruin and death into almost every house in Brussels. The Place Royale, near the king's palace, is perhaps the finest square in Brussels. The houses around it are remarkably handsome and regular. The Place du Grand Sablon is the largest square, and is used as a market-place. The Place de la Monnaie is also extensive, and approached by several spacious streets: it contains the theatre, the mint, the exchange, and some of the finest cafés in the city. The Place de St. Michel, better known since the Revolution as the Place des Martyrs, is planted with rows of linden-trees, and surrounded by uniform and elegant buildings ornamented with Doric columns. This square was chosen for the sepulture of those who fell in opposing the royal forces during the revolutionary struggle in September, 1830. There are fourteen other squares of less distinction, but which at once serve the purposes of health and ornament. The park is an open oblong space of about fourteen acres, on the high eastern side of the city. Its surface is covered with smooth verdant turf, and is formally laid out in broad straight walks and winding paths, which are overshadowed and sheltered by lofty beech and chestnut trees and plantations of acacias. There are several fountains, and many excellent marble statues, busts, vases; and groups of persons and personifications from classical mythology and history are distributed about the grounds. The walks command a great variety of interesting scenery, including the old Gothic edifices of the lower town and the surrounding country, which is very picturesque. In the N. E. corner of the park is "Vauxhall," comprising a small

pretty theatre for vaudevilles, and a ball-room. Along the banks of the Antwerp canal, issuing from the N. point of the city, is the beautiful promenade called the *Allée Verte*, that is the Green Alley. It is formed of a broad carriage-road, and on each side a footway, divided by four rows of umbrageous elms, extending about a mile and a half. Here the royal family, and multitudes of all classes, are seen every fine evening enjoying the freshness of the country air, and the pleasing views of numerous villas and rural scenery. In fact, the environs of Brussels are in general so interesting, that they form the subject of a large portion of every full description of the city. Besides the excursion, *of course*, to the battle-field of Waterloo, and its surrounding localities, still intensely exciting to the curious, about thirty-five villages in the more immediate vicinity of Brussels are enumerated in the guide-books as well worth the attention of philosophic and inquisitive strangers. Among their objects of interest are—the splendid royal palaces of Laecken and Tervueren, and the great workhouse and penitentiary establishments of Vilvorde and La Cambre. The most remarkable public buildings in Brussels require some notice. The royal palace, at the S. extremity of the park, presents a façade of 120 yards in length, with a central portico and arcades. The style of architecture is plain, and the general aspect of the structure not at all remarkable. The interior, too, offers little worthy of inspection beyond the usual suites of royal saloons and apartments, which are very superbly furnished, and covered with rich velvet, satin, and gilt. The paintings are neither numerous nor very valuable, with the exception of Vandyke's *Chapeau de Velours*. The Palais du Congrès, at the N. end of the park is a magnificent building, ornamented with fluted Doric columns and appropriate sculptures. Marble stairs on each side of a spacious hall ascend to the two chambers of parliament, which are elegantly fitted up for the reception of the members. The public are admitted into both chambers during the debates, females as well as males; and for this accommodation, the Chamber of Deputies contains a capacious gallery. On the E. side of the park is a palace which, before the revolution of 1830, was occupied by the hereditary Prince of Orange. It was built in 1820. The exterior is nobly simple, presenting a façade of 230 feet in length, with a lofty central dome and cupola. The interior is not surpassed by any European palace in sumptuous furniture and elegant decorations. The paintings are not numerous, but of the highest order, comprising some of the most choice productions of the Flemish and Italian schools. The Hôtel de Ville, in the Grande Place, or great central market-place, is one of the largest and most remarkable of those civic palaces, in the florid Gothic style, that are to be seen in perfection only in the Netherlands. It was erected in 1400. The architecture is Lombardo-Gothic, with a great profusion of quaint sculptures, pointed turrets, and other fanciful and intricate ornaments. In the front are forty windows, and in the lofty sloping roof eighty more. At a point remarkably distant from the centre of the front, an elaborately ornamented pyramidal tower, open throughout to the summit, rises to the height of 364 feet, and commands a fine view of the surrounding country, including the battle-field of Waterloo. It is surmounted by a colossal copper-gilt statue, 17 feet high, of St. Michael crushing a dragon, which turns about to serve for a weather-cock. The interior of the building is entered by a spacious flight of steps, and the lofty halls and saloons exhibit many curious old paintings, gilded carvings, and specimens of fine tapestry. Opposite the town-hall is a venerable Gothic edifice, built about A.D. 1000, called the Brood Huys (bread house) or Maison de Roi. The Palais de Justice is a large building containing the courts of law: its front displays a noble portico, imitated from that of Agrippa's Temple at Rome. The Palais du Conseil d'État, the Hôtel des Monnaies, and several other state offices, are structures more or less elegant: also the theatre, which was opened in 1819, and cost £56,000. Its interior displays very commodious arrangements and tasteful decorations. The stage in front is of greater width than that of the Grand Opera at Paris. The price of admission to the boxes is *4s. 4d.*, and to the pit *1s. 4d.* A smaller theatre in the park has been already noticed, and there is also a private one for amateurs. Near the Place Royale is the large and handsome old Palace or Const, founded in 1300, and rebuilt in 1746. When this was the residence of the Spanish and Austrian governors of the Netherlands, it was one of the richest palaces in Europe. It now contains the public libraries, lecture-rooms, museums, and galleries of paintings and sculptures. The Palace of Industry is a large adjoining building for the exhibition of the manufactures of the kingdom, mechanical models, and new inventions.

Brussels contains several grand and venerable cathedral churches, erected in the middle ages. Four only, of sixteen, are considered primary, and belong each to one of the four arrondissements into which the city is divided: the others, although little inferior in appearance, are secondary in rank. The cathedral of St. Gudule, the largest and finest in Brussels, was founded 1010; and here the first chapter of the chivalric order of the Golden Fleece was held by Philip le Bon, in 1435. There is an aspect of imposing grandeur in its spacious front, surmounted by two large square towers, from the top of which Antwerp is distinctly visible at a distance of 27 miles, and one contains a bell that weighs 14,500 lbs. Against the pillars which divide the lateral aisles from the nave, and support the lofty roof, are placed finely-sculptured statues of the twelve apostles, 10 feet in height, at an elevation of 25 feet from the floor. The pulpit is formed of wonderfully carved groups of figures, the size of life, representing the expulsion of Adam and Eve from paradise. The glass of the principal window displays a magnificent representation of the last judgment, by the celebrated Flemish painter, Francis Flors, and several other antique painted windows of this noble cathedral are exceedingly brilliant and beautiful. Its altars and sumptuous mausoleums of sculptured marble, and numerous fine paintings, are objects worthy of especial notice. The organ, too, is remarkable for the depth and power of its intonations and perfect unison; but that which most attracts the curious spectator is one of the side chapels—a large and splendidly ornamented oratory—called *St. Sacrement des Miracles*, from its being the sanctuary in which are preserved three miraculous consecrated wafers, said to have been stolen by Jews in the 14th century and miraculously recovered. These wafers are still annually paraded with great pomp through the principal streets!

The cathedral of *Notre Dame de la Chapelle* is a beautiful Gothic structure, founded in 1134, and but little inferior in dimensions to that of St. Gudule. Its paintings and sepulchral monuments are even more numerous. At the summit of its lofty spire is stationed a watchman, who sounds a trumpet every quarter of an hour during the night, in proof of his wakeful vigilance; and on seeing a fire, he blows a shrill and incessant blast, to hasten the attendance of the engines. The interior ornaments of this fine cathedral consist of numerous paintings, statues, and monumental sculptures, by eminent artists; and a very curious carved pulpit, representing Elijah fed by an angel under a canopy of palms. The church of *Notre Dame des Victoires* is a profusely ornamented Gothic structure of the 13th century, displaying the most exact symmetry in its plan and proportions. It is ornamented by marble statues and sculptured tombs; its windows are brilliantly painted; and the tones of its organ are exceedingly grand and harmonious. *Notre Dame de bon Secours*, built in the 17th century, is the best attended church in Brussels. Its handsome front façade is surmounted by a lofty dome, and the ornaments of the interior are exhibited to great advantage by the frequent performance of high mass with peculiar sacerdotal pageantry. St. Catherine and St. Nicholas are very irregular and uncouth Gothic edifices of the 12th century, adorned with numerous fine old paintings. The churches of Caudenberg St. Augustine, and Notre Dame de Finisterre, are handsome specimens of the Grecian style, and were erected in the 17th century. A convent of Béguin nuns, called *Le Grand Béguinage*, built in 1657, at an expense of 332,000 florins, has a beautiful church, which contains many fine paintings. There were here formerly a thousand nuns: at present the number is greatly reduced. There are two other nunneries, the convent of Berlaimont, and that of *Les Sœurs Noires*—the Black Sisters. The Church of England service is performed in several Protestant chapels, for the accommodation of the numerous English residents; and the Jews, of whom there are 10,000 in the whole kingdom, have their general consistory in Brussels, and a handsome synagogue; but the great mass of the population are zealously attached to the rites and doctrines of the Church of Rome, while their Lutheran king, Leopold, attends the Protestant service in his private chapel. Previous to the suppression of religious houses in Belgium by the French republican government, at the close of the last century, Brussels contained thirty-one monasteries, two convents of Béguins, two of English nuns, and eighteen oratories; and during the middle ages, the extent and magnificence of the monastic establishments in this locality were truly amazing.

The two principal medical hospitals of St. Peter and St. John are admirably regulated. There is also a well-managed lying-in hospital, and a military hospital attached to the barracks. Nothing can exceed the care and cleanliness observed in every part of the hospital of St. Peter; indeed to this remarkable attention is attributed the fact that, in the calamitous year of cholera, not one case of that dreadful malady occurred in the wards of this establishment, among a miscellaneous assemblage of 600 patients. The hospital of St. John contains between 200 and 300 beds, and includes a community of the Sisters of Charity. The earnest piety and genuine benevolence which induce these and other exemplary females of the Catholic religious orders to go about doing good, by visiting the sick poor, especially in the hos-

pitals, often excite the admiration of strangers who justly appreciate virtue and goodness, and convey a tacit reproach to the pious Protestant ladies of England. There is an excellent society for gratuitous vaccination, which is efficiently supported, and is very beneficial to the poor.

The civil and military prison of Brussels is an appropriate modern building, having nine or ten open courts. It is situated very healthily in the high S.W. quarter of the city, and is under excellent management. The part for civil offences will contain 500 prisoners. There are three public cemeteries, outside the boulevards, adjacent to the gates of the Hal, Louvain, and Flanders. The English residents in Brussels have also two burial-grounds on the roads to Uccle and Louvain. Several commodious bathing establishments are formed upon the river Senne, both within and beyond the city walls, and one for medical steam-baths. In the *Place Royale*, near the king's palace, are the public hotels *de Belle Vue*, *de Flandres*, and *de l'Europe*, which, in the extent and excellence of their accommodations, are not much surpassed by any on the Continent. There are also several large and elegant cafés which might admit of comparison with some of the finest in Paris. The markets of Brussels amount to more than twenty, and are all well and abundantly supplied. The principal corn-market, in the lower N.W. quarter, forms one of the finest squares in the city. It is surrounded by handsome houses, and planted with double rows of lofty trees. Adjoining the fish-market, which is one of the best in the kingdom, is the market for poultry, in which are exhibited baskets full of the hinder legs, or *gigots*, of large frogs, neatly twisted and skewered up ready for dressing. Their appearance is bright and plump, and by no means so disagreeable as to increase the unfavourable prejudice of an English palate. Brussels is amply supplied with culinary vegtables from market-gardens. Butchers' meat is good, and about 6d. a pound. Game is rather plentiful, and poultry abundant. Fresh-water fish are cheap, sea fish rather dear. Bread is excellent in quality, and two thirds cheaper than in London. Groceries in general are 10 per cent. lower, and tea 50 per cent. lower than in England. Ale and beer of a good description are the common beverage. Wines are moderate in price, spirits particularly cheap. Excellent coal is obtained, by the Charleroy Canal, at one third the cost in London; and wood for fuel is cheaply procured from the forest of Soignies. The following tabular abstract of the records for 1838, which are made in imposing municipal taxes upon the provisions brought into the city, will serve to show the amount of different articles consumed in 1838.

Oxen	11,001 in No.	Brandy and liqueurs	63,250 galls.
Calves	14,303 —	Gin	1,539,569 —
Sheep and lambs	29,199 —	Beer	7,168,106 —
Pigs	3,636 —	Vinegar	38,138 —
Hams	7,104 —	Oats	278,311 bush.
Meat cut up	2,134,350 lbs.	Hay	8,993 tons.
Fresh sea fish	£22,777 value.	Straw	9,039 —
Cod	998 tons.	Firewood	71,000 c. mét.
Stockfish	192 —	Charcoal	137,546 bush.
Red herrings	3,389 bask.	Coal	79,360 tons.
Pickled herrings	225 tons.	Timber	19,612 —
Butter	21,190 cwts.	Lime	246,191 bush.
Wines	164,824 galls.	Bricks	41,058,450 in No.
		Stones	5,983 tons.

The pop. of Brussels, in 1824, was 84,004; in 1830–31, 98,279; and in 1837, 104,265; but these numbers are exclusive of the pop. of the suburbs, amounting to about 30,000.

From the city registers, which are very carefully compiled, we find that the average number of the inhabitants of Brussels, in each of the fourteen years, from 1824 to Jan. 1, 1838, was 93,002; the average annual births, 4037; deaths, 3709; marriages, 910, and divorces, 3.

The climate of Brussels is temperate, moist, and extremely variable. The inhabitants of the upper town enjoy a warmer and dryer atmosphere, and a greater exemption from diseases, than those of the lower town, from which the epidemics that occur most commonly arise. In general the city is healthy, and rarely visited by malignant or pestilential fevers. The air is genial and mild, and the sky often serenely blue. Refreshing breezes blow from the sea, but fogs not unfrequently descend in the morning and evening. The temperature of Brussels, compared with that of Paris, is colder in winter, and less warm in summer; compared with London, it is also colder in winter, but warmer in summer. The dry nature of the soil in the higher part reflects the sun's rays in summer, so as to render the heat extremely oppressive. In general the weather is more damp and variable than in Paris, and less so than in London.

Among numerous benevolent institutions, are several extensive and munificently supported almshouses, or asylums for the aged, infirm, and destitute, who have never resorted to public begging. The buildings of these establishments are extremely neat and commodious, and the management is such as to produce the most exemplary order and propriety. Each has from 150 to 200 inmates, and the annual expense of one (near the cathedral of St. Gudule) is defrayed by voluntary contributions, amounting to 25,000 francs, collected from the public houses of the city; to the proprietors of which 5 fr. are awarded for every 300 fr. contributed by their customers. There is a foundling hospital, which had, in 1833, 1920 inmates, supported at an expense of 150,000 fr. a year, of which 27,300 fr. are furnished by the government. The Orphan Asylum contains about 150, who are taught industrial arts, and provided for until the age of twenty. In 1833, there were ten almshouses, or asylums for the indigent, which supported 3870 persons, at an expense of 771,684 fr., and, according to the official reports of the superintendents of the poor, the total number of paupers in Brussels, to whom relief was administered in the same year, was 31,426, belonging to about 500 families. The Board of Beneficence, in relieving 31,426 individuals, expended 158,970 fr., which, with the 771,684 fr. supplied by the asylums, make 930,654 fr., or £36,778, devoted to the poor in one year, besides a great extent of private charity. A great and important institution, called the Société Philantropique, has for its object the prevention and extirpation of mendicity: it is supported by subscriptions. In 1833, the number of pledges received by the Mont de Piété, was 240,940, and the sum lent thereon was 1,806,543 fr.; the number of pledges redeemed was 179,933, and the amount refunded was 1,234,698 fr. In March, 1838, the Central Savings' Bank, established in the capital for the whole kingdom, possessed a fund of deposits consisting of 39,971,634 fr., or £1,615,485. Very ample provision is made for the instruction of the children of the poor. There are also evening schools for adult mechanics and labourers, and an excellent establishment for instructing the deaf and dumb. In 1832, the schools for poor children, including a numerous one for infants, contained 5276 scholars, the expense of whose instruction, during that year, was 25,596 fr. A model school receives from the government 1270 fr. per ann. for its head master, and for each of two under masters 494 fr. Subsidies to the amount of about 1900 fr. are also awarded to three other schools, one of which is Jewish, and held at the synagogue. The primary schools connected with the model school were attended in 1833 by 1780 children. At the same period the total number of scholars at the different schools in Brussels was 8470. A large school on the Lancastrian system is established in a spacious building erected for the purpose, and supported by a society of benevolent persons; and Sunday schools are numerously attended. For the instruction of youth of both sexes in all departments of scholastic knowledge, and every elegant accomplishment, there are many excellent academical institutions, public and private. The modern collegiate establishment, called the Free University of Brussels, offers every desirable facility for prosecuting a complete course of study in science, language, and literature. Besides a magnificent library, it possesses a chemical laboratory; museums of natural history, mineralogy, geology, comparative anatomy; an anatomical theatre, and chambers for clinical practice. In 1838, the number of students was 210, of whom 30 were devoted to the physical sciences, 89 to law, 52 to medicine, and 39 to polite literature. The Royal Athenæum is a highly useful and prosperous institution, established on liberal and rational principles, and kept in full operation by fifteen professors and masters. The attention formerly devoted to the ancient languages, so as to engross exclusively the whole period of youth, is properly divided between ancient literature and the more important modern experimental sciences and industrial arts. In the former department there are usually from 150 to 200 pupils, and in the latter from 250 to 300. The hall for lecturing will hold 1200 persons. There is a fine veterinary and agricultural college, with 150 students, a military school, and a school for instructing boys scientifically in the principles of commerce, and the operations of the mechanical arts. Several societies and establishments for the promotion of science and literature have a high and well-merited reputation. The Royal Academy of Brussels was founded in 1769. The Geographical Establishment, in the Faubourg de Flandres, was founded in 1830, by M. Vander Maelen, an affluent and patriotic gentleman. On the boulevards, at the E. angle of the city wall, is the Observatory, a neat and appropriate edifice, with two towers commanding an extensive horizon. Its site is 190 ft. above the level of the North sea. This establishment is furnished with an apparatus of very superior philosophical instruments, and serves not only for the prosecution of astronomical and meteorological observations, but for the promotion of all the kindred mathematical and experimental sciences, especially that of horology. Near the Observatory, on the outer side of the city wall, is the Botanic Garden, which is generally allowed to be one of the finest in Europe. An institute of fine arts awards prizes to

distinguished students of painting, engraving, sculpture, and architecture, and affords them the means of professionally visiting Rome, and the other celebrated schools and repositories of art. Prizes are also distributed by an academy of painting, sculpture, and architecture, which is numerously attended by students, whose productions form an annual exhibition. There is also a society of friends of the fine arts. A royal conservatory of music is attended by 400 pupils, many of whom become eminent performers; and infirm and aged musicians are assisted by an institution called the Society of Apollo.

For the promotion of mercantile and mechanical knowledge, there is a commercial society, and one for the encouragement of arts and industry. Two medical societies comprise very numerous bodies of learned physicians, and other distinguished men of science. In the old court, or Palace of the Fine Arts, is a museum of natural history, that surpasses in extent and value every other in the kingdom. The departments of zoology, ornithology, entomology, and mineralogy, are especially replete with rare and admirable specimens, including animals from the Dutch East Indian colonies, Russian minerals, and all the volcanic products of Mount Vesuvius. Another portion of the edifice contains the great public library, of nearly 140,000 vols., and 15,000 historical MSS. and minerals. The latter were collected at a very early period, by the dukes of Burgundy, and are of extreme value; many being richly adorned with miniature paintings of exquisite beauty, by the early Flemish artists, and the greater part are splendidly bound in crimson morocco. Above 2000 vols. of the books were printed in the 15th century. The third division of the palace is occupied by a collection of about 500 paintings, by the great Flemish masters from Van Eyck to Rubens, and his numerous pupils. The library, museums, and gallery, are constantly open to the public. This spacious building serves also for public lectures, which are delivered gratuitously every day, by the most eminent professors, on geology, botany, chemistry, architecture, doctrine of chances, philosophy of history, history of the sciences, history of Belgium, general literature, hygiene, individual and public, and industrial mechanics. Besides the great literary treasures in the old palace, there is a national library possessing 60,000 vols., and 1100 MSS.; and several of the public institutions have large and choice collections of scientific and literary works. Brussels indeed affords peculiar advantages to those who require the use of modern publications for study or amusement; not only from its convenient central position between Germany, France, and England, the three great foci of European literature; but that, owing to a very active, yet, perhaps, not strictly equitable, spirit of enterprise among the publishers of the Belgic capital, all the best new French works, in every department of science and literature, are reprinted in Brussels, with equal accuracy and neatness, nearly as soon as they appear in Paris, and commonly at one third of the original cost. Paris and the Parisians are the models which the people of Brussels are ambitious to imitate. They advert accordingly with much complacency to those points of resemblance which their city exhibits—its circumambient boulevards forming a fashionable promenade beneath umbrageous trees; its palace garden in imitation of those of the Tuilleries; its cafés, that emulate the splendid saloons of the Palais Royal; its grand theatre for the operatic drama, and smaller one for vaudevilles. These, and other copies of the characteristics of the French capital, with a general adoption of the French language, and, among the wealthier classes, an anxious observance of French manners and fashions, have obtained for Brussels the appellation of "Paris in miniature." The common language of the working classes in the lower and commercial parts of the city is Flemish, and a smaller portion speak the Walloon, a language derived from the Gallic tribes antecedent to the Franks. It may, in general, be observed, that the inhabitants of Brussels are possessed of a spirit of enlightened enterprise, and exhibit a zealous disposition to adopt all rational improvements in social institutions, in the physical sciences, and industrial arts; while, in ecclesiastical matters, they retain, with peculiar veneration, many notions and ceremonious customs that belong to remote ages of ignorant superstition. Public charities are supported with great liberality. Modern literature and the fine arts, especially music and painting, are cultivated with ardent emulation. The drama is powerfully patronized, and the performances at the principal theatre are got up in a sumptuous and masterly style. A classification of the inhab., published in 1833, when the whole amounted to 93,574, shows the number of wholesale merchants to be 350; dealers in wine and brandy, 120; brewers of beer, 55; keepers of estaminets, or houses for drinking and smoking, 200; distillers of spirits, 40; bakers, 125; butchers, 25. At the same time there were 113 doctors of medicine, 81 surgeons, and 46 apothecaries.

The manufactures of Brussels consist principally of its celebrated lace and tulle, and of carpets, fine linen, hosiery, printed cottons, hats, paper, soap, candles, chemical productions, painted porcelain, leather, fabrics of horse-hair, and caoutchouc, articles of iron, brass, gold, silver, bronze, and cut glass; clocks, lamps, mathematical, optical, and surgical instruments. The establishments are numerous and of the highest description for brewing beer, refining sugar and salt, cabinet-making, carriage-building, lithography, type-founding, and printing and binding books. In the year 1833, there were forty-five printing-offices, all in active operation. In addition to the commerce arising from its manufactures, and the consumption by the inhabitants, Brussels possesses an important transit trade, by means of its two canals, consisting of all kinds of grain, coals, timber, iron, stones, lime, bricks, and various other products of the soil, and of foreign countries. The number of canal boats which entered Brussels during the three months, April to June, in 1833, was 1560, of 80,727 tons. Cheap and expeditious conveyance to Antwerp is supplied by the railroad, the carriages of which proceed from Brussels every alternate hour. The establishments connected with commercial operations are—the Commission Supérieure d'Industrie et de Commerce, Tribunal de Commerce, Chambre de Commerce, Société Générale pour favoriser l'Industrie, Société du Commerce de Bruxelles, six insurance companies, the Entrepôt, Royal Exchange, Custom House, and very commodious public rooms, called the Brussels Lloyds, where merchants meet for the transaction of business and perusal of the daily papers. There are two large annual fairs for the sale of all kinds of merchandise; one of twelve days, commencing May 22; the other of fourteen days, beginning the 18th October.

The municipal authority of Brussels is vested in a burgomaster and four sheriffs. They constitute the city regency, whose sanction must be obtained to all measures affecting the rights and interests of the citizens. The supreme court of law and other national tribunals seated in the capital, are noticed in the article on Belgium, where further particulars are given respecting some of the institutions here mentioned.

Brussels is believed to have been founded in 600, and to have been walled in 1044. A code of municipal laws was formed in 1229, involving the principle of trial by jury. About 1300, sixty trades were incorporated in nine classes, to represent the citizens in all questions of taxation. Liberal notions of government continued to prevail, and the population and extent of the city were much increased. In the general persecution of the Jews during 1370–71, hundreds of that race were put to death in Brussels, and the amount of their confiscated property in the province of Brabant was nearly 13,000,000 florins. Under the Dukes of Burgundy, at the commencement of the 15th century, Brussels became a distinguished seat of learning and the arts, and was the residence of a magnificent court, which greatly promoted the progress of science literature commerce, and manufactures, especially the weaving of linens and woollens, and beautiful tapestry. In 1489, during the dominion of the House of Austria, the city was desolated by a dreadful plague, which destroyed 30,000 inhab., and produced a famine, whose effects lasted four years. Brussels was highly prosperous under the Emperor Charles V., who often dwelt in its palace, and made it the scene of his final abdication in 1555. The intolerant and oppressive proceedings of Philip II. kindled that rebellion in the Low Countries which ended in the establishment of the independence of the United Provinces. In 1568, the martyrs of freedom, Counts Egmont and Horne, were beheaded in the Grande Place. Alva's violent exaction of exorbitant taxes at length excited a general revolt of the citizens, and after many changes and party contentions, and the loss, in 1578, of 27,000 inhab. by the plague, the Spanish governors, in 1598, gave up the place to the Austrian dynasty, under which the arts and sciences again revived and prospered.

Brussels, in 1695, was unsuccessfully besieged and bombarded by the French, under Marshal Villeroy, when 14 churches and convents were destroyed, with 4000 houses. In 1706 the keys of the city were delivered to the Duke of Marlborough, and in 1746 it was again attacked by the French, under Marshal Saxe, to whom it capitulated after a siege of three weeks. In 1794, after the storm of the French revolution had burst upon it, and Belgium was annexed to France, it became the chief town of the department of the Dyle. In 1803, Napoleon entered the city with great pomp, at the head of 10,000 troops, with a body-guard of the citizens in splendid uniform. Twelve years afterwards, on his return from Elba, Brussels was the head-quarters of the British army, and sent forth the troops who, on the plains of Waterloo, put an end to the ambitious career of that extraordinary individual. From that period Brussels, conjointly with the Hague, was the capital of the kingdom of the Netherlands until the Belgic revolution of Sept. 1830, which made it the capital of Belgium. (*Documents obligingly communicated by M. Vander Maelen of Brussels; Annuaires of Brussels; Remberg's Brussels*

and its Environs; Guide to Brussels and Belgium, Paris; Grattan's Hist. of the Netherlands; Délices des Pays Bas; Traveller's Guide through Belgium, Hague; Addison's Handbook for Residents in Belgium, Brussels, &c.)

BRUTON, a town of England, co. Somerset, hund. and par. Bruton, on the Brue, 24 m. S. by E. Bristol. Pop. 2031. It is well built, consisting principally of three streets, having a common centre, with a good market-house, where the sessions for the E. division of the co. are sometimes held. Here is a well-endowed hospital, founded by a native of the town, for the support of poor men and women, and for the support and education of a certain number of children. In 1838 this town had four silk-mills, employing in all 355 hands. Market, Saturday; fairs for cattle 20th of April and 19th of September.

BRUTUS, t., Ingham co., Mich. Pop. 97.

Brutus, t., Cayuga co., N. Y., 7 m. N. Auburn, 153 m. W. by N. Albany. Watered by Branch and Cold Spring creeks, which flow into Seneca river. It contains the village of Weedsport on the Erie canal, which passes through it. It has thirteen stores, two fulling-mills, two grist-mills, nine saw-mills, fifteen schools, 751 scholars. Pop. 2044.

BRYAN, county, Ga. Situated in the S. E. part of the state, and contains 480 sq. m. Ogeechee river bounds it on the N.E., and St. Catharine's sound, a branch of the Atlantic, on the S.E. Drained by Cannouches r., and its branches. The soil is marshy. It contains four academies, 65 students. Pop. whites 897, slaves 2278, free coloured 7; total 3182. No other returns were received. Capital, Bryan C.H.

BUCHANAN, county, Mo. Situated in the N.W. part of the state, and contains 800 sq. m. Bounded by Missouri river on the W. Drained by Little Platte river. It contained in 1840, 8476 neat cattle, 6071 sheep, 25,778 swine; and produced 1884 bushels of wheat, 194,961 of Indian corn, 12,069 of potatoes, 3300 pounds of tobacco. It had fourteen stores three grist-mills, two saw-mills, seventeen schools, 427 scholars. Pop.: whites, 6004; slaves, 227; free coloured, 6; total, 6237. Capital, Sparta.

Buchanan, v., Botetourt co., Va. Situated on the S. side of James river, opposite to Pattonsburg, with which it is connected by a fine bridge.

Buchanan, t., Berrien co., Mich. Watered, in its W. part, by St. Joseph's river. It contains one grist-mill, one saw-mill, three schools, 57 scholars. Pop. 264.

BUCHOREST or BUKOREST, a city of Wallachia, of which it is the cap., being the residence of the hospodar, and of a Greek archbishop, on the Damboritza, over which there is here a bridge; 37 m. (direct dist.) from its confluence with the Danube, and 280 m. W.N.W. Constantinople; lat. 44° 26′ 45″ N.; long. 46° 47′ E. Pop. variously estimated at from 60,000 to 80,000. It is situated in a vast swampy plain, is divided into above 60 quarters, and though of comparatively recent origin, it is not built according to any regular plan, and presents a curious display of barbarism and civilization in its mud cabins, brick houses covered with shingles, and spacious hotels; and in the vulgar finery of the boyars, or nobles, and the rags and filth of the other classes. It also presents a curious mixture of European and Oriental habits and costume; half the inhab. wearing hats and coats, and half caipacs and pelisses. Some of the streets are paved; but they are mostly boarded over, or rather covered with trunks of trees, or other large logs laid transversely, instead of a pavement; and from the flatness of the ground, and the slovenliness of the inhabit., all the filth of the streets collects under this rude floor. The streets are thence called *ponti*, or bridges, and, according to Dr. Walsh, they "are really bridges floating on rivers of filth. In winter this is continually splashing up through the interstices, and in summer it rises in clouds of black dust; and at all seasons is attended with a foul unwholesome odour, generating putrid fevers and the plague." The palace of the hospodar, or prince, an immense old pile, and the metropolitan church, are in the largest square in the centre of the town. Near to them is the fire tower, 60 feet in height, whence a full view of the city is obtained. It has a vast number of churches, each with from three to six spires, or towers! It has also about 20 monasteries and convents, and 30 khans, or Oriental inns, with several hospitals, one of which, for the military, managed by German physicians, is said to be very well conducted: another hospital, founded in 1835, by a bequest left by Prince Brankovano, is also stated to be worthy of notice. There is a wooden theatre, where French plays and Italian operas are sometimes performed. The other principal buildings are a large bazar, and the residences of the consuls or ambassadors of the different European powers. Since the final emancipation of the prov., in 1834, from the rapacious and brutal despotism of the Turks, improvements of all kinds have begun to be set on foot, and the most praiseworthy efforts have been made to supply all classes, especially in the capital, with the means of education. In this view the college of St. Sauvain has been organized, which furnishes instruction to 500 pupils. The French language has been adopted as the basis of instruction, and the institution is under the direction of a gentleman who resided long in Paris. In addition to this four other schools have been opened in the city, where instruction is afforded gratuitously to all who choose to accept it. There is also a lyceum for the Greeks; and a public library, a society of belles lettres, and an agricultural society, have been established.

Formerly the boyars used to ride on horseback; but about 40 years ago they adopted the practice of riding in carriages, and now would hardly cross to the opposite side of the street without using one of them. When Dr. Clarke was here, the number of carriages was estimated at 4000, and, at present, it is probably not materially different. But Buchorest is principally distinguished by profligacy of manners. Gambling-houses are most abundant; and prostitutes are more numerous in it than in any other European city of nearly the same size: a tax upon them has, in fact, been suggested as the most prolific source of revenue, but in this respect, as in most others, some improvements have taken place.

The trade of the town is very considerable. The exports consist of wool, butter, wheat, hides, yellow berries, tallow, honey, wax, &c., sent by the Danube, or by Varna, to Odessa, Constantinople, &c.: they also export immense herds of horned cattle, hogs, &c. to Germany, whence they import almost every thing they have, from the cheapest necessaries up to the most expensive luxuries. There are considerable numbers of German artizans, particularly of watchmakers and jewellers, in the town.

The old cap. of Wallachia was Tergovist; but in 1698 the seat of government was transferred to the present city, then only a miserable village, belonging to a boyar, called Buchor, from whom it has taken its name. (*See* Wallachia; and *Walsh's Journey from Constantinople to England*, cap. 11; *Macmichael's Journey from Moscow to Constantinople*, p. 107–120; *Clarke's Travels*, viii., 264, &c.; *Revue de Deux Mondes for May*, 1839, &c.

BUCK, t., Luzerne co., Pa. It contains eight saw-mills, one school, 45 scholars. Pop. 307.

BUCK CREEK, t., Hancock co., Ia. It has one grist-mill. Pop. 234.

BUCKFASTLEIGH, a par. and town of England, co. Devon, hund. Stanborough, 172 m. S.W. by W. London. Pop. in 1821, 2340; 1831, 2445; houses, 480; area, 6720 acres. It consists of one main street, on the line of the great western road from London to Plymouth; and of another branching from it on the W. side down the incline, and called the Lower Town. Generally speaking, the houses are meanly built: it is paved, but not lighted. The church is on an eminence overlooking the Dart, on the N. of the town, in the meadows beneath which there are some remains of an ancient Cistertian abbey. The inhabitants are chiefly employed in wool-combing and weaving serges, for which there are three or four manufactories in the town. There is also a copper mine in the parish, that is, or was recently, in work; and limestone is quarried and burnt in considerable quantities, for manure to the surrounding district. There are fairs held, for the sale of live stock, the third Thursday in June, and second Thursday in Sept. The weekly market has been long discontinued. The annual value of property in 1815 was £5802. There are the remains of an ancient encampment in the parish.

BUCKFIELD, p. t., Oxford co., Me., 32 m. W. by S. Augusta, 50 m. N. by W. Portland, 591 W. Watered by a branch of Androscoggin river. It contains eight stores, one fulling-mill, four grist-mills, four saw-mills, forty-six tanneries, one academy, 25 students, thirteen schools, 656 scholars. Pop. 1639.

BUCKINGHAM, an inland co. of England, having N. Northamptonshire, E. the cos. of Bedford, Hertford, and Middlesex, S. Berks, and W. Oxford. Shape very irregular; area 472,320 acres, of which about 440,000 are supposed to be arable, meadow, and pasture. The vale of Aylesbury, one of the richest tracts in the empire, occupies the middle of the co., and has, on either side, ranges of hills. It is about equally divided between tillage and pasture. The grass lands are partly used for the dairy, and partly for fatting. Agriculture but indifferent; there is a great waste of horse power, and a proper rotation is not always observed. Sheep are an important stock, and the average weight of their fleece is supposed to have been increased, during the present century, from 3 to 5 lbs.; many hogs are also kept; and large quantities of ducks are raised at Aylesbury and other places. There are some large estates. Farms of a medium size average about 180 acres. Leases pretty common; but they are not granted for a sufficiently long term, and are defective in not laying any restrictions on the tenant as to cropping. Average rent of land in 1810, 21*s.* 1½*d.* an acre. Cottages generally good, and most of

them have gardens. The manufacture of pillow lace has greatly declined; but a good deal of straw plat is made in the parts of the county next to Bedford. Minerals of no importance. The Thames bounds the county on the S., and the Ouse partly intersects it, and partly bounds it on the N. It contains eight hunds. and 202 parishes, and had, in 1841, 21,071 inhab. houses, and 155,989 inhabs., of whom 76,316 were males, and 79,673 females; it returns 11 memb. to the H. of C., viz., three for the co., and two each for the boroughs of Aylesbury, Marlow, Buckingham, and Wycombe. Sum expended on the relief of the poor in 1837-38, £61,634. Annual value of real property in 1815, £662,872; profits and professions in ditto, £223,982.

Buckingham, a par., parl. bor., and town of England, co. Buckingham, hund. of same name, on the Ouse, 50 m. N.W. London. Area of par. 5330 acres. Pop. of par., 1831, 3465; 1831, 3610; houses at the latter date, 740. Except on the N. side, the town is surrounded by the Ouse, over which there are three stone bridges. It consists chiefly of one long street, which is paved and lighted; houses of brick, and neatly built. The church, with a good tower and spire, was built in 1780, principally at the expense of the Temple family. It has a free grammar and green-coat school for 96 boys, and a national school for 300 boys and girls; two ancient hospitals, supporting six green-coat and ten blue-coat pensioners; and a few minor charitable benefactions. The weekly market is on Saturday, and there are ten annual fairs for cattle and sheep. A branch of the Grand Junction canal extends to the town, by which coals, &c. are supplied. No particular manufacture is carried on: in the neighbourhood are paper and corn-mills, and a few lime quarries. Under the Municipal Reform Act there are four alderman and twelve councillors, and the limits of the bor., which were previously co-extensive with the par., are restricted to that portion of it on which the town stands, and which comprises about three-fourths of the pop. The town was incorporated by a charter in 1st of Mary, for services rendered by its inhabit. in the Duke of Northumberland's rebellion: the corporation was a self-elected body, consisting of a bailiff and twelve chief burgesses, who, till the passing of the Refrm Act, returned two mem. to the H. of C. The last-mentioned act not merely gave the suffrage to the £10 householders of the bor., but included with them the £10 householders of the parish., and those of several of the adjoining parishes. Registered electors in 1838, 341. There is a court of gen. sessions for the bor. held twice a year. It is the seat of the summer assize for the co. The jail was built in 1758, by Lord Cobham, through whose influence the act for holding one of the assizes here was procured; both having previously been held at Aylesbury. The revenue of the corporation does not exceed £63 a year. Under the Poor Law Amendment Act it is the central town of a union of 30 parishes. Buckingham is a polling town for the co. Till within a recent period, the manufacture of lace by hand furnished employment to many of the women and children. The ducal title of the Temple family is derived from the town. (*Lysen's Mag. Brit.*, i.; *Camden's Brit.; Par. Pap. and Ret.*)

Buckingham, t., Wayne co., Pa. Bounded E. by Delaware river. It has three schools, 50 scholars. Pop. 233.

Buckingham, p. t., Bucks co., Pa., 104 m. E. by N. Harrisburg, 166 W. It contains a well-endowed academy, seven stores, six grist-mills, six saw-mills, two oil-mills, seven schools, 281 scholars. Pop. 2462.

Buckingham, county, Va. Situated S. by E. of the centre of the state, and contains 816 sq. m. Bounded N.W. and N. by James river, S. by Appomattox river. It contained in 1840, 11,881 neat cattle, 14,566 sheep, 22,345 swine; and produced 168,771 bushels of wheat, 1311 of rye, 438,913 of Indian corn, 227,080 of oats, 20,539 of potatoes, 2,452,220 pounds of tobacco, 10,941 of cotton. It had thirty stores, one furnace, one woollen-factory, one cotton-factory, twenty-two flouring-mills, fifty-two grist-mills, forty-four saw-mills, seventy-six tanneries, nine distilleries, one college, 97 students, sixteen academies, 300 students, twenty schools, 356 scholars. Pop.: whites, 7393; slaves, 10,014; free coloured, 449; total, 18,786. Capital, Maysville.

Buckingham C.H., p.o., Maysville v., capital of Buckingham co., Va., 79 m. W. Richmond, 158 W. Situated near the centre of the county.

BUCKLAND, p.t., Franklin co., Mass., 104 m. W. by N. Boston, 412 W. Bounded N. by Deerfield river, by a branch of which it is watered. Incorporated in 1779. It contains three churches, one Congregational, one Methodist, and one Baptist, one store, one fulling-mill, one grist-mill, five saw-mills, two tanneries, eight schools, 279 scholars. Pop. 1084.

Buckland, p. v., Prince William co., Va., 111 m. N. Richmond, 42 W. It has an elevated situation on Broad Run, in the N.W. part of the co., and contains one church free to all denominations, two stores, two flouring-mills, one distillery, various mechanic shops, and about 200 inhab.

BUCKRAM, p. v., Oyster Bay t., Queen's co., N. Y., 179 m. S. Albany, 259 W. Situated on Beaverdam creek, in the N. part of Long Island, and contains one Friends' church, two stores, two grist-mills, and about 100 inhab.

BUCKS, county, Pa. Situated in the S.E. part of the state, and contains 546 sq. m. Bounded N.E. by Delaware river. Drained by Tohickon and Neshamony creeks. Plumbago, or black lead, is found in Southampton t. It contained in 1840, 32,805 neat cattle, 27,344 sheep, 33,516 swine; and produced 236,915 bushels of wheat, 255,666 of rye, 680,128 of Indian corn, 107,864 of buckwheat, 884,879 of oats, 237,979 of potatoes, 1280 pounds of silk cocoons. It had 133 stores, ten lumber-yards, two fulling-mills, two woollen-factories, two cotton-factories with 7000 spindles, eleven flouring-mills, ninety-four grist-mills, eighty saw-mills, fifteen oil-mills, twenty-four tanneries, twenty-two potteries, two distilleries, one brewery, four printing-offices, four weekly newspapers, one college, 30 students, eight academies, 233 students, ninety-one schools, 3696 scholars. Pop. 49,107. Capital, Doylestown.

Bucks, t., Tuscarawas co., O. It contains one store, one grist-mill, four saw-mills, one distillery, six schools, 570 scholars. Pop. 1547.

Bucks, t., St. Joseph co., Mich. Watered by St. Joseph's river, which crosses its S.E. corner, and by Rocky river, its tributary. It has several small lakes in its W. part, and contains two fulling-mills, one flouring-mill, two saw-mills, five schools, 149 scholars. Pop. 787.

BUCKSPORT, p. t., Hancock co., Me., 38 m. N.E. by E. Augusta, 654 W. Pleasantly situated on the E. side of Penobscot river, 15 m. below Bangor, just above the head of Orphan island, on ground gradually ascending from the river. It is handsomely laid out, and neatly built. It has a good harbour, with a sufficient depth of water for vessels of the largest class; and the river seldom freezes here in the winter. The lower ferry on the Penobscot r. crosses at this place. Its shipping is considerable, and it has an extensive trade, particularly in lumber. It contains five foreign commercial houses, eighteen retail stores, one fulling-mill, three grist-mills, eight oil-mills, two tanneries, two academies, 65 students, fifteen schools, 1371 scholars. Pop. 3015.

BUCYRUS, p. t., capital of Crawford co., O., 62 m. N. Columbus, 406 W. The village is situated on the S. side of Sandusky river, here a small stream. It contains a brick court-house, a jail, a U. States land-office, several stores, and over 800 inhab. The township contains nine schools, 302 scholars. Pop. 1634.

BUDA, (*Slav.* BUDIN; *Germ.* OFEN),* a royal free city of Hungary, of which, in conjunction with Pesth, it is the cap. and seat of government, on the right bank of the Danube, immediately opposite to Pesth, 116 m. W. Debretzin, and 135 m. E.S.E. Vienna; lat. 47° 29′ 44″ N., long. 19° 3′ 30″ E. Pop. about 41,000. The pop. of Pesth may be estimated at 65,000; so that, if we regard them as one city, its pop., exclusive of the military, will be about 106,000. Buda is built on and round the last hill of a range which decreases in height as it approaches the Danube, and is divided into six quarters. The upper town, or citadel, occupies the centre and highest part of the city, the Schlossberg; it is enclosed by bastioned walls, but is no longer of any importance as a fortress. Although the smallest division, it contains most of the finest buildings. The royal castle, or palace, begun in 1749, is a quadrangular structure of great extent, containing 203 apartments, some of which, as the throne-room, audience-hall, and drawing-rooms, are extremely magnificent. In this building are kept the regalia of the kingdom, to which the Hungarians attach an extraordinary degree of importance. A large garden surrounds the palace; and Dr. Clarke says that the view from one of its balconies, elevated on a rock above the Danube, is one of the most striking he had ever seen. The church of the Virgin's Ascension, and the Garrison church, both Gothic edifices, the State's palace, high judicial chamber, town hall, residence of the commandant, arsenal, post-office, and many other military and civil public buildings, are situated in this quarter. To the N., and at the base of the rock on which the citadel stands, is the lower, or "Water-town," which in some parts vies with the former division in elegance. It contains the church of St. Anne, and several others. The *Landstrasse*, a well built quarter; the new town, a cheerful suburb toward the E., reaching to the bank of the Danube; the Raizenstadt, or *Tabes*, to the E., the most populous quarter of all; and the "Christina town," to the S.W., extending into the rich and beautiful Christina valley, are the other divisions of Buda. The chief remaining buildings deserving notice are the churches of the Capuchins, the Elizabethan nuns of St. Florian, the Greek church, the synagogue, several monasteries and convents, the palace of the primate in the Landstrasse, with the

* Literally, oven, from its natural substructure, or hot-baths.

palaces of Counts Sandor, Teleki, Erdödy, Zichy, Pechy, Batthyany, &c. A well-appointed observatory, attached to the University of Pesth, stands on the Blocksberg, an adjacent hill to the S., 300 feet above the level of the river. Copious hot springs, strongly impregnated with sulphur, issue from the sides of the hills on which Buda is partly built, and especially from the Blocksberg. The successive occupiers of the place, Romans, Turks, and Christians, have taken advantage of these springs, and have converted them into commodious baths. Of those constructed by the Romans, only broken fragments now remain; but the Turkish baths are in a perfect state of preservation, and the largest, appropriated to the use of the town, is a fine specimen of Saracenic architecture. The finest of the modern baths, that of the "Emperor," in the vicinity of the Landstrasse, is surrounded by gardens and pleasure-grounds. There is here also a good theatre, with other places of public amusement, including numerous fine promenades. Among the many establishments devoted to science and education in Buda, are an archigymnasium (high college), a high school in each of the different quarters of the city, a school of design, Illyrian female schools, a public library, cabinets of mineralogy, conchology, &c. Many of the nobility, the Franciscan friars, and other bodies, possess good libraries, to which liberal access is permitted: in the royal palace there is a gallery of paintings. There are various charitable institutions, including four hospitals. A bridge of boats, about 3-4 m. in length, across the Danube, connects Buda with the modern and finely-built city of Pesth, on the opposite bank of the river; but this is about to be superseded by a magnificent suspension bridge, the construction of which, if it be not already, is to be immediately commenced.

The summit of the Blocksberg commands a fine view of the surrounding country, and especially of the river and the opposite city, "The bridge of boats appears alive with the crowds that are continually passing: on this side is Buda, full of architectural anomalies, yet, from that very circumstance, an object of peculiar interest: on the other, Pesth, laid out in all the regularity of street, and square, and mall, and public garden. There is not a greater contrast between the old and new towns of Edinburgh than between Buda, the ancient capital of the Magyars, and Pesth, a city of yesterday's growth. The one wanders from terrace to terrace, in dark and dingy masses, or stretches in a long line wherever, between the river and the basis of the hill, a space of level ground can receive it: the other, a series of streets which cross each other at right angles, shines in all the splendour of a plan rigidly adhered to, and materials the best calculated to preserve an appearance of uniformity, even in separate edifices." (*Gleig.*) Add to this striking contrast the vastness of the river, the passing of barges, ships, and steam-packets, in the very centre, as it were, of Europe, and the scene and the associations connected with it must be admitted to be of no common kind.

Buda is the usual residence of the viceroy, or palatinate, and the general commandant of the kingdom, the seat of the vice-regal council, and the highest administrative authorities. It has much less of a bustling and commercial character than Pesth. There are a few manufactures of linens, woollens, silks, velvet, leather, gunpowder, earthenware, &c., and a cannon-foundry; but its principal trade is in its fine wines, of which about 230,000 eimers are produced annually from the vineyards around the heights in its neighbourhood.

Buda is believed by some writers to be either the *Curta* of Ptolemy, or the *Aquincum* of the Itinerary of Antoninus. It was held by the Romans till nearly the end of the 4th century. Attila made it occasionally his residence. Arpad, the Magyar chief, made it his head quarters in 900; and it then became the cradle of the Hungarian monarchy. It was enlarged and improved by succeeding Hungarian monarchs, and made a free city by Bela IV. in 1245. It was taken by the Turks, under Solyman the Magnificent, in 1526; but was recaptured by Ferdinand I., king of Bohemia, brother of the emperor Charles V., in the following year. It was again taken by Solyman in 1529, and was held by the Turks till 1686, when it was taken by the Imperialists, after a desperate resistance. Joseph II. removed the seat of the Hungarian government thither in 1783. In 1810, the Taban quarter, and a part of the Water-town, were destroyed by fire. (*Oesterr. Nat. Encyclop.; Murray's Handbook for S. Europe; Gleig's Bohemia, &c.; Clarke's Travels*, viii., 336, 8vo ed.)

BUDUKHSHAN, a prov. of central Asia, now a dependency of the khan of Koondooz, between lat. 36° and 38° N., and long. 70° 30′, and 72° 30′ E.; having N. and N.E a chain of mountains, inhabited by tribes claiming a Macedonian origin; S.E. and S. the Bolor-Tagh mountains, and the high country of the Caufirs; and W. the other territories of Koondooz. It consists of the valley of the Koocha, a tributary of the Oxus, which rises at its S.E. corner, and soon becomes a considerable river, unfordable even at Budukhshan (Fyzabad). The scenery of this country, and its natural productions, have been spoken of in high terms by all who have visited it: it contains ruby mines, and cliffs of lapis lazuli. Near the Oxus the former are still worked by the khan of Koondooz, and the latter article, much of which was formerly sent into China, is obtained by lighting a fire under the cliffs, and when hot, dashing cold water upon them, which causes them to fracture. The ruby mines were well known to the emperors of Delhi, and at a much earlier period: they are at a place called Gharan, on the verge of the Oxus; are dug in low hills; and the gems imbedded in limestone like round pieces of pebble or flints. The inhabitants of Budukhshan are Tadjiks; very social and hospitable; speaking the Persian language, and retaining the manners and customs prevalent N. the Hindoo Koosh before the Tartar invasion. Neither Uzbeks nor Toorkees had settled in the country before the chief of Koondooz overran it about 16 years ago, by whom its own chief was dethroned; since which its peasantry have been driven out, and a rabble of lawless soldiery quartered in their stead. The capital is also called Budukhshan, or Fyzabad, and is near the E. bank of the Koocha, in lat. 36° 28′ N., long. 71° 23′ E. It is said to have been peopled from Balkh, and most of the inhabitants are of the Shiak sect. This country suffered much from a terrific earthquake, in January, 1832, which appeared to exhibit its chief violence in this valley, and destroyed many roads and villages and a great part of the population. (*Burnes's Trav. into Bokhara*, iii., 174—178; *Elphinstone's Caubul*, ii. 187, 388.)

BUDWEIS, a town of Bohemia, cap. circle of the same name, on the river bank of the Moldau, 75 m. S. Prague. Pop. 7400. Is well and regularly built, and partially fortified. Contains a cathedral, seven churches, a court of jurisdiction for the circle, gymnasium, philosophical academy, and diocesan seminary. Has manufactories of woollen cloth, muslin, damask, saltpetre, and musical instruments; and considerable trade in horses and corn. (*Oesterreichische Nat. Encycl.*)

BUENOS AYRES, (*Good Air*), a marit. city of S. America, cap. of the repub. of La Plata, on the S.W. shore of the estuary of the great river La Plata, 125 m. W by N. Montevideo, and 90 m. N.W. Point Piedras; lat. 34° 36′ 29″ S., long. 58° 23′ 34″ W. Pop., according to Sir W. Parish, perhaps 100,000; from 15,000 to 20,000 of whom are foreigners, chiefly English and French. The city is built upon a bank from fifteen to twenty feet above the level of the river. Including its suburbs, it extends N. and S. for upwards of two m., with a breadth in its centre of about one and a half m. It is built on a uniform plan; the streets, which are all straight, intersect each other at right angles at every 150 yards, dividing it into a number of squares, each having an area of about four Eng. acres. The principal streets, which were formerly all but impassable in wet weather, while in the dry season they were obscured with clouds of dust, are now tolerably well paved, and provided with footpaths on either side. The houses and other buildings have also been greatly improved within the last few years, and their interior rendered much more comfortable; upper stories are now generally added to them; chimneys, that were formerly all but unknown, are common; they are supplied with English grates, and with coals carried out from Liverpool as ballast. Most sorts of European furniture have found their way into the residences of the upper classes. Almost every house in the principal streets has a garden both before and behind it; and many have latticed balconies in which odoriferous shrubs are reared. Though on the edge of one of the greatest rivers in the world, water in Buenos Ayres is both scarce and dear. The wells, though numerous, afford nothing but hard, brackish water, unfit for culinary purposes. There are no public cisterns; rain-water is, indeed, carefully collected in a few private tanks; but the mass of the people have to pay high for their daily supply, which instead of being raised from the river by machinery, and conveyed in conduits to public pumps, is carried about in butts mounted on bullock-carts. The quarter of the city inhabited by Mestizos and negroes is wretched and filthy in appearance, and strongly contrasts with the opulence and taste displayed in the other parts. The *Plaza*, or great square, contains the cathedral, and the town-hall, a handsome stone edifice, built by the Jesuits; and a whole side of it is occupied by the *Recova*, a range of piazzas, 150 yards long, and above 20 in width, enclosing a double range of shops. In the centre of the square is a small obelisk, erected to commemorate the declaration of independence. The town-hall is chiefly used as a prison, but meetings of the municipality are sometimes held in the upper rooms; and from the balcony the citizens are harangued on public occasions. The cathedral, a large handsome edifice, with

a cupola and porticos, has its interior profusely decorated with carving and gilding, and its dome painted in compartments, representing the acts of the apostles. The church of the Franciscans, and that of the convent of Mercy, are next in rank, and have steeples and cupolas nearly in the same style as the cathedral. In the former there is a painting of the Last Supper, well executed, by a native Indian artist. There are many other Catholic churches, several convents and nunneries, a Protestant church, Presbyterian chapel, &c., a foundling hospital, orphan asylum, and other benevolent institutions. These edifices are all built of fine white stone, found in the plain not far from the city. The fort, which contains the residence of the supreme director and the government offices, is a square brick and stone building, near the river. The university, one of the most celebrated in S. America, occupies a very extensive building, which has been recently fitted up at a great expense: a suite of six rooms in this building contains the state library, a good collection of about 25,000 vols.

The estuary of the Plata is very broad, but is also in most parts shallow, encumbered with sand-banks, and infested with sudden gusts of wind called *pamperos*. Its navigation is consequently attended with a good deal of difficulty, and ships bound for Buenos Ayres generally take pilots on board. There is no harbour, and vessels drawing sixteen or seventeen feet water anchor in the outer roads, called the *Amarradero*, seven or eight m. from the shore, loading and unloading by means of lighters. This, too, is an operation by no means free from danger, boats being sometimes swamped in crossing the bar between the outer and inner roads. From the want of a pier, and the shallowness of the water on the beach, even the boats are not able to come close to the shore, but are met at a little distance from it by a rude sort of ox-carts, into which they deposit their goods, at no little risk, and sometimes much loss. These unfavourable circumstances, which might, however, be materially improved by a little exertion and outlay on the part of the government, operate as a heavy drawback on the trade of the city, and tend proportionally to augment that of Montevideo, which is more easily accessible. But notwithstanding the competition of the latter, and the great increase of its trade of late years, Buenos Ayres is still the principal outlet for the produce of the vast countries traversed by the La Plata, and especially for the provinces situated on its right bank.

The quantities and value of the principal articles exported in 1837 were:

Products.	Quantity.	Price.	Value.
			Dollars.
Spanish dollars	258,743 No.	. .	258,743
Marks of silver	4981 —	at 8 8	39,048
Gold	21,999 oz.	. 17	373,983
Do. uncoined	3oz —	—	6154
Ox-hides .	823,635 No.	. 4	3,294,540
Horse-hides	35,367 —	. 1½	37,046
Jerked beef	178,877 quintals.	. 2½	446,092
Horns .	434,456 No.	. 60 per mil.	25,070
Horse-hair	70,372 arrobas of 25 lb.	. 3 —	211,116
Sheep's wool	161,706 —	. 2 —	323,412
Chinchilla skins	3317 dozens	. 4 —	13,265
Nutria skins	51,853 —	. 2½ —	129,632
Tallow .	100,349 arrobas	. 1½ —	150,573
Cotton .	160 —	. 3 —	80
Sheep-skins	56,188 dozens	. 2½ —	140,470
Flour .	14,069 fanegas	. 4 —	56,268
Corn .	4160 —	. 3½ —	14,525
Sundries .	. . . . .	. .	*108,818
Total .	. . . . .	. .	5,637,136

*To this amount may be added, as allowance for short manifests, &c., about 20 per cent. additional.

Within the last few years the trade in wool, in consequence of the great improvement effected in the breed of sheep, has become of considerable and rapidly increasing importance. In 1827 the export of this article to Great Britain amounted to only 19,444 lbs.; whereas in 1837 it amounted to 2,207,951 lbs.! Corn, which for a considerable period was not produced in sufficient quantity for home consumption, has within the last two or three years become an article of export: it is sent chiefly to Brazil. Most of the jerked beef, and numbers of mules, are exported to the Havana. The total value of the imports, in 1837, amounted to about 7,000,000 dollars, or £1,487,000; of which those furnished by Great Britain amounted to near a half, or to £696,104. The imports hence chiefly consist of cotton (by far the most important article), linen, woollen and silk manufactures, hardware, cutlery, earthenware of all sorts, glass, leather, hats, &c., with about £40,000 or £50,000 worth of foreign and colonial produce. France supplies Buenos Ayres with jewelry, perfumery, and other articles of luxury, to the value, in 1836, of £231,373: the imports from the U. States in the same year amounted to £76,986, and consisted chiefly of coarse unbleached cloths, spirits, soap, sperm candles, dried and salted provisions, tobacco, furniture, and deals. Germany sends woollen and linen cloths, and Rhenish cottons; the Netherlands, fire-arms, swords, &c.; Holland, butter, cheese, Westphalia hams, &c., chiefly by way of Antwerp, the principal mart for Buenos Ayres hides on the Continent. The Baltic furnishes iron, cordage, canvass, pitch, deals, &c.; the Mediterranean trade is principally in Sicilian and Spanish produce, particularly cheap wines, brandies, olive oil, maccaroni, dried fruits, and paper. Spanish goods are in little demand, though some serges, velvets, sewing silk, and snuff, are imported. The annual importation of Spanish and Sicilian wines is from 10,000 to 12,000 pipes, besides about 1000 pipes of brandy. The *yerba maté*, or Paraguay tea, formerly an export article of some consequence, has now been nearly superseded, even in Buenos Ayres, by tea: the other Chinese imports are silks, crapes, nankeens, porcelain, and numerous minor articles. The trade with Chili and Peru is insignificant. The markets of this city are well supplied with butchers' meat and fish. Poultry is dear, a couple of fowls selling for as much as an ox. Vegetables and fruit generally are also dear; milk in quality and price is much the same as in London, and all the butter used is imported.

The inhab. of Buenos Ayres are said to be observant, intelligent, and desirous to improve. Education receives a considerable share of attention. Several years since, besides the university, a superior academy, and a military college, there were eight public schools, for whose support the corporation contributes about 7000 dollars annually, and five other schools exclusively for the benefit of the poor, under the charge of different monasteries, and supplied with books and stationary at the public expense. It is rare to meet with a boy ten or twelve years of age in the city who cannot read and write. There are several printing presses; and various weekly journals advocating liberal principles are published.

Buenos Ayres was founded by Don Pedro de Mendoza, in 1534, but in consequence of the opposition of the Indians to the settlement, it was obliged to be abandoned at two subsequent periods, and was not permanently colonized till 1580, after some sharp actions with the natives. In 1620 the city was erected into a bishopric, and in 1700 contained 16,000 inhabitants. In 1776 it became the seat of the viceroyalty of La Plata; and in 1778, when the trade of the river was thrown open by Spain, its trade and consequence began rapidly to augment. In June 1806 it was taken by the British, but retaken by the Spanish in the same year. In 1810 the revolutionary movements began that ended in the emancipation of Buenos Ayres and the states of La Plata from Old Spain. The declaration of independence appeared on the 9th of July, 1816. (*Sir W. Parish's Buenos Ayres, &c.; Mod. Trav.*, XXX., *Parl. Reports, &c.*)

BUENOS AYRES (REPUBLIC OF). *See* PLATA (LA), (REPUBLIC OF).

BUFFALO, city, port of entry, and capital of Erie county, N. Y., is situated at the N.E. extremity of Lake Erie, near the commencement of Niagara river, its outlet, at the mouth of Buffalo creek which forms its harbour, 268 m. W. Albany, 363 m. from do. by the Erie canal; 73 m. W. Rochester; 22 m. S.S.E. Niagara Falls; 103 m. E.N.E. of Cleveland, O.; 290 m. E. by N. Detroit, Mich.; 637 m. S.E. Mackinaw; 807 m. E.S.E. Green bay; 427 m. S.W. Montreal, L. Canada, 281 W. Population in 1810, 1508; 1820, 2095; 1830, 8653; 1840, 18,213. Of these 771 were employed in commerce; 1851 in manufactures and trades; 71 in navigating the ocean; 347 do. canals, lakes and rivers; 211 in the learned professions and engineers.

The situation of Buffalo as a place of business is very commanding. It constitutes the great gate between the East and the West, being at the western extremity of the Erie canal, and at the eastern termination of the navigation of the great lakes, Erie, Huron and Michigan. The ground on which it is built rises gradually from the creek, which runs through its S. part, and at the distance of two miles, it becomes an extended and elevated plain, fifty feet above the level of the lake, furnishing a commanding view of the harbour, lake Erie, Niagara river, the Canada shore, and the Erie canal. The city is regularly laid out, with broad and straight streets, generally crossing each other at right angles. Main street is over two miles long, and 120 feet broad; and it is lined on both sides with splendid and lofty stores, shops, dwellings and hotels, presenting an imposing appearance, and scarcely surpassed by any street in any other city of the Union. The houses generally are built with neatness and taste. Many of the streets are paved and lighted. Three public squares, neatly railed in, and planted with trees, are ornaments to the city. Buffalo contains over 150 streets, and more than 2000 dwellings.

The public buildings of the city are a court-house, jail, county clerk's office, two markets, in the upper story of one of which are the common council chamber and city offices, and seventeen churches, three Presbyterian, two

Episcopal, one Methodist, one Baptist, three German Protestants, one Unitarian, two Roman Catholic, one Universalist, one Bethel and two African. It has two banking houses, an insurance company, an orphan asylum, a theatre, and several spacious and elegant hotels, of which the American is one of the finest in the country. The Young Men's Association, is a flourishing literary institution, with a library of over 3000 volumes of well-selected books, and it sustains an able course of literary and scientific lectures in the winter season, which are numerously attended.

The harbour of Buffalo is formed by the mouth of Buffalo creek, which has twelve or fourteen feet of water for the distance of a mile from its entrance into the lake. Originally, a bar at its mouth prevented the access of most vessels from the lake. But a mole and pier, consisting of wood and stone, 1500 feet long, has been constructed at the mouth of the creek, by the joint contributions of the United States government and of the citizens; which, by confining the channel of the creek, has so far removed the bar, that vessels requiring eight feet of water freely enter. At the end of the pier is a light-house, built of dressed limestone, twenty feet in diameter and forty-six feet high, which is not only a necessary, but an ornamental structure. The harbour is protected from all winds, and so spacious that several hundred steam-boats and other lake vessels could be well accommodated in it. A ship canal 700 yards long, 80 feet wide and 12 feet deep, has been constructed, extending from the creek, near its mouth, into the place, where vessels can be secure from the descending ice in the spring floods and have a better access to the city. By a law of the state, the canal commissioners are extending the Erie canal, over a mile E. of its original termination, through the eastern part of the city, parallel to the harbour, to which there will be side cuts, which will enable boats to enter the harbour at different points, with great facility. At the breaking up of the ice in the lake in the spring, by means of the strong westerly winds which at that season prevail, the ice is generally accumulated at Buffalo harbour, and is not dissolved so as to make it accessible, until five or six weeks after the broad lake is navigable. To make the harbour more accessible in severe winds and storms, it has been proposed to construct a ship canal from the lake, across the isthmus, to Buffalo creek, about a mile from its mouth, which would greatly improve the navigation. The harbour is generally open for navigation about the 15th of May.

The commerce from Buffalo to the west employs fifty or sixty steam-boats, many of which are spacious, commodious, and elegant; and about 300 schooners and other lake vessels. The larger vessels are generally schooners, which are more easily managed than square rigged vessels. The tonnage of Buffalo in 1840, was 4916. The arrivals of steamboats and other vessels, were 4061, and the clearances, 4881. The arrivals and clearances in 1835 were only 200 each, during the season of navigation. The amount of property sent E. on the Erie canal from Buffalo during the year 1840 was 177,607 tons. The amount of goods, including domestic manufactures, salt, &c., received by the canal and shipped to the west, was 98,733 tons. The tolls received at Buffalo on the Erie canal, amounted to $376,417. A chain of rail-roads, now completed, connects Buffalo with Albany, and thence with Boston. It is also connected with Black Rock, Niagara Falls, and Lewiston by rail-roads. There were in 1840, in Buffalo, twenty-three foreign commission houses, with a capital of $94,000, 231 retail stores, with a capital of $736,335, one woollen-factory, four flouring-mills, one grist-mill, two saw-mills, one oil-mill, three tanneries, two distilleries, one pottery, ten printing-offices, five daily, four weekly, and one semi-weekly newspapers, and six periodicals. The total amount of capital employed in manufactures was $630,300. It had one academy with 64 students, twenty-eight schools with 2676 scholars.

By an act of the Legislature, the common schools of Buffalo have been taken from under the school law of the state, and constituted free schools, under the management of the common council of the city. The children of all classes of the citizens are educated in them, without charge for tuition, the expense being defrayed by the city.

Buffalo was incorporated as a city, April 20th, 1832, is divided into five wards, and is governed by a mayor and common council, elected annually by the people. It was originally laid out by the Holland Land Company in 1801, and grew slowly from the time of its foundation until 1812. In that year it became a military post. In December, 1813, the place was burned by a combined force of British and Indians, with the exception of two buildings. It then contained 100 dwellings. This conflagration was ostensibly in retaliation for the burning of Newark, a small village in Canada, at the mouth of Niagara river; and it is remarkable that this burning of Newark was afterwards made the excuse for the Vandal conflagration of the city of Washington, in which the capitol, the finest senate house in the world, was left in smouldering ruins. At the close of the war, the inhabitants of Buffalo received from the United States the sum of $60,000, in compensation for their losses by the conflagration. In 1817 Buffalo contained over 100 dwellings, many of which were of brick, and some of them large and elegant, most of which were built in 1816. It was incorporated as a village in 1822. In 1829 it contained 400 dwellings, and over 2000 inhabitants. In April 1833 a company was incorporated for the erection of a marine hospital. In May 1834, a company was incorporated for constructing a marine rail-way, with dry or wet docks, for building and repairing vessels. In April 1835 the Sailors' and Boatmens' Friend Society was incorporated, for the purpose of improving the moral condition of the persons navigating inland waters. In 1841 the nett proceeds of the post-office at Buffalo, were $11,729. The commencement of the rapid growth, and great importance of Buffalo, dates from the completion of the Erie canal, which was finished in 1825. It has an uninterrupted lake navigation of 1500 miles, with a coast of 3000 miles. The Ohio canal has already added much to its business; and the Wabash and Erie canal and the Illinois and Michigan canal, will open to it the trade of a greatly enlarged extent of country. No place in the interior of the country possesses so commanding a position, or may be expected to surpass it in its future growth.

Buffalo, t., Armstrong co., Pa., 6 m. W. Kittaning bor. Bounded S.W. by Alleghany river. At the mouth of Buffalo creek, in the S. part of the t. is the village of Freeport. It contains three stores, one falling-mill, eight grist-mills, four saw-mills, one distillery, one school twenty-two scholars. Pop. 1820.

Buffalo, t., Union co., Pa. It contains one store, three flouring-mills, three saw-mills, two tanneries, six schools, 240 scholars. Pop. 1348.

Buffalo, p. t., Washington co., Pa., 217 m. W. Harrisburg, 243 W. situated on the National road. Watered by Buffalo cr. It contains two stores, one falling-mill, one woollen-factory, four grist-mills, two saw-mills, three tanneries, eight schools, 230 scholars. Pop. 1116.

Buffalo, t., Butler co., Pa., 11 m. S.E. Butler. Drained by Thorn, Great and Little Buffalo creeks. It contains six stores, four grist-mills, four saw-mills, nine schools, 495 scholars. Pop. 1820.

Buffalo, t., Perry co., Pa., 11 m. E. Bloomfield. Bounded E. by Susquehannah river. A ferry here crosses the Susquehannah. Watered by Juniata river, over which are two ferries. It contains five stores, one flouring-mill, one grist-mill, five saw-mills, one rope-walk, seven schools, 247 scholars. Pop. 948. It contains Buffalo, bor., situated on the W. side of Susquehannah river, five m. above the mouth of Juniata river, and has one Presbyterian church, two stores, one school, thirty-five scholars, twenty-five dwellings, and 147 inhabitants. A ferry here also crosses the Susquehannah.

Buffalo, t., Union co., Pa. It contains one store, three flouring-mills, three saw-mills, six schools, 240 scholars. Pop. 1348.

Buffalo, p. t., Guernsey co., O., 87 m. E. Columbus, 319 W. Pop. 1027.

Buffalo, t., Pike co., Mo. Pop. 2174.

Buffalo, v., capital of Niangua co., Mo., situated on Buffalo Heart prairie, 3 m. W. of Niangua river.

Buffalo, t., Morgan co., Mo. Pop. 188.

BUFFON, a small vil. of France, dep. Côte d'Or, on the Armançon, 13 m. N. Semur. This village belonged to the illustrious author of the *Histoire Naturelle*, Georges Louis Le-Clerc, created, by Louis XV., Count de Buffon, by which name he has since been distinguished.

BUG (an. *Hypanis* or *Bogus*), a river of European Russia. It rises near Blosysko, in the S.W. corner of Volhynia, and pursues a S.E. course past Bratzlaff, Olivlopol, Vomesensk, and Nicolaeff, 25 m. below which it falls into the estuary of the Dniepr. It is navigable from Vomesensk. The entrance to the Bug is without the bar of the Dniepr; happily, too, it has no bar of its own, and has deep water as far as Nicolaeff.

BUGIA or BOUJEIAH, a sea-port town of Africa, reg. Algiers, on the declivity of a mountain, at the mouth of the Aduse, 122 m. E. Algiers. The port, which is large, is formed by a projecting neck of land, great part of which was anciently faced with stone. There is good anchorage off the town in eight or ten fathoms, but N.E. winds throw in a heavy sea. Previously to the French occupation, the town was protected by half ruinous walls, and by a castle on the summit of a hill, which also commanded the roadstead. The inhabs. manufacture ploughshares, mattocks, &c., of the iron obtained from the neighbouring mountains, and great quantities of oil and wax are brought down to this place by the Kabyles, for shipment. The town is built of, and stands upon, the ruins of a more con-

siderable ancient city. It was bombarded by Sir Edward Spragge, in 1671. (*Shaw's Barbary*, p. 43, 4to ed.)

BUGNE (LE), a town of France, dep. Dordogne, cap. cant., a little above the confluence of the Vézère with the Dordogne 16 m. W.N.W. Sarlat. Pop. 2437. It is advantageously situated, well built, and carries on different branches of the woollen manufacture. It is also the entrepôt of the wines and other products of the surrounding cantons, which are shipped thence to Bordeaux, and has a considerable trade in cattle, hogs, &c.

BUIS (LE), a town of France, dep. Drôme, cap. cant., on the Ouvèze, 10 m. S.E. Nions. Pop. 2147. It is ill built, but has some fine promenades and a handsome square, surrounded by a double row of trees. It has some trade in wool, cloth, hats, and jewellery.

BUJALANA, a town of Spain, Andalusia, prov. Cordova, being 23 m. E. from the city of that name, and 7 m. from the Guadalquivir. Pop. 14,500. It is well built, with broad streets, has two convents for either sex, two hospitals, a college, and a foundling hospital. It has some woollen fabrics, and a large fair which commences on the 26th of August. Though its modern name be of Arabic origin, it is believed that this town occupies the site of the *Calpurnia* of the Romans; and it has various inscriptions, and other antiquities of Roman origin. (*Miñano.*)

BUKHUR, an island and fort in the Indus, 165 m. N. Hydrabad. The fort, which is constructed of brick, is about 400 yards from the left, and 350 from the right bank of the Indus. But it has no strength in its works, and is formidable only from its position. (*Burnes*, i. 256, 12mo ed.)

BUKOWINE, a ci-devant prov. of the Austrian empire, now included in Gallicia, which see.

BULGARIA (an. *Mœsia Inferior*), a large prov. of Turkey in Europe, included in the begierbeglik of Roumelia; lying between lat. 42° 8' and 44° 10' N., and long. 22° 14' and 29° 36' E.; having N. Wallachia and Bessarabia, W. Servia, S. Roumelia, and E. the Black sea. Length, N.E. to S.W., about 350 m.; breadth varying from 40 to 100 m. Area, loosely estimated, from 30,000 to 34,000 sq. m. Pop. 1,880,000? The country is for the most part mountainous, and eminently so in the S., where the principal chain of the Balkhan mnts. forms its boundary: the Danube constitutes its N. limit; but excepting that river, Bulgaria possesses none of any magnitude, although sufficiently watered by small streams. Its climate is temperate, and its soil fertile and well adapted for the culture of corn, vines, the mulberry, and other fruit trees, and tobacco. There are but few marshes; the pasturages are extensive and rich, and feed numerous herds of cattle: the higher lands are often covered with forests of pine, oak, beech, &c. The Bulgarians are descended from a Slavonic horde, formerly inhabiting the banks of the Wolga, who crossed the Danube and established themselves in this country in the 7th century, and have since gradually spread themselves over a large part of the region S. of the Balkhan. The present race have laid aside the military character of their ancestors; they are a pastoral people, living in small hamlets of about forty or fifty houses each, and occupying themselves chiefly in agriculture and cattle-breeding, with some manufactures, as those of coarse woollen cloth, rifle-barrels, morocco leather, and attar of roses. Large gardens are devoted to the culture of roses; and we are indebted to the Bulgarians for the finest and most elegant of perfumes. Dr. Walsh says that the people are kind, hospitable, and benevolent; forming a striking contrast to the "rude and brutal" Turks found among them. The women, who mix freely with the men, are handsome, industrious, and dress neatly: all wear trinkets; and the girls have their heads uncovered, and their hair braided and ornamented with different coins, as among the Albanians. The male peasantry dress in brown sheep-skin caps, jackets of undyed brown wool, which their wives spin and weave, white cloth trowsers, and sandals of raw leather, and carry no weapons of offence. They live in houses of wickerwork plastered, the interior being clean and comfortable. Their language is a dialect of the Servian. Ever since the 9th century their religion has been that of the Greek Church; but they have few places of worship, and in those they have the service is performed in Greek, a tongue which they do not understand. Schools and books are equally rare with churches, and except the shop-keeper and priest of a village, scarcely any one can read or write; yet notwithstanding this gross ignorance, crimes are singularly scarce, and travellers in their country are not secure only, but experience the kindest treatment. *Spente, sua, sine lege, fidem rectusque colebant.* Bulgaria is divided into four sandjiaks, viz. those of Silistria, Rustchuk, Widin, and Sophia; its chief towns are Sophia, the capital, Shumla, Silistria, Rustchuk, Nikopoli, Widin, and Varna. (*Malte Brun; Walsh's Journey from Constantinople, &c.*, p. 164 to 170.)

BULLITT, county, Ky. Situated in the N. part of the state, and contains 250 sq. m. Watered by Salt river. Salt is made in the co. It contained in 1840, 6379 neat cattle, 8821 sheep, 20,988 swine; and produced 39,681 bushels of wheat, 3561 of rye, 246,655 of Indian corn, 77,105 of oats, 6452 of potatoes, 2540 pounds of tobacco, 12,171 of sugar. It had six stores, seven flouring-mills, eighteen grist-mills, nine saw-mills, one oil-mill, five tanneries, four distilleries, one brewery. Pop. whites, 4995, slaves, 1322, free coloured, 18; total, 6334. Capital, Shepherdsville.

BULLOCK, county, Ga. Situated in the S.E. part of the state, and contains 800 sq. m. Bounded N.E. by Ogeechee river, S.E. by Cannouchee river, by branches of which it is watered. It contained in 1840, 9013 neat cattle, 1621 sheep, 6145 swine; and produced 2974 bushels of wheat, 39,509 of Indian corn, 1677 of oats, 12,416 of potatoes. It had one store, twelve grist-mills, seven saw-mills, one school, 27 scholars. Pop.: whites, 2147; slaves, 955; total, 3102. Capital, Statesboro.'

BUNCOMBE, county, N.C. Situated in the W. part of the state, and contains 2000 sq. m. Drained by French, Broad and Nolachucky rivers. It contained in 1840, 10,536 neat cattle, 9803 sheep, 20,552 swine; and produced 22,968 bushels of wheat, 9251 of rye, 304,271 of Indian corn, 68,344 of oats, 24,308 of potatoes, 8619 pounds of tobacco. It had nine stores, thirty-six grist-mills, twenty-five saw-mills, one oil-mill, five tanneries, sixty-two distilleries, one printing-office, one weekly newspaper, one academy, 15 students, one school, 10 scholars. Pop.: whites, 8798; slaves, 1199; free coloured, 87; total, 10,084. Capital, Ashville.

BUNDLECUND, a large division of Hindoostan, prov. Allahabad, between lat. 24° 3' and 26° 26' N., and long. 77° 48' and 81° 33' E.; having N. the Jumna; S. Berar and Malwah; E. Bogilcund; and W. Scindia's dom.: area 23,817 sq. m. Pop. (*Hamilton*, 1828) 2,400,000. The country is mountainous, and imperfectly cultivated; the mountains belong to the Vindhyan chain, and run in parallel ranges through the district, each successively buttressing a table-land; the country is naturally very strong, every hill being a natural fortress, and often crowned by an artificial one; but the highest summit is no more than 2000 feet above the level of the sea. The Cane, Desan, and Betwah, are the chief rivers, but none of them is of much importance; there are several large artificial reservoirs or lakes, formed by masonry, erected across the currents of various streams for the purposes of irrigation. The soil is of every variety, from the rich black loam to the sterile coakar; the valleys and lowlands are generally of the former, and, when properly watered, yield abundant crops: the summits of the hills, although mostly rocky, are covered with small coppice-wood: the face of the country often presents detached pieces of jungle, but there are no forests, and a few scattered and stunted teak-trees form the only large timber. Bundlecund is celebrated for its diamond mines in the table-land of Pannah, where they are said to be found wherever the soil is gravelly. This soil is from 2 to 8 cubits deep, mostly very red, but elsewhere of a dark brown; it contains many small pebbles, with which the diamonds are found intermixed, but never adhering to any other stone or pebble. The workmen lift up the gravelly earth; throw it into a shallow pit filled with water; and, after washing out the earth, examine the pebbles on a board. Much time is fruitlessly lost, but a very few diamonds found in the course of the year repay the workman, since he receives ½ the value of those above the size of a filbert, ¼ the value of those as large as a pea, &c. Very few are now found worth more than £100, and their profits are comparatively insignificant. The mines are the exclusive property of the rajah of Pannah; they are supposed to be identical with the Panasus of Ptolemy.

Bundlecund is now either substantially British territory, or possessed by chiefs tributary to the British, who, since 1803, have retained the internal administration of their dom., on an acknowledgment of allegiance, and the right of interference on our part. The British distr. (1832) contained 2,119,000 kucha begas in cultivation, yielding a revenue of about £300,000 a year. Hindoo usages have been less affected here by foreign rule than in most other parts of India; the people generally are industrious, and obedient to the constituted authorities, though their chiefs are restless and turbulent. Their language is a dialect of the Sanscrit. They are usually possessed of but little personal property; there is little trade or capital stirring, and these circumstances, together with the bare and open character of the country, are probably the causes of *dacoity* or gang-robbery being so unusual. Atrocious crimes are rare; footpad robbery and *cozzanky*, or robbery on horseback, are the only serious offences, and these are most common on the skirts of Scindia's prov., whence small parties of Pindarries occasionally enter on ravaging excursions: burglary and theft are not common. The zemindars consider it highly disreputable to connive at such outrages, and frequently expel from their villages or estates persons of suspected character.

The punchayet, or arbitration system, in the settlement of disputes, has been always very much resorted to here.

At the fall of the Delhi empire, the Mahrattas, under Ali Bahauder, possessed themselves of part of this prov., but were unable to establish their authority in the villages and hill fortresses. Bundlecund was occupied by the British troops in 1804, and erected into a magistracy under the Benares court of circuit. In 1817 that portion of it now belonging to the Bengal presid., was finally ceded by the Peishwa, to whom Ali Bahauder had been nominally subordinate. (*Hamilton's Hindostan*, i., 317–334; *Martin's Statist. of the Colonies*, p. 275–368; *Reports on E. I. Affairs, and Appendixes.*)

BULSAUR, a sea-port town of Hindostan, presid., Bombay, on the gulf of Cambay, 45 m. S.W. Surat; lat. 20° 36′ N., long. 73° 5′ E. Its trade is considerable, chiefly in grain, jaghery, and timber; its manufactures are mostly coarse ginghams and other cloths. Rice and sugar-cane are cultivated in its vicinity.

BUNGAY, a town of England, N. border, co. Suffolk, hund. Waveney, on the Wangford, 92 m. N.E. London: it consists of two par., having together an area of 2000 acres, and a pop. of 3734. Having been almost wholly destroyed by fire in 1688, it is comparatively new, well laid out, and well built. The market-place, said to be the best in the co., has two fine crosses; and the town has also a neat theatre, and assembly rooms; a free grammar school, with two exhib. to Emanuel College, Cambridge, and several other schools; the remains of a Benedictine nunnery; some manufactures of hemp; and a considerable trade in malt, corn, coal, flour, lime, &c. Here is also the celebrated printing establishment of the Messrs. Child, which has produced many reprints, in a cheap form, of some of the principal English classics. The trade of the town is promoted by the Waveney, being navigable thence to Yarmouth. Market, Thursday; fairs, 14th May, and 25th September.

BUNKER HILL, Charlestown, Mass., has obtained great celebrity, as being the theatre of the first regular battle between the Provincial and British troops, in the war of the Revolution. The place where the battle was fought was originally called Breed's Hill, Bunker Hill being of about an equal height, and north of it, at the entrance of the peninsula on which Charlestown is situated. On this height, a detachment of 1000 men were directed to entrench themselves, on the night of the 16th of June, 1775. By some mistake, they proceeded to Breed's Hill, which is nearer to Boston, and which has since been denominated Bunker Hill, as the name is intimately associated with the battle. The men had worked with such secrecy, that, by the dawn of day, they had, unperceived by the enemy, thrown up a redoubt of 8 rods square. The incessant fire from the shipping and a battery on Copp's Hill, in Boston, did not prevent the Americans from completing, by midday, with great labour and fatigue, a slight breastwork from the redoubt to the bottom of the hill, on the E. side. Between 12 and 1 o'clock the British, to the amount of 2000 men, with a portion of artillery, under Major-general Howe, and Brigadier-general Pigot, landed in Charlestown, and having formed their men in two lines, advanced slowly to the attack, frequently halting to allow their artillery time to fire. The Americans coolly waited in their entrenchments their approach. It is said that General Putnam, who was a leader, though Col. Prescot had the chief command, told the men that they had not a charge of powder to loose, and exhorted them not to fire upon the enemy, until they could *see the whites of their eyes*. They were suffered to approach within 10 or 12 rods, when these practised American marksmen discharged their pieces incessantly with such deadly aim, as threw the British into confusion, and caused them to retreat precipitately to the bottom of the hill. By the efforts of their officers they were formed a second time, and advanced to the attack. The Americans waited until they were within 5 or 6 rods, when they opened a destructive fire, which brought them to a stand, and threw them into confusion. At this critical moment General Clinton arrived from Boston, and succeeded in rallying his men, and in bringing them to a charge, while some cannon were brought to a station that enabled them to rake the breastwork, from end to end. The works were now attacked with fixed bayonets; and as the Americans were not furnished with them, and as their ammunition began to fail, they found it necessary to retreat over Charlestown neck, in doing which they were exposed to the fire of the Glasgow man-of-war and the floating batteries, without suffering great injury from them. The British were victorious; but it was a dear-bought victory. The British loss, by the acknowledgment of General Gage, was 1054 killed and wounded, and the engagement was particularly fatal to the officers, as they were doubtless singled out by the American marksmen. Nineteen commissioned officers were killed and seventy more wounded. Among the former was Major Pitcairn, who led the attack at Lexington. Of the men, 226 were killed and 828 wounded. The Americans, who had at no time more than 1500 men engaged, had 145 killed and 304 wounded and missing, making in the whole 449. Among the former was Major-general Warren, then president of the colonial congress, and a volunteer. The British did not pursue the victory farther than to entrench themselves on Bunker's Hill, and the Americans did the same on Prospect Hill in front of them, about half way to Cambridge.

Early in the battle, order was sent to Copp's Hill in Boston, to set Charlestown on fire, which was effected by discharging a carcass into the place, and the fire soon spread over it. But the direction of the wind prevented the smoke from seriously annoying the Americans.

On the site of the battle, 62 feet above the level of the harbour, on ground purchased for the purpose, the Bunker Hill Monument, a splendid obelisk, has been erected. The corner stone was first laid, by the celebrated La Fayette, on the 50th anniversary of the battle, in the presence of an immense concourse of citizens, June 17th, 1825, when an address was delivered by the Hon. Daniel Webster. This foundation having been insufficient, the corner stone of the present structure was laid in a more substantial manner, in March, 1827. The monument was completed, July 23d, 1842. The obelisk is 30 feet square at the base, and 16 feet 4½ inches at the top, having a diminution of 14 feet 7½ inches above its base. It is substantially built of hewn Quincy granite. The height from the base to the commencement of the apex is 208 feet; and from the base to the top of the apex, it is 221 feet in height. The whole cost has been $119,800. The interior is circular, having a diameter of 10 feet 7 inches at bottom, and of 6 feet 4 inches at top, and is ascended by 294 steps. The top is an elliptical chamber, 17 feet high, 11 feet in diameter, with 4 windows, 2 feet 8 inches high, and 2 feet 2 inches in breadth, and presents the most splendid view in the United States, combining in a remarkable degree the beautiful and the sublime. Boston, its harbour and environs, with the more distant country, embracing mountain scenery, are spread out in a most enchanting prospect. The obelisk consists of 90 courses of hewn stone, 84 above the base, and 6 below it. There are a number of windows in the structure, closed with iron shutters, besides numerous apertures. The ladies of Boston, by a fair and other donations, raised a large sum, which ensured the completion of the monument. At the fair, by tickets and the sale of articles, the sum of $32,000 was raised. The finishing of the monument, July 23d, 1842, was hailed by the firing of cannon, and other testimonials of rejoicing. The anniversary of the battle, and the completion of the monument was celebrated in a splendid manner, June 17th, 1843, in the presence of the President of the United States, and the heads of Department, and an immense concourse of citizens, when an address was delivered on the occasion by Hon. Daniel Webster, late Secretary of State of the United States.

During the erection of the monument, one man was killed by a fall from it; the only serious disaster which occurred. This monument, being the most elevated object in the vicinity, will serve as a landmark to seamen; and will long stand in commemoration of the brave men, who here fought, and many of them fell, in defence of their country's rights, and nobly contributed to the independence of the United States. And it is to be hoped, that it will equally testify to posterity of the horrors of war; for many were the widows and orphans which were made on the 17th of June, 1775.

BUNPOOR, a town or village of Beloochistan, cap. prov. Kohistan; 14 m. N. the Bushkurd mnts.; lat. 27° 47′ N., long. 60° 20′ E. It is small, and ill built; at one time it had been surrounded by a mud wall, but the whole is now gone to decay. The citadel of the chief, strong enough to resist any attacks from the Persians, is built on the summit of an extraordinary mound of earth, said by tradition to have been artificially raised by an immense army of Ghebers, who, at a remote period, passed this way. Pottinger says, "that if really artificial, it must have been raised with vast labour, as the earth could not have been procured nearer than the mnts." The neighbourhood of Bunpoor is desolate and impoverished, destitute of agriculture, and even of date-trees. The inhab. are the Rukhshanee Beloochs, the leading tribe among the Nharooés; the language spoken at Bunpoor is Persian and Beloocheekee mixed. The revenues of the chief are usually farmed out, and in lieu of them he received (1810) 26,000 rupees, 140 camels, 140 matchlocks, 140 sheep or goats, 140 measures of 160 lbs. each, of wheat, and the same of dates. (*Pottinger's Beloochistan, &c.*, p. 176.)

BURDWAN (*Vardhaman*, productive), a distr. of Hindostan, presid. and prov., Bengal; between lat. 22° and 24° N., and long. 87° 20′ and 88° 25′; having N. Beerbhoom, E. Nuddea, S. Hooghly, and W. the Jungle Mehals district; area 2000 sq. m. Pop. (1822) 1,487,300. It is one of the

most productive territories of India, and being environed by jungles N. and S., "appears like a garden surrounded by a wilderness." The uncultivated are but 1-8th part of the extent of the cultivated lands: the chief articles of produce are indigo, sugar, cotton, tobacco, and mulberry-trees. A principal part of the wealth of Burdwan consists in its coal mines: the coal-field appears to be very extensive; the coal is of good quality, and preferred to any other at Calcutta. Several mines, about 120 m. from that city, are worked by an English company, which employed, in 1831, from 2000 to 3000 natives in mining, and 300 or 400 boats in conveying the coal to Calcutta, the mines being on the banks of a river connected with the Hooghly. It is not sold at the pit's mouth, but delivered at about 20*s.* a chaldron in Calcutta; Singapore, Penang, Madras, and Ceylon, are also supplied hence: the wages of the miners are from 5*s.* to 8*s.* per month. Fine iron-ore is found in the neighbourhood of the coal, and a great deal of stone. Commerce has been greatly facilitated by the opening of roads to Hooghly. Culna, and Cutwa; the zemindars are opulent, and many of them reside in the capital of the presid.; the land-revenue in 1829–30 was £384,780. There are few villages in which there is not a school for the rudiments of education, and there are some private endowments for the purpose; but no regular schools of Hindoo or Mohammedan law exist here: the proportion of Mohammedans to Hindoos is about 1 to 5. Burdwan became subject to the British, with the rest of Bengal, in 1760: the titular rajah enjoys, at present, but little consideration; and his zemindary is now greatly diminished from its original size. (*Hamilton's Hindostan*, i., 153-155; *Evid. of Mr. Bracken, on Coal, &c., Reports*, 1831.)

BURDWAN, a town of Hindostan, prov., Bengal, cap. of above distr., and seat of a zillah court; 60 m. N.N.W. Calcutta; lat. 23° 15′ N., long. 87° 57′ E. Pop. about 54,000, 2-7ths of whom are Mohammedans. The Burdwan rajah has here a large palace, an English summer-house, and spacious gardens, &c.

BUREAU, county, Ill. Situated toward the N. part of the state, and contains 648 sq. m. Watered by Bureau creek. It contained in 1840, 4001 neat cattle, 2067 sheep, 12,056 swine; and produced 55,794 bushels of wheat, 190,380 of Indian corn, 51,860 of oats, 35,112 of potatoes. It had several stores, six grist-mills, ten saw-mills, one academy, 45 students, thirteen schools, 321 scholars. Pop. 3067. Capital, Princeton.

BURFORD, a par. and town of England, co. Oxford, hund. Bampton; 63 m. W.N.W. London. Pop. 1821, 1686; 1831, 1866; houses, 385; area, 2170 acres. It is pleasantly situated by the small river Windrush, but is very indifferently built. The church is partly in the Norman, partly in the later Gothic style, and has a very fine spire, surmounting a tower. The Baptists, Friends, and Wesleyans, have chapels. There are almshouses for sixteen poor widows; a free school, with an endowment producing £84 a year, held in the town-hall, where, till 1636, the co. assizes were held. There is a weekly market on Saturday, and fairs held the last Saturday in April, and July 5th, for live stock and cheese. Saddlery was once a considerable branch of manufacture: there was also a large traffic in wool and corn; both have greatly declined; and the property of the town has been still further depreciated by the alteration in the line of road from Oxford to Cheltenham, which previously passed through and now avoids it. Edgehill, where Fairfax beat the royalists, is in the neighbourhood. The celebrated Wilmot, earl of Rochester, was educated in its school. It gives the title of earl to the duke of St. Albans.

BURG, a town of the Prussian states, prov. Saxony, reg. Magdeburg, on the Ille, 13 m. N.E. Magdeburg. Pop. 13,500. It is walled, has three gates, four reformed churches, a grammar school, a hospital, a work-house, &c. It is also the seat of a provincial council, a board of revenue, a district court of justice, &c. A very extensive woollen manufacture is carried on, and it has some dyeing establishments and snuff factories.

BURGOS, a city of Spain, cap. prov. same name, on the Arlançon, and on the high road from Madrid to Bayonne, at the foot of a mountain, 134 m. N. Madrid, 59 m. S.W. Vittoria; lat. 42° 21′ N., long. 3° 38′ W. Pop. 12,000. It is of an irregular shape; streets clean and handsome, particularly that leading to the cathedral, but it has a deserted impoverished appearance. It has a modern square, surrounded with a portico, supported by large columns, with houses upon a uniform plan, but small and mean. It is only, in fact, worth mentioning from its bronze statue of Charles III., almost the only one of the sort in Spain; though, according to Bourgoing, it is ill designed and executed. The cathedral, a well-preserved chief-d'œuvre of Gothic elegance, is about 300 ft. in length, by above 250 in width. Its exterior is inferior to none in Spain; but the interior, though remarkable for the beauty of its workmanship, is inferior to the cathedrals of Toledo and Seville. Having been the cradle of the two most renowned captains of Spain. Ferdinand Gonzales, and the Cid Campeador, Burgos contains a triumphant arch in memory of the former, and a monument to the latter. There are three fine stone bridges over the Arlançon. in the space of half a league. Two of them communicate with the suburbs of the city, on the opposite bank, called Vega, and the third, with the royal hospital, remarkable for its cleanliness and salubrity. There are some fine meadows on the banks of the river, and there also is the famous convent of Las Huelgas, whose abbess possessed almost royal privileges. Close to the city is the monastery of Miraflores, where John II. and his queen have magnificent tombs, and where also there are, or were, some paintings remarkable for their colouring. There are three military roads from Burgos, one to Oviedo and Gijon, another to Agreda, and a third to Santaña. The approaches to, and promenades of the town are well ornamented with trees; but though it be one of the coldest parts of Spain, fuel is scarce and dear. Miñano mentions a hospital for deserted children, and four other hospitals, exclusive of that already specified. Formerly the greater part of the wool exported from Spain used to pass through Burgos, and it still has some manufactures of leather, woollens, and hats, and two *lavaderas*, or washing-pools for wool.

La Borde contends, notwithstanding what has been affirmed to the contrary, that Burgos did not exist in the time of the Romans, from its not being mentioned by Ptolemy nor any other ancient geographer; its want of any ancient monuments, and its being insulated and out of the line of the ancient military road. He maintains that its foundation cannot be carried farther back than the reign of Alphonso I., and that it was Alphonso III. who ordered the castle to be built. It was formerly the residence of the counts of Castile, and many of the Castilian kings, and was then celebrated for its wealth and prosperity, and for its woollen manufactures and fairs. But it has since greatly declined: it suffered much during the late contest with France, and still more in the present civil war. (*Miñano*; *Bourgoing*, *Tableau de l'Espagne*, 37; *De la Borde*, ii.; *Inglis*, i., 40.)

BURGUNDY, one of the old French provinces, now distributed among the deps. of Côte-d'Or, Saone et Loire, Yonne, Nièvre, Aube, Haute Marne, and Ain.

BURHAMPORE. *See* BOORHAMPOOR.

BURKE, p. t., Caledonia co., Vt., 51 m. N.E. Montpelier, 561 W. Drained by Pasumpsic river and its branches, which afford water-power. First settled in 1790. Oil-stones, from a small island in lake Memphremagog, are here prepared and exported. It contains a Baptist church and several other religious societies, four stores, four grist-mills, seven saw-mills, two fulling-mills, ten schools, 328 scholars. Pop. 997.

BURKE, county, N. C. Situated in the W. part of the state, and contains 1625 sq. m. Watered by Catawba river and its branches. It contained in 1840, 16,529 neat cattle, 12,653 sheep, 39,556 swine; and produced 45,976 bushels of wheat, 14,753 of rye, 620,996 of Indian corn, 77,691 of oats, 37,809 of potatoes, 17,718 pounds of tobacco, 43,664 of cotton, gold to the value of $38,122. It had twenty stores, eight flouring-mills, sixty-six grist-mills, thirty-two saw-mills, three oil-mills, eleven tanneries, 183 distilleries, one academy, 25 students, eight schools, 294 scholars. Pop.: whites, 12,819; slaves, 2916; free coloured, 264; total 15,799. Capital, Morgantown.

BURKE, county, Ga. Situated in the E. part of the state, and contains 1900 sq. m. Bounded N.E. by Savannah river, and S. by Ogeechee river. Watered by Brier creek, which flows into the Savannah. It contained in 1840, 14,956 neat cattle, 4756 sheep, 26,798 swine; and produced 7698 bushels of wheat, 508,503 of Indian corn, 10,577 of oats, 35,465 of potatoes, 665 pounds of rice, 6,250,393 of cotton. It had fifteen stores, thirty-six grist-mills, twenty-two saw-mills, one academy, 25 students, five schools, 183 scholars. Pop.: whites, 4609; slaves, 8408; free coloured, 159; total, 13,176. Capital, Waynesboro'.

BURLINGTON, county, N. J., extends across the state, S. of the middle, and contains 800 sq. m. Bounded N.W. by Delaware river, and S.E. by the Atlantic, and S. by Little Egg Harbour river. Watered by Wading river, a branch of Little Egg Harbour river, and Rancocus creek, which flows into Delaware river. Bog iron ore is found, and marl abounds in its W. part. In Springfield t. is a well which converts wood into stone. It contained in 1840, 16,863 neat cattle, 15,108 sheep, 20,396 swine; and produced 90,836 bushels of wheat, 253,346 of rye, 577,520 of Indian corn, 39,549 of buckwheat, 197,180 of oats, 123,186 of potatoes. It had 129 stores, four fulling-mills, one woollen-factory, one cotton-factory, with 2500 spindles, one dyeing and printing works, three furnaces, seven tanneries, three potteries, nineteen distilleries, thirty-four grist-mills, forty-six saw-mills, three paper-mills, one printing-office, three

weekly newspapers, six academies, 135 students, 101 schools, 7125 scholars. Pop. 32,831. Capital, Mount Holly.

Burlington, p. t., Penobscot co., Me., 120 m. N.E. Augusta, 713 W. It has three schools, 105 scholars. Pop. 350.

Burlington, p. t., port of entry, and capital of Chittenden co., Vt., 40 m. W.N.W. Montpelier, 80 m. S.S.E. Montreal, L. C., 22 m. S.E. Plattsburg, N. Y., 75 m. N. Whitehall, at the S. end of lake Champlain, 513 W. Situated in 44° 27′ N. lat., and 73° 10′ W. long. Pop. 1830, 3525; 1840, 4271. The beautiful village in the W. part of the town, is the largest in the state, and one of the finest, for its extent, in the United States. It is built on a bay which sets up between two points on the E. side of lake Champlain, and forms a regular curve. The shore in the S. part of the village is low, but toward the N. it rises to an elevated bluff, on the level summit of which were the barracks for the United States soldiers, during the last war, which have since been removed or taken down. On the brow of the elevated bank was a powerful battery, which once maintained an action of half an hour, with a British naval force on the lake. From the S. part of the village the ground rises by a gradual ascent for one mile, where it attains the elevation of 261 feet above the surface of the lake. The streets run from W. to E., and are crossed by others at right angles from N. to S., dividing the whole surface into regular squares. Near the centre is a public square, on which the court-house is situated, which is surrounded by brick stores, and the principal hotels. The village contains many neat, and some splendid dwellings, surrounded with shrubbery, and generally having fine gardens in the rear. Some of the public buildings are spacious and elegant. The Calvinistic Congregational church, completed in 1842, in the place of one which was consumed by fire in 1839, is an elegant model of pure Grecian architecture, is 92 feet long by 61 wide, built of brick, and cost $90,000. The Unitarian church, erected in 1816, is very spacious, with a lofty spire, is built of brick, and with its bell, clock, and organ, cost $23,000. The Episcopal church is a handsome Gothic structure, built of stone, and cost $9000.

The lake is here 10 miles broad, which is its widest part unobstructed by islands, and the view from the cupola of the University, as it respects *natural scenery*, is second to none in the United States. To the west are presented a full view of the beautiful village, the broad expanse of the lake, adorned with several islands, and the moving scenery of vessels and steam-boats; and beyond the lake, rise the lofty Adirondack mountains of New York, to the height of between 5000 and 6000 feet, and elevate the beautiful into the sublime. To the N. are seen the beautiful windings of Winooski or Onion river. To the E. is presented an extended country with the range of the Green mountains, embracing its two most elevated summits, over 4000 feet high.

The harbour of Burlington is the best on the lake, and more vessels navigating the lake are owned here, than at any place. It is easy of access from the N. and S., and to protect it from the west winds, the government of the United States has erected a break-water, 900 feet long, to be continued to the length of 2000 feet, at the distance of 1000 feet from the central wharf, which will cost when completed, $150,000. A light-house was erected in 1826 on Juniper island, which is distant 4 miles from the wharf, and contains 11 acres of ground. The light-house is in the form of a truncated cone, 30 feet high, 18 feet in diameter at the base, and 12 at the top; and the light is kept continually burning in the night, during the season of navigation, from the middle of April to the first of December. There are three substantial wharves in Burlington, and a great amount of goods is landed here. Burlington has an extensive and fertile back country, and the mercantile business of the place amounts to about $1,000,000 annually. Steam-boats stop here daily on their way from Whitehall, N. Y., to St. John's, L. Canada.

Burlington contains a court-house, jail, two banking-houses, six churches, one Congregational, one Unitarian, one Methodist, one Episcopal, one Baptist, and one Roman Catholic, an academy, a female seminary, forty-nine stores, one rope-walk, one brewery, one tannery, one glass-factory, one pottery, one grist-mill, three saw-mills, three printing-offices, two weekly newspapers, one academy, 104 students, seventeen schools, 385 scholars. Some of these are out of the village. The village contains 400 dwellings, and 3000 inhabitants. A steam ferry boat crosses from this place to Port Kent on the opposite side of the lake, and thence to Plattsburg. The University of Vermont occupies an elevated situation on the E. border of the village, 261 feet above the level of the lake, and has four spacious edifices. It was founded in 1791, and was endowed by the Legislature with 29,000 acres of land, of which the part leased yields an income of $2500 annually. It has a president and five professors or other instructers, 241 alumni, 101 students, and 9300 vols. in its libraries. The commencement is on the first Wednesday in August.

About a mile and a half N.E. of the court-house is the flourishing manufacturing village of Winooski, on Onion or Winooski river, partly in this t., and partly in Colchester, and connected by a fine covered bridge over the river. The river here has a fall of about 20 feet, nearly perpendicular, which affords a great water-power, easily available on the Colchester side. The village contains a church, an extensive woollen-factory, and various mechanical and manufacturing establishments, which are chiefly included in the statistics of Colchester.

The first permanent settlement in Burlington was made after the peace in 1783, it was first organized in 1787. The first store was opened in 1789. The first Congregational church was formed in 1795. Burlington contained a garrison and hospital, during the last war. A great mortality prevailed among the soldiers in the winter of 1813, and out of 4000 men, from 12 to 20 died daily, for several weeks in succession.

Burlington, p. t., Middlesex co., Mass., 13 m. N.W. by N. Boston, 453 W. Watered by Vine brook, a head branch of Shawsheen river. Incorporated in 1799. It contains one Congregational church, two stores, one grist-mill, one saw-mill, four schools, 180 scholars. Pop. 510.

Burlington, p. t., Hartford co., Ct., 19 m. W. Hartford, 339 W. Watered by Farmington river, in its N.E. part. It contains two churches, one Congregational, and one Methodist, two stores, two fulling-mills, two woollen-factories, four grist-mills, six saw-mills, three distilleries, nine schools, 335 scholars. Pop. 1901.

Burlington, Otsego co., N. Y., 79 m. W. Albany, 356 W. It contains one church, seven stores, four fulling-mills, two tanneries, four grist-mills, nine saw-mills, two distilleries, thirteen schools, 558 scholars. Pop. 2154.

Burlington, city and port of entry, Burlington co., N. J., 12 m. S. by W. Trenton, 17 m. N.E. Philadelphia, 156 W., in 40° 5′ 10″ N. lat., and 72° 52′ 37″ W. long. Pop. in 1830, 2670; 1840, 2434. Pleasantly situated on the S.E. bank of Delaware river, opposite to Bristol, Pa. A great part of the city is isolated by a creek, over which are several bridges. It is regularly laid out, with streets crossing each other at right angles, nine running N. and S., and four E. and W. Upon Main street the houses are compactly built, but less so in other parts, with large gardens, affording much excellent fruit. It is neatly built, and is highly valued as a rural retreat, by the citizens of Philadelphia. The bank of the river is a beautiful grassy plain, bordered with elegant dwellings, among which is the residence of the Bishop of New Jersey, a handsome Gothic edifice, surmounted by a cross. It contains six churches, one Episcopal, one Presbyterian, two Methodist, one Baptist, and one Friends, a city hall, a bank, a lyceum, a public library, three large boarding schools, one of which is for young ladies, and a free school, founded in 1682, and supported chiefly by the rents of Matenicunk island in the vicinity, given for that purpose by the proprietaries. The island contains 300 acres, and yields an annual rent of about $1000.

The river opposite the city is about a mile wide, and it has a pretty good harbour, but little navigation. Four steam-boats pass the city, to and from Philadelphia daily. The tonnage of the port in 1840 was 3851. It contains fifteen stores, four grist-mills, two saw-mills, one tannery, one pottery, one printing-office, one weekly newspaper; total capital in manufactures $69,650; one academy, 40 students, nine schools, 480 scholars.

Burlington was laid out as a town in 1667, and incorporated by the proprietary government, including the island only, in 1693. It was incorporated as a city by the Legislature of New Jersey, in Dec. 1784, three miles long on the Delaware river, and one mile wide, and has a Mayor, recorder, and three aldermen, elected annually.

Burlington, p. t., Bradford co., Pa., 144 m. N.E. Harrisburg, 254 W. Drained by Sugar creek, and its branches. It contains two stores, one grist-mill, eleven saw-mills, seven schools, 245 scholars. Pop. 1118.

Burlington, p. v., Fayette t., capital of Lawrence co., O., 133 m. S.S.E. Columbus, 410 W. Situated on the N. bank of Ohio river, at the extreme S. point of the state, opposite to the mouth of Big Sandy river. It contains a court-house, jail, two churches, one Methodist, and one Presbyterian, a steam saw-mill, two carding machines, and about 250 inhabitants.

Burlington, p. t., Calhoun co., Mich., 111 m. W. Detroit, 572 W. It contains one saw-mill, four schools, 84 scholars. Pop. 411.

Burlington, p. v., Hampshire co., Va., 198 m. N.N.W. Richmond, 126 W. Situated on Patterson's creek, a branch of Potomac river, and contains one church, free to all denominations, one store, and several mechanic shops.

Burlington, p. v., capital of Boone co., Ky., 82 m. N. by E. Frankfort, 508 W.

BURLINGTON CITY, p. v. and capital of Des Moines co., Iowa, 572 m. W. It is one of the largest towns in the Ter., and was formerly the capital. It is pleasantly situated on the W. bank of the Mississippi, 248 m. above St. Louis, and 1499 m. above New Orleans. The ground rises by a gradual ascent from the river to the hills, by which it is encompassed. It is regularly laid out, and the streets, rising one above another, present many fine sites for dwellings. It is neatly built, and contains a court-house, jail, several brick churches, a mechanics institute, a United States land office, a fire-insurance company, five forwarding and commission houses, twenty-three wholesale and retail stores, various mechanic shops, two printing-offices, two weekly newspapers, several schools, and 1300 inhabitants. Two steam ferry boats here cross the Mississippi, and it is the seat of much trade. The view from the hills in the rear of the place is beautiful and extensive.

It was first settled by two enterprising white men in 1833, and two stores were opened in the course of the year. It was chartered as a city in 1837–8, and is governed by a Mayor and eight aldermen. It was formerly known as the Flint hills, an old trading post for the Indians, and in the few years which have elapsed since its settlement by the whites, it has become a flourishing city

BURLINGTON, t., Licking co., O. It has five schools, 284 scholars. Pop. 1222.

BURNHAM, a par. and village of England, co. Bucks, hund. Burnham; 30 m. E. London. Pop. 1821, 1918; 1831, 2137; houses, 393; area, 4110 acres. The village is a short distance from the Thames: its church is an ancient structure; and there is a national school. Fairs are held Feb. 23, May 1, and Oct. 2. Its ancient market has been long discontinued. The ann. val. of prop. in 1815 was £10,361. Its poor-rates average £1167. It is a place of great antiquity. The moated site of a palace of the kings of Mercia is still traceable. A nunnery, founded in 1165, existed till the general suppression.

BURNLEY, a market town of England, Lancashire, hund. Blackburn, par. Whalley, on the Burn, 180 m. N.W. by N. London, 30 m. S.E. by S. Lancaster, and 21 m. N. Manchester. Pop., in 1801, 3305; 1821, 6378; 1841, 54,192. Its name is derived from the river Burn or Brun, on which it is situated, which unites with the Calder immediately below the town. It stands in the middle of a narrow valley, and has been greatly improved and enlarged within the last twenty years. It is mostly built of freestone, and is well paved, lighted, and abundantly supplied with water. St. Peter's parochial chapel, built shortly after the Conquest, has been replaced by a more recent structure, built at different periods. It has in it the burial-place of the Towneley family, where, among other monuments, one has been erected to the memory of Charles Towneley, Esq., whose fine collection of marbles is now in the British Museum. The Independents, Baptists, Wesleyan and Primitive Methodists, and Rom. Catholics have places of worship. A free grammar school was founded in 1578, to which the sons of tradesmen and others in the lower walks of life are admitted on paying a fee of £2 2*s*. a year, the fee paid by the sons of the higher classes being £3 3*s*. There are several other schools, and numerous charitable endowments and institutions. There are six county magistrates residing in the neighbourhood; two or more of whom usually attend the petty sessions which are held here every Monday. The town is a station for receiving votes at the election of members for the N. division of the county. The woollen manufacture, which was once carried on extensively, and which still exists here, has been nearly superseded by that of cotton, which is carried on upon a great scale in the town and neighbourhood. There were in the town and on its bounding streams, in 1835, seventeen cotton-mills, mostly wrought by steam, and employing 2040 work-people; and since then the trade and pop. of the town have greatly increased: the latter is now (1839) estimated at above 10,000. The articles produced are principally common printing calicoes. There are also extensive bleaching and printing works, with iron and brass foundries, machine manufactories, breweries, tanneries, rope-works, &c. The town is mainly indebted for its rapid growth and progress in manufactures to the abundance and cheapness of the coal found in its immediate vicinity, or, rather, directly below it; for here, as at Whitehaven and some other places, parts of the town have sunk, from the roof of the coal mines not being properly supported. It is also well supplied with freestone, slate, &c. It has an easy communication with the surrounding districts by means of the Liverpool and Leeds canal, by which it is nearly encircled. Markets are held on Monday for corn, and on Saturday for general purposes: fairs on March 6, Easter eve, May 9 and 13, July 10, and Oct. 11; also for cattle on alternate Mondays, for woollens on the second Thursday in July, and for horses on the third Thursday in October. A branch of the Commercial Bank of England, and the banking-house of Birkbecks, Alcock, and Co., are established here. (*Baines's Lancashire, &c.*)

BURNS, t., Alleghany co., N.Y., 237 m. W. by S. Albany. Drained by Canaseraga creek. It contains three stores, two grist-mills, four saw-mills, seven schools, 299 scholars. Pop. 867.

BURNS, t., Shiawassee co., Mich. It has one saw-mill, one school, 25 scholars. Pop. 257.

BURNHAM, p. t., Waldo co., Me., 34 m. E. Augusta, 630 W. It contains one store, two saw-mills, seven schools, 266 scholars. Pop. 602.

BURNSIDE, p. t., Clearfield co., Pa., 156 m. N.W. Harrisburg, 234 W. Pop. 556.

BURNTISLAND, a royal burgh and sea-port town of Scotland, co. Fife, on the N. shore of the Frith of Forth, 5½ m. N. Newhaven. Pop. (1841) 1859. It is dull, but a clean and well-built town, having a main street running nearly at right angles with the harbour, and some subordinate streets. It has a town-house, a parish church, a Presbyterian dissenting chapel, and a good school-house. Its harbour, though the best on the N. side of the Forth, nearly dries at low water; but it is said that this serious defect might be obviated at a moderate expense, by the extension of the piers. A considerable number of boats are employed in the herring fishery; but this branch of industry has greatly declined. It used to be exclusively carried on in the Frith of Forth during the winter season. That department is now, however, wholly abandoned; and the boats sent out by the Burntisland curers are employed, in summer only, at Fraserburgh or Wick. Their annual take may amount to 16,000 or 18,000 barrels; but only 746 barrels were cured at Burntisland in 1837. One or two ships are annually sent to the N. Sea whale fishery; and, exclusive of these and the herring-boats, a few coasting and other trading vessels belong to the port. Burntisland has been, of late, a good deal resorted to in summer by sea bathers. It has long formed one of the principal stations for the landing and embarkation of passengers crossing the Frith of Forth, the number so conveyed amounting to 16,635 a year, at an average of the three years ending with 1836. It is at present (1839) proposed to vest this ferry in a joint stock company, and to construct low-water piers. In the vicinity of the town is a large distillery. Burntisland unites with Kinghorn, Dysart, and Kirkaldy, in sending a mem. to the H. of C., and had, in 1838–39, fifty-three registered electors. (*New Statist. Account of Scotland*, art. *Burntisland, &c.*)

In 1601, the General Assembly met at Burntisland, when James renewed his vows as a Covenanter. It is a curious fact that the existing quays were built by Cromwell.

BURRILVILLE, p. t., Providence co., R.I., 19 m. N.W. Providence, 208 W. Incorporated from Gloucester in 1806. Situated in the N.W. corner of the state. Drained by Branch river, issuing from Alum pond, on the line of Mass., which affords water-power. It contains one free church, a bank, four stores, two woollen-factories, one cotton-factory with 1056 spindles, five grist-mills, fifteen saw-mills, ten schools, 448 scholars. Pop. 1982.

BURR OAK, p. t., St. Joseph co., Mich., 128 S.W. Detroit, 576 W. It has five schools, 80 scholars. Pop. 286.

BURSA, BRUSA, or PRUSA (an. *Prusa ad Olympum*) a famous city of Turkey, in Asia, Natolia, cap. Sanjack, 62 m. S. Constantinople, lat. 40° 9′ 30″ N., long. 29° 4′ 45″ E. Pop. estimated at 40,000 by Kinneir, and at 100,000 by Fontanier; but probably about 60,000. It is beautifully situated at the extremity of a fertile, well-watered, and well-wooded plain, on the lower acclivities of mount Olympus. Including the suburbs, which are more extensive than the city properly so called, it extends 2 m. from E. to W., and ½ m. from N. to S. (*Turner.*) It is not well built; the houses being principally of wood, on the model of those of Constantinople: it is very subject to fires, and the streets are, for the most part, narrow. Tournefort says, that the latter are *bien pavé et propre, surtout dans le quartier du bezaar;* whereas, according to Mr. Turner, who visited the town in 1815, "*all* the streets are badly paved, and most of them narrow and dirty." No doubt, however, this is one of the cleanest of the cities of Turkey; for a great number of streams that have their source in the upper parts of the mountain flow down several of the streets, and supply almost every house with a fountain. The castle, on a perpendicular rock near the centre of the town, most probably occupies the site of the acropolis of the ancient Prusa. Within its walls is a mosque, formerly a Greek church, in which are the tombs of Sultan Orchan, his wife, and children. The chief ornaments of the city are its mosques, which are exceedingly numerous. The most magnificent are those of the sultans Achmet and Osman, and the Ooloh, or great mosque, in the centre of the city. The warm baths of Brusa are famous all over the East: the principal is that of Kaplutcha Hamman, about 1½ m. N.W. from the city. The heat of the water, which is slightly impregnated with sulphur, does not exceed 100° Fah. The water is re-

ceived into a fine building, where there is every accommodation for bathers of both sexes. The *bezestein*, a large building with shops and ware-houses, and the bazars, which are extensive, are well supplied with merchandise, particularly with raw silk and silk stuffs. Great quantities of silk are produced in the adjacent plains; and very excellent silk and silk and cotton stuffs are manufactured in the city, and furnish, with raw silk, carpets, and velvets, the principal articles of export. The khans and colleges, or medresses, of Brusa are numerous, and may vie with those of any other city of the Ottoman dominions. On the whole, considering the fertility of the surrounding country, the beauty of the situation, and its comparative cleanness, it is one of the most agreeable of Turkish cities. "Here, indeed, it is, and at Damascus (if anywhere), that the destroying phrensy of the race of Othman seems to have been arrested in its career, and its menaces successfully defied by the productive powers of indulgent nature." (*Browne.*)

Prusa was founded by Prusias, the protector of Hannibal, and was long the cap. of Bithynia. We hear little of it after it came into the possession of the Romans, though it was always famous for its baths, and admired for the beauty of its situation. It was one of the most considerable cities of the Greek empire. It was taken by Orchan, son of Othman, the founder of the Othman dynasty, in 1356, and became the seat of the Turkish power and the ordinary residence of the sultans till Amurath removed the seat of government to Adrianople. (*Tournefort*, letter 21; *Kinneir's Asia Minor, &c.*, p. 245; *Walpole's Trav. in various Countries*, ii., 109, &c.; *Turner's Levant*, iii., 163, &c.)

BURSLEM, a market town and par. of England, co. Stafford, N. division of Pirehill hund., 2¼ m. N.W. Newcastle-under-Line, 19 m. N. Stafford. Pop. (1831) town 11,950, par. 12,714. It stands on a gentle eminence, near the Trent and Mersey canal, and is the principal town in that important district called the Potteries, the principal seat of the earthenware manufacture. It contains many well-arranged manufactories, neat and convenient dwelling-houses for the workmen and overlookers or superintendents of works, and some handsome houses for the proprietors. Its principal buildings are, a neat market-house or town-hall, an edifice of modern erection nearly in the centre of the town, one part of which is used as a police-office, and another as a news-room, which is well supplied with metropolitan and provincial papers; the old church, dedicated to St. Peter, built of brick, with a stone tower of much greater antiquity than the body; and a new district church, a handsome edifice, erected in 1828, under the authority of the commissioners for building churches. Burslem was originally a chapelry in the parish of Stoke, but was formed into a separate parish by act of parliament, in 1807. It is lighted with gas, and has a police force under the provisions of a local act. The living is a curacy in the archdeaconry of Stafford. There are places of worship for Baptists, Independents, Primitive, Wesleyan, and New Connexion Methodists, and Roman Catholics, all of which, as well as the churches, have Sunday schools attached to them. There is also a national school, and a free grammar school for a limited number of boys. In 1835 there were here, in all, thirty-seven day and eleven Sunday schools. At a very early period Burslem was distinguished for its clay, and for its manufacture of earthenware and pottery, for which, in the 17th century, it was the principal place in the kingdom. The greater part of the inhabitants are engaged in the potteries, and in the earthenware manufacture, which has been brought to a state of beauty and excellence nearly approaching that of China. In Domesday Book this town is written Barcardeslim. The market days are Monday and Saturday. Fairs for cattle and horses are held in Feb., April, June, October, and December.

BURTON-ON-TRENT, a market town and par. of England, partly in the N. division of Offlow hund., co. Stafford, and partly in the hund. of Repton and Gresley, co. Derby. Pop. (1831) 6988, of which were resident in the town 4400. The town, situated in a fertile vale on the N. bank of the Trent, 12 m. N.E. Litchfield, 22 m. E. Stafford, 125 m. N.N.W. London, consists chiefly of one long street running from the place where the abbey stood to the bridge, and of another intersecting it at right angles. Of late it has been considerably improved, and is now paved and lighted with gas. The town hall, erected at the expense of the Marquis of Anglesea (the lord of the manor), who owns the greater part of the property in the neighbourhood, is a handsome building, and contains, in addition to the usual offices for transacting public business, an elegant suite of assembly-rooms. The old church, dedicated to St. Mary and St. Modwen, formerly connected by a cloister with the abbey founded in 1004, was rebuilt in 1722. The new church, erected in 1823 in the Gothic style, is a handsome edifice. But the most celebrated structure of the town is the ancient bridge over the river, erected prior to the Conquest, and substantially repaired in the reign of Henry II. It has thirty-seven arches, and is 1545 ft. in length, being considered the longest bridge in England. The government of the town is vested in a high and low steward, and a bailiff, appointed by the lord of the manor. The bailiff is also justice of peace and coroner. A court leet and court baron are held annually, as also two probate courts for proving wills. There is likewise a court called the "Genter's Court," held every third Friday before the steward or his deputy, for the recovery of debts not exceeding 40*s.*, the jurisdiction of which extends over the whole parish. The power to try and to execute criminals, and to hold courts of pleas to any amount, was formerly enjoyed by the town, but has long since ceased. The inhabitants, by virtue of the letters patent granted in the 11th of Henry VIII., are exempted from serving the office of sheriff, and from being summoned as jurors at the assizes and sessions for the county. There are various places of worship for Independents, Wesleyan Methodists, and General and Particular Baptists. There are also Sunday schools attached to the different churches and chapels; a national school, and a free grammar school, founded and endowed in 1520 by the then abbot, William Beane. In 1835 there were, in all, nineteen day and six Sunday schools. There is also a literary institution, entitled "The Burton Permanent Subscription Library;" an almshouse for eleven poor women; a dispensary; and a savings' bank. Considerable estates for charitable and other purposes are vested in trustees. In the time of Leland, Burton was famous for its alabaster works, but how long they were continued is not known. The principal manufacture carried on at present is that of its justly famous ale. Contrary to general usage, the brewers prefer in its preparation hard water to soft; and though the Trent runs close by, they use that water only which they obtain from their pumps. It has also fabrics of hats, cotton, tammies, and light woollen stuffs; with iron furnaces and manufactories of tools; two or three rope-walks, tanneries, a cotton-factory, &c. The Trent and Mersey canal (or Grand Trunk) passes Burton, and unites with the Trent about 1 m. lower down; and the Trent itself, which falls into the Humber, is navigable for vessels of some burden from Gainsbro' up to the town; so that, by means of the facilities thus afforded and otherwise, the town can easily communicate with almost all parts of England. The old abbey, a once magnificent pile, of which now scarcely a vestige remains, enjoyed many privileges: the abbots occasionally sat in parliament. Burton suffered greatly during the civil commotions in the reign of Charles I., and was several times taken and retaken by the contending parties. The market-day is Thursday. There are four annual fairs, one of which lasts fifteen days. The six days before Oct. 29 are for horses: the others are for cattle, horses, and pedlary: a cheese fair has also recently been opened.

BURTON, p. t., Cattaraugus co., N.Y., 297 m. W. by S. Albany, 312 W. Watered by Alleghany river and its tributaries. The line of the New-York and Erie rail-road passes through it, along Alleghany river. It contains one store, one fulling-mill, one grist-mill, four saw-mills, two schools, 32 scholars. Pop. 530.

BURTON, p. t., Geauga co., O., 165 m. N.E. Columbus, 330 W. Watered by Cuyahoga river. It contains six stores, three grist-mills, seven saw-mills, five schools, 357 scholars. Pop. 1022.

BURTON, t., Luzerne co., Pa. It contains one store, two flouring-mills, one saw-mill. Pop. 733.

BURTSCHEID, or BORCETTE, a town of the Prussian states, prov. Rhine, reg. Aix-la-Chapelle, of which city it is almost a suburb. Pop. 5200. It has broad streets, good houses and promenades. There are here important manufactures of cloth, cassimeres, and needles. The last, which is conducted on a large scale, and with great success (employing, with the needle manufacture in Aix-la-Chapelle, nearly 1000 work-people), is principally carried on by Protestants driven from Aix-la-Chapelle. It has several hot springs; they, however, differ essentially from the springs of the neighbouring city, and resemble those of Wiesbaden. (*Schreiber; Murray's Hand-book.*)

BURY, a par., parl. bor., and town of England, co. Lancaster, div. Bolton, hunds. Salford and Blackburn. The town is situated on the left bank of the Irwell, 2 m. above its confluence with the Roch; 8 m. N.N.W. Manchester. The townships of Bury and Elton, included in the parl. borough, comprise an area of 4360 acres; and had, in 1821, 13,480, and, in 1841, 77,496 inhabitants. The general appearance of the town has been greatly improved of late years, by widening the streets and approaches, and the erection of handsome modern structures. The church is a large, handsome structure, rebuilt in 1773; besides this, there are five Episcopal chapels in the parish, and about twenty dissenting places of worship; one of the former and seven of the latter being in the town. There is a free school, founded in 1726, the present income of which is £442; it has two exhibitions, either to St. John's Coll.,

Cambridge, or Brasennose Coll., Oxford: 75 scholars are educated, one third in classics, under the head master; the rest in accounts, &c., under the second master; and 10 girls, under a mistress. Another school, founded in 1748, for 80 boys and 30 girls, has been changed to a national school, and a spacious school-room been built for it. Here is, also, a dispensary, a public library, a mechanics' institute, several public news-rooms, and a horticultural society; all established within a recent period. The weekly market is held on Saturday; and three annual fairs on March 5, May 3, Sept. 18. The manufactures are annually increasing in amount and value. The principal branches consist of cotton and woollen spinning, and weaving, both by hand and power looms; with calico-printing, bleaching, and machine-making. Within a recent period, additional reservoirs have been formed on the banks of the Irwell, and the advantages of the numerous mountain-streams that feed it have been greatly extended. In 1836, there were in the parish eighty-two cotton-mills and fifteen woollen-mills, employing altogether sixty-one steam-engines, with an aggregate power of 1905 horses, and ninety-nine water-wheels, with the power of 977 horses. There were, at the same time, 2067 power-looms, employed in weaving calico; 6954 in weaving fustian; and 280 in weaving woollen goods. There were, in all, 8195 hands then employed in these manufactories, independently of those employed in other factories, coal-mines, &c.; the last employ between 600 and 700 hands. There is a canal and railway communication between Bury, Bolton, and Manchester, for goods and passengers. The ann. val. of prop. in the township only, was estimated, in 1815, at £16,546, and in 1829, at £34,954; that of the entire parish, in 1815, at £60,902, and in 1829, £109,993. Three courts-leet for the manor are held annually, in April, Whitsuntide, and Oct.: their jurisdiction is co-extensive with the parish. A court-baron is held every third week, for the recovery of debts under 40*s.*; and petty sessions are held every Friday in the town. The Reform Act conferred on Bury the privilege of returning one mem. to the H. of C. Houses in the parl. borough, in 1832, 3497, of which 353 were rated at £10 and upwards: registered electors, in 1837-38, 678.

The parish of Bury extends over 22,600 acres; and had, in 1831, a pop. of 47,829. Besides that of Bury, it comprises four townships and three chapelries. The greater part is a stiff loam, varying in fertility: a small portion only is under the plough. It contains good quarries of building stone, and those of Hornclifff produce excellent flags and slates. There are nine coal-mines wrought, so that the factories and inhab. have an abundant supply of fuel within the limits of their own parish. The first distinct notice that occurs of the manufactures of Bury is in Leland's Itinerary, in the reign of Henry VIII.; they were then exclusively of woollen, which is still carried on to some extent. In 1738, John Kay, a native of Bury (though at the time residing in Colchester) invented the fly-shuttle; and in 1760 Robert, a son of the former, the drop-box, by which patterns of various colours are woven nearly with the same facility as plain calico; the setting of cards by machinery also originated in the same family, and in Bury. In 1791, Henry Whitehead, the post-master of Bury, suggested the mode of piecing the ends of broken yarns, in spinning, without stopping the machinery, as had previously been necessary. But the circumstance which chiefly contributed to bring Bury into repute, as the seat of any peculiar branch of the cotton manufacture, was the establishment of large print-works by a firm, of which the late Sir Robert Peel, Bart., was at the head: the perfection to which calico-printing was there brought, not only enriched the parties, but added largely to the wealth and importance of the town. This establishment, with its numerous workshops, ware-houses, and dwellings, is still in full activity; as are also the large manufactories of the same company on other streams, notwithstanding the many changes that have taken place in their ownership. The Right Hon. Sir Robert Peel, the present distinguished parliamentary leader, was born at Chamber Hall, in the immediate vicinity of the town. (*Baine's Hist. Lancashire; Parl. Pap. and Rep.*)

BURY ST. EDMUNDS, a parl. bor. and town of England, co. Suffolk, hund. Thingoe, 60 m. N.E. by N. London. Pop., in 1821, 9999; in 1841, 12,547; houses at latter date, 2517. It is finely situated on a gentle eminence on the W. side the Larke, amid a richly cultivated, diluvial district. Streets broad, well paved, and lighted; houses mostly uniform, and well built, and the whole town has a cheerful, neat appearance. St. Mary's church (finished in 1433) is a fine Gothic structure, with a low Norman tower. St. James's church, finished after the Reformation, is a handsome building. Its belfry, at some little distance, was originally the grand entrance into the burial-ground of the old monastery: it is of a quadrangular shape, eighty feet in height, remarkable for strength and simplicity, and forms one of the finest extant relics of Saxon architecture. There are two Independent chapels; and the Catholics, Friends, Baptists, Methodists, and Unitarians have each places of worship. There is an ancient guild hall, in which the bor. courts are held; a shire hall for the assize courts; a county jail on a radiating plan, built in 1805; and a bridewell (an ancient Norman building). The free grammar school (founded by Edward VI.) has six exhib. to either of the universities, a scholarship in Corpus Christi, and another in Jesus College, Cambridge; it educates 100 boys, and holds a highly respectable station among English schools. It has also a charity school for forty boys; two others where fifty girls are clothed and instructed; and two Lancastrian schools for boys and girls established in 1811. There are ninety-eight almshouses, endowed by various benefactors, and under the management of trustees, who have about £2800 a year in their hands for various charitable purposes. Cipton's Hospital (whose annual revenue is £300) supports six widowers and six widows, decayed housekeepers; the General Hospital (established in 1825) accommodates forty patients. There are also a theatre, built in 1819, with concert, assembly, and billiard rooms; a good subscription library, a mechanics' institute, and botanical gardens, supported by subscription. Weekly markets are held, one on Wednesdays for corn, the other on Saturdays for general provisions. The annual fairs are held on Easter Tuesday, a pleasure fair; Oct. 1, for horses, cattle, butter, and cheese; a great fair, commencing Oct. 10, and lasting about three weeks; and Dec. 1. About a mile from the town the Larke becomes navigable to Lynn for barges, whence coals and other commodities are brought. Spinning yarn was formerly a great source of employment to the poor of the town, but at present it has no manufactures.

The bor. is co-extensive with the two parishes of St. James and St. Mary, the area being 2935 acres; it is divided into two wards, and governed by a mayor, three aldermen, and eighteen councillors. Petty sessions for the bor. are held every Thursday; a manor court, for small debts, every third week; a court of pleas, monthly; and courts of general sessions thrice a year, in Feb., June, and Nov. The quarter sessions and assizes for the co. are also held in the town. The total number of offenders committed in 1837 was 450; of these seventy-eight were tried at the assizes, 296 at the co. quarter sessions, and seventy six at the local courts. The property of the corp. consists of lands and houses in the bor., the livings and tithes of both parishes, and the tolls of the markets and fairs; the ann. average revenue is £1000; a fee-farm rent is paid the crown, and a stipend of £100 to each of the church ministers. Ann. value of real prop. in 1834, £48,784. The poor-rates for the year ending Ladyday, 1837, amounted to £6827. The bor. has returned two members to the H. of C. since the 12th of James I.; previously to the Reform Act, the right of election was in an alderman and thirty-six burgesses; the former had a casting vote, and was returning officer; it was, in fact, a nomination bor., in the hands of two peers of opposite political principles. It has about 730 houses of the ann. value of £10 and upwards; and had, in 1837-38, 665 registered electors.

A monastery was founded here in 633, to which, in 903, the body of St. Edmund, the Saxon king, was transferred: hence the name. Canute expelled the secular monks, and transferred thither a convent of Benedictines from Norfolk; his, and other subsequent endowments, made this abbey inferior only to that of Glastonbury; it possessed the franchises of many separate hunds., and the right of coinage; its abbot sat in parliament, and had power to inflict capital punishment, and determine all civil suits within the liberty. The abbey gateway and bridge, and portions of the walls, still remain; its ann. value, in 26 Hen. VIII., was (according to Dugdale) £1659, (Speed) £2336 18*s.* There were a few other establishments, of minor importance, in the town previous to the general suppression.

Sir Nicholas Bacon, bishops Gardiner and Prettyman, and Dr. Blomfield (the present bishop of London) were born in the town. It confers the title of viscount on the Keppel family. Ickworth, the magnificent seat of the marquis of Bristol, is within about three miles of the town.

BUSACO, a convent of Portugal, prov. Beira, on the ridge called the Sierra Busaco, 17 m. N. by E. Coimbra. Here, on the 27th September, 1810, a French army of 65,000 men under Marshal Massena, were repulsed with great loss in an attack on the position occupied by the Anglo Portuguese army, about 40,000 strong, under the Duke of Wellington. But, though unable to force this position, Massena succeeded in turning it, when the allies retreated upon the lines at Torres Vedras.

BUSH CREEK, t., Washington co., Ark. Pop. 296.

Bush Creek, t., Scioto co., O. It has two schools, 45 scholars. Pop. 401.

BUSHIRE (more properly ABOUSHEHR, or ABUSHAHR, Arab., the *father of cities*), a sea-port town of Persia, prov. Fars, and, excepting Bussorah, the principal

port of the Persian gulf, on the N.E. coast of which it is situated; 120 m. W.S.W. Shiraz, and 255 m. S. by W. Ispahan; lat. 29° N. long. 50° 48′ E. Pop. uncertain, and variously estimated at from 8000 to 15,000. It is built at the N. extremity of a low, sandy peninsula, about 11 m. in length, by 4 m. in breadth at its widest part, on its E. side enclosing a deep bay or harbour. The town is thus surrounded on all sides by water, except towards the S., where a mud wall (useless as a fortification), about ¾ m. in length, has been built across the isthmus between the bay and the sea. Viewed from the sea, it has rather a handsome appearance. It is, however, a mean, wretched place, without bustle or movement of any kind. The whole number of dwellings are said not to exceed 1500, of which a third, at least, are reed enclosures, scarcely deserving even the name of huts, as most of them are unroofed. The houses are built chiefly of a friable stone, composed of sand and shells imbedded in clay, and the best of them are constructed of burned bricks brought from Bussorah; but excepting the E. I. Company's factory, the residence of the governor, and a few good dwellings of the merchants, there is scarcely one comfortable, and certainly not one handsome, edifice in the place. Some of the principal houses have *baudgeers*, that is, wind-catchers, or spires of a square form, open at each side; and which, acting as a funnel, and admitting the air from every quarter, ventilate and cool the houses. The streets are so many narrow, unpaved alleys, without order or regularity, or sufficient height of wall on either side to shelter the passenger from the sun. The mosques are all open buildings, and inferior to those seen in the smallest villages of Arabia; there are but few coffee-houses, and the solitary bath is small, filthy, and badly attended. Water is excessively bad; that fit for drinking having to be brought in goat-skins a distance of 16 m. In dry and windy weather, the dust and flies constitute an almost intolerable nuisance. On the S.W. side of the town, facing the outer road, the beach, which is level and sandy, is beat by an almost constant surf, though not so violently as to prevent the landing of boats in moderate weather. The N.E. side, facing the inner harbour, has a wharf or two for landing goods, and is better sheltered. Owing to the numerous sand-banks, the inner harbour is not always easily accessible even for boats; but it is always preferred as the safest and best landing-place. Ships of more than 300 tons burden lie in the outer roads, six miles from the town, where there is good anchorage, subject, however, to all the fury of violent N.W. and S.W. winds, which are very prevalent, often obliging ships to part their cables and bear up for Karak, or elsewhere. Ships of 300 tons burden or less may anchor in the inner roads to the N. of the town, but still six miles distant. By reason of a bar, the inner harbour is only accessible, at high water springs, to ships drawing 18 ft., and at other times to vessels drawing 8 or 9 ft. The water immediately to the E. of Bushire is deep; and it appears from the older descriptions of the place, that the company's cruisers were formerly able to anchor close up to the N.E. side of the town; but the channel leading up to this will now scarcely admit of small dows, except they be lightened. Some islands in the N.E. part of the bay give sufficient shelter to native boats and other small craft.

Bushire is the principal entrepôt for the supply of Persia with Indian goods. It has a considerable trade with Bombay and Calcutta, especially the former; and through them receives most of the goods brought to it from Europe, China, and the E. Archipelago. Few ships touch at Bushire without also touching at Bussorah, and conversely. The imports from Bengal are rice, sugar, indigo, pepper, and spices, with a small assortment of muslin and piece-goods. From Bombay are brought iron, steel, tin, lead, woollen cloths, cutlery, &c., with sugar, sugar-candy, preserved ginger, porcelain, &c., the produce of China; and cassia, cloves, nutmegs, and other productions of the E. Archipelago. The demand for English cotton prints is said to be increasing in Persia, while that for the fabrics of Germany and Switzerland is diminishing. Coffee is supplied from Mocha and other Arabian ports, but to no great amount, as it is not in very general use in Persia. The returns to India are mostly in horses for cavalry service; dates, and dried fruits, assafœtida, carpets, Cashmere, and Kerman shawls, Kerman wool, tobacco, old copper, turquoises, attar of roses, rosewater, &c., but chiefly in money. The other exports of Bushire are raw silk and silk goods, Shiraz wine, grain, gall-nuts, pearls, yellow-dye berries, and various drugs. The Russian provinces on the Caspian derive their supplies of indigo from Persia, by way of Bushire. The trade of the port is crippled by the imposts laid on goods passing to the capital, and the unjust and injudicious appropriation of goods on the part of the government. Formerly it was much injured by the pirates; but, thanks to British interference, these are now all but suppressed.

The merchants of Bushire are about equally divided between Persians and Armenians; the latter are the more active, intelligent, and wealthy. There are no Jews of any note, as at Bussorah; nor Banians, as at Muscat. The E. I. Company has a resident here. The population generally is a mixture of the Persian and Arab races. (*Niebuhr; Kinneir's Memoir; Buckingham's Travels; Dict. of Com. merce.*)

BUSHKILL, t., Northampton co., Pa., watered by Bushkill creek. It contains one store, one forge, four grist-mills, four saw-mills, three schools, 160 scholars. Pop. 1716.

BUSHWICK, t., Kings co., N. Y., 3 m. E. Brooklyn, 148 m. S. Albany. Situated on the W. end of Long Island, and drained by Newtown creek. Dairies are kept for the purpose of supplying the city of New-York with milk, which produce $13,200 annually. It has ten stores, four rope-walks, and various other manufactories, which, together, employ a capital of $55,000. It has six schools, 155 scholars. Pop. 1295.

BUSSORAH, called also BALSORA, BASRA, and BUSSRA, (Arab. *a margin*), a city of Turkey in Asia, pach. Bagdad, the most E. part of note in the Turkish dom., and the principal port of the Persian gulf, on the right or S.W. bank of the Euphrates, or, as it is here called, the Shat-ul-Arab (*river of the Arabs*), 70 m. from its mouth, and 45 m. below its junction with the Tigris, 270 m. S.E. Bagdad, and 220 m. W.N.W. Bushire: lat. 30° 29′ 30″ N., long. 47° 34′ 15″ E. Pop. probably 60,000.* The form of this city is an irregular oblong, lying E.N.E. to W.S.W., or at right angles with the course of the river, from which it is a few hundred yards distant. Length about 3 m., breadth opposite the river about 1 m.; circuit estimated at from 7 to 9 m. The space actually occupied by buildings does not, however, comprise above a fourth part of this area, the rest being laid out in corn-fields, rice-grounds, date-groves, and gardens, intersected by a number of little canals. Bussorah is surrounded by walls, built of sun-dried bricks, with a parapet at the top, having loopholes for musketry, and occasionally ports for cannon, but of these very few are mounted: it has five gates, and is divided into 70 *mahalls*, or quarters. Two canals, cut from the river, surround the city on either side, within a few yards of the walls, and uniting beyond the W. wall, form a complete ditch to the fortifications. A third canal leaves the river nearly midway between the other two, and is carried through the whole length of the city, serving at once to supply the inhabitants with water for domestic purposes, to irrigate the fields and gardens within the walls, and to admit of the transportation of goods. These canals are filled by the flood, which usually rises 9 feet, and left nearly dry at ebb-tide. They are mere channels dug out of the soil, without being lined by masonry; and the few brick-built bridges thrown over them in different parts of the city are of the meanest kind. Bussorah is wretchedly built; the streets are narrow and unpaved; and, notwithstanding the facilities afforded by the ebb and flow of the tide in the canals for the removal of impurities, it is most disgustingly filthy. No stone of any kind, and scarcely any wood, excepting that of the date-tree, which is very unfit for carpentry, are found within many miles of the city, which is mostly constructed of sun-dried bricks. The English factory, the *serai* of the *Mutesellim* (residence of the governor), one or two of the principal mosques, and perhaps half a dozen mansions of the richest inhabitants, are the only buildings of kiln-dried bricks, and in fact, the only decent edifices in the place. There are about 40 mosques, innumerable *khans* and coffee-houses, and a wretched bath: the bazars, though stocked with the richest merchandise, are not arched, as in Bagdad and other Persian cities; but are miserable structures, covered only by mats laid on rafters of date-trees. Bussorah is a place of considerable trade, being the grand emporium of the Turkish empire for Indian and other eastern produce. Its situation is, in this respect, so favourable, that notwithstanding the obstacles arising from bad government and unsafe access, both by land and sea, it continues to command a considerable traffic; almost every inhabitant being in some way or other concerned in trade. At the mouth of the Shat-ul-Arab there is a bar which has commonly only about 12 feet water; but the channel within is deep, and ships of 500 tons burden, provided they cross the bar at spring tides, may, without difficulty, ascend the river as far as the city. At an average, five or six British ships arrive in the course of the year from India; but the principal part of the trade is carried on in Arabian bottoms, particularly in those belonging to Muscat. The imports are muslins and piece-goods, pepper, and other spices, drugs, rice, sugar, indigo, silk, cotton yarn, Surat manufactures, shawls, Chinaware, and paper, dye-woods, coffee, lac, beads, sugar-candy, and other articles, the produce of India; with lead, iron, steel, tin, quicksilver, cochineal, &c., exported to that country from Europe. The returns to India are mostly made in

* Niebuhr estimated the population at from 40,000 to, at most, 50,000 (*Voyage*, ii., 179, Fr. ed.); and Kinneir and Keppel at 60,000. Buckingham a very inferior authority, estimates it at nearly 100,000.

the precious metals, Arabian horses, pearls, dates (a staple product of Bussorah), copper, gall-nuts, raw silk, gold fringe, coral, gums, rose-water, assafœtida, almonds, dried fruits, &c. Of these, gold and silver coin and horses constitute the principal articles. The average cost of the horses sent to Bengal is, on their arrival at Calcutta, including all expenses, about 2000 rupees or £200; that of those sent to Bombay is about 800 rupees, or £80, each. From Persia, Bussorah imports shawls, assafœtida, and fruits, and a few horses from Bushire; coffee, dates, and gums, from Arabia; pearls from Bahrein; coral from the Mediterranean, by way of Aleppo, &c. Among the returns to Persia, through Bushire, are a good many English cotton prints, received at Bussorah from the Black sea, Smyrna, and Constantinople. A taste for British cottons and woollens is now forming in all the vast countries watered by the Euphrates and Tigris, which it is of importance to this country to promote and encourage. (For the import and export duties on commodities, *see* TURKEY.)

The trade with Aleppo and Bagdad is conducted by means of caravans. The naval force of Bussorah was once sufficiently powerful to command the whole of the Persian gulf, and to suppress the marauding expeditions of the pirates who have infested it. It has now, however, dwindled to almost nothing.

The boats used upon the canals are of many different kinds, two of which may be worth notice. The first is a light canoe, long, narrow, and drawing only a few inches water, and impelled forwards by two boatmen, who stand in the head and stern, and often use short paddles alternately from side to side, presenting the appearance which Arrian, in his account of the voyage of Nearchus, describes as belonging to the boats at Kophos, the men in which seemed not so much to row as to dig the water with their oars, and to toss it up as a labourer throws up the earth with his spade. The second is a circular kind of boat of basket-work covered with bitumen, of shallow draught, capable of containing six or eight persons, and which are paddled or spun along, making a circular motion. The ebb tides occupying always twice as long a time as the flood, and the chief canal being much too small for the convenient passage of the vessels employed on it, great activity and corresponding confusion takes place for a short period only, after which most of the craft are grounded till next tide. Great inconvenience sometimes occurs from laden vessels losing the springs and lying till the next spring tide in the centre of the channel, and blocking up all passage for smaller vessels, an inconvenience which a little outlay in widening the canal would effectually obviate. But what improvement need be looked for from a Turkish government? About half the inhabitants are Arabs, one fourth Persians, and the remainder a mixture of Turks, Armenians, Jews, Catholic Christians, and Koords. The Turks are few, perhaps not above 500; they, as well as the Arabs, are of the Sunite sect, excepting a small body of Arab Christians, who call themselves Subbees, or disciples of John the Baptist. The Persians, who are of the sect of the *Schiites*, engross most of the intermediate stations in commerce, as those of clerks, shopkeepers, mechanics, &c., while among the Arabs, a man is either in easy circumstances or a mere labourer. The Armenians do not exceed 50 families; they are chiefly merchants and brokers: they have a small church, with two or three priests. The Jews amount to about 100 families; they are similar to their tribe elsewhere. The Catholic Christians are about 20 families: some are natives of Bussorah, others are recent settlers from Bagdad and Aleppo. The Subbees are a singular sect, scattered over the plain of the Euphrates, very limited in numbers, and constantly intermarrying. They practise no fasts, but baptism is frequently performed on the same individual; their places of worship are all temporary; they are very particular as to the purification of their food; and are said to hold a breach of trust in abhorrence. They are mostly mechanics and handicraftsmen, especially smiths and workers in metals. The Indians in Bussorah are chiefly Banians; and the sepoys of the British factory guard are mostly Hindoos. Some few have their women with them; altogether, they may amount to 200. The few Koords are mostly engaged under the Turks in inferior offices of trust, and in the army. Bussorah formerly constituted a separate pachalic; but its governor has for a long period been sent from Bagdad, to the pacha of which he is subordinate.

The country around Bussorah has no beauties to recommend it. It is, for the most part, a dead flat. Corn, dates, olives, pomegranates, and other fruit, vegetables, and pot-herbs, are cultivated, and there are whole fields of roses grown for the distillation of the attar, and rose-water. Wherever portions of this plain are enclosed near the city walls, and irrigated for a few years from the canals, fine garden-plots are soon produced; and, under a good government, the whole of it would no doubt become of the most exuberant fertility. At present, however, few villages or people are to be seen without the walls of the city; a monotonous and gloomy silence prevails; and on the W. and S. nothing is seen but a dreary desert extending as far as the eye can reach, with no object to break the line of the horizon but the tops of the houses of Zobeir just seen above it, and the range of Geb-el Senam. For six months of the year Bussorah is quite surrounded by water, like an island in the midst of a sea. Summer is extremely hot, and in autumn the city is unhealthy. Winter and spring are delightfully cool, refreshing, and salubrious; and Bussorah is at these seasons resorted to by invalids from India.

In the English factory, established in 1640, there is an English resident; but, with this exception, there are no Europeans in the place. The French factory has merely a nominal existence; the officer under whom it is placed resides at Bagdad.

Bussorah originated from a town now called Zobeir, 8 m. to the S.W., founded by the caliph Omar in 635 or 638, on a canal supposed to be the ancient Pallacopas. In a few years it became one of the largest and most flourishing cities of Arabia; but the canal being neglected, and becoming useless, the ancient site of the city was abandoned. The present city was taken by the Turks in 1668, by the Persians in 1777, and by the Montefik Arabs in 1787. A few months after the latter conquest it was retaken by the Turks, to whom it has ever since belonged. (*Kinneir's Persian Empire*, p. 288-292; *Niebuhr, Voyage en Arabie*, ii., 179-196; *Keppel's Journey from India to England*, i., 69-78; *Buckingham*, ii., 126, 207.)

BUSTI, p. t., Chatauque co., N. Y., 392 m. W. by S. Albany, 336 W. Bounded N. by Chatauque lake. It contains one store, one grist-mill, five saw-mills, sixteen schools, 756 scholars. Pop. 1604.

BUTE, a co. of Scotland, consisting of the islands of Bute, Arran, the Cumbraes, and Inchmarnock, all in the Frith of Clyde. Its total area is estimated at about 165,000 acres, of which about 60,000 are cultivated, 40,000 improvable, and 65,000 unimprovable. It contained, in 1841, 5 parishes, 3067 inhab. houses, and 15,695 inhab., being 6625 males, and 7656 females. Valued rent, £15,042, Scotch; annual value of real property in 1815, £22,541. The co. returns one mem. to the H. of C.; registered electors, 1838-9, 374.

BUTE, the island whence the above co. takes its name, in the Frith of Clyde: it is separated from the district of Cowall in Argyleshire by a narrow, winding channel, called the Kyles of Bute, is about 5 m. W. from the nearest point of the Ayrshire coast, and is about 19 m. in length (N.N.E. and S.S.W), by about 4 in breadth. Pop. in 1831, 6630, of which 4817 belonged to the bor. of Rothesay. Its N. extremity, towards Argyle, is bleak and rugged, but its central and S. parts consist for the most part of undulating grounds, with moderately good soil, fit either for tillage or pasturage. The climate is remarkable for mildness and salubrity, but is particularly humid, which renders it not so suitable for agriculture as for the raising of cattle. Agriculture has, however, been materially improved of late years; and a good deal has been done in the way of consolidating farms, building improved houses, opening new roads, &c. The town of Rothesay on the E. coast, famous for its old castle, once the residence of the Scottish monarchs, is now become, in the summer seasons, a favourite resort of the citizens of Glasgow. The principal part of the island belongs to the Marquis of Bute, whose seat, Mountstuart on the E. side of the island, a little to the S. of Rothesay, is its chief ornament. Most part of the inhab. speak Gaelic; but the use of English is daily becoming more prevalent. Kean, the eminent tragedian, had a seat, in a secluded situation, in the interior of the island.

BUTLER, county, Pa. Situated in the W. part of the state, and contains 800 sq. m. The Alleghany river touches its N.E. and S.E. corners. Drained by Slippery Rock and Connequenessing creeks, which flow W. and unite before entering Beaver river. It contained, in 1840, 26,051 neat cattle, 51,191 sheep, 40,144 swine; and produced 254,914 bushels of wheat, 107,703 of rye, 125,007 of Indian corn, 91,261 of buckwheat, 660,179 of oats, 286,153 of potatoes. It had fifty-nine stores, three furnaces, three fulling-mills, four woollen-factories, two powder-mills, fifty-four grist-mills, sixty-four saw mills, four oil-mills, five potteries, twenty-two tanneries, thirteen distilleries, two printing-offices, two weekly newspapers, two academies, 119 students, 134 schools, 5252 scholars. Pop. 22,378. Capital, Butler.

BUTLER, county, Ala. Situated in the S. part of the state, and contains 1000 sq. m. Drained by branches of Conecuh river. It contained, in 1840, 5550 neat cattle, 1112 sheep, 10,757 swine; and produced 3198 bushels of wheat, 116,766 of Indian corn, 4293 of oats, 8392 of potatoes, 696,302 pounds of cotton. It had fourteen stores, one cotton-factory, with 984 spindles; twenty-three grist-mills, sixteen saw-mills, four tanneries, six academies, 236 students,

nine schools, 233 scholars. Pop.: whites, 6192; slaves, 2470; free-coloured, 23; total, 8685. Capital, Greenville.

Butler, county, Ky. Situated W. of the central part of the state, and contains 570 sq. m. Watered by Green river, which is navigable through the co. It contained, in 1840, 5784 neat cattle, 4978 sheep, 21,564 swine; and produced 15,313 bushels of wheat, 183,088 of Indian corn, 35,424 of oats, 4103 of potatoes, 170,776 of tobacco, 16,409 of cotton, 10,324 of sugar. It had six stores, two flouring-mills, seven grist-mills, three distilleries, one academy, 51 students, three schools, 98 scholars. Pop.: whites, 3370; slaves, 515; free-coloured 4; total, 3898. Capital, Morgantown.

Butler, county, O. Situated in the S.W. part of the state, and contains 480 sq. m. The Miami river and the Miami canal cross it. It contained, in 1840, 21,908 neat cattle, 29,172 sheep, 68,838 swine; and produced 318,720 bushels of wheat, 99,291 of rye, 2,943,661 of Indian corn, 1760 of buckwheat, 12,556 of barley, 550,990 of oats, 46,035 of potatoes, 38,860 pounds of sugar. It had 121 stores, two lumber-yards, one fulling-mill, six woollen-factories, seventeen flouring-mills, twenty-one grist-mills, thirty-eight saw-mills, four oil-mills, two paper-mills, ten tanneries, forty-nine distilleries, two breweries, three potteries, three printing-offices, one daily and two weekly newspapers, two colleges, 254 students, one academy, 62 students, seventy-nine schools, 2837 scholars. Pop. 28,173.

Butler, p. t., Wayne co., N. Y., 178 m. W.N.W. Albany, 358 W. Drained by small streams flowing into lake Ontario. Chartered in 1826. It contains one Methodist and one Baptist church, one store, one grist-mill, two saw-mills, one distillery, one tannery, eleven schools, 735 scholars. Pop. 2271.

Butler, p. b., capital of Butler co., Pa., 203 m. N.N.W. Harrisburg, 245 W. Situated on the N. side of Connequenessing creek, a branch of Mahoning river. Incorporated in 1817. It contains a court-house, a handsome building on elevated ground on a public square, which has fine and capacious public offices attached; a jail of stone, an academy endowed by the state, which has a stone edifice; five churches, one Presbyterian, one Methodist, one Episcopal, one Unionist, and one Roman Catholic; thirteen stores, three tanneries, one pottery, two printing-offices, two weekly newspapers, two academies, 119 students, two schools, 125 scholars, and over 100 dwellings. Pop. 861. The *township* contains two powder-mills, four grist-mills, seven saw-mills, one oil-mill, one brewery, fourteen schools, 359 scholars. Pop. 1384.

Butler, t., Luzerne co., Pa. It contains one store, one flouring-mill, nine saw-mills, two schools, 80 scholars. Pop. 514.

Butler, t., Branch co., Mich. It has three schools, 40 scholars. Pop. 234.

Butler, t., Columbiana co., O. It has seven schools, 241 scholars. Pop. 1711.

Butler, t., Dark co., O. Pop. 1116.

Butler, t., Montgomery co., O. It contains one fulling-mill, one woollen-factory, five grist-mills, four saw-mills, two tanneries, five distilleries, six schools, 325 scholars. Pop. 1896.

Butler, t., Knox co., O. Pop. 647.

BUTTERMILK CHANNEL, the passage between Governor's island and Long Island, in the harbour of New-York. It admits the passage of the largest vessels.

BUTTERNUTS, p. t., Otsego co., N. Y., 94 m. W. by S. Albany, 341 W. Drained by Butternut creek and Unadilla river. It contains three churches, one Presbyterian, one Methodist, and one Baptist, eight stores, four fulling-mills, three grist-mills, eleven saw-mills, one oil-mill, three tanneries, eighteen schools, 769 scholars. Pop. 4057.

BUTTS, county, Ga. Situated in the central part of the state, and contains 420 sq. m. Bounded N. and E. by Ockmulgee river. It contained, in 1840, 466 neat cattle, 2522 sheep, 15,046 swine; and produced 34,637 bushels of wheat, 294,395 of Indian corn, 28,813 of oats, 5385 of potatoes, 926,659 pounds of cotton. It had twenty-four stores, eleven grist-mills, six saw-mills, one academy, 64 students, four schools, 120 scholars. Pop.: whites, 3825; slaves, 2029; free coloured, 1; total, 5308. Capital, Jackson.

BUXTON, a town, and fashionable watering-place of England, co. Derby, hund. High Peak, par. Bakewell, 140 m. N.W. by N. London. Pop., in 1821, 1036; in 1831, 1211: houses at the latter date, 231. It stands in a valley surrounded by hills of considerable elevation, except at one narrow opening, through which the Wye flows. The old town stands on much higher ground than the modern one, and consists of one wide street, in which are a few respectable inns and lodging houses, but the greater number are low, ancient buildings: it has a market-place, with an old cross in the centre. The new part, commencing with the Crescent, extends along the Bakewell road. This is an elegant range, in the Grecian style, comprising two hotels, a library, news and assembly rooms, baths, and some private houses; the whole erected by the late Duke of Devonshire, in 1781, at a cost of £120,000. The adjoining square has an arcade, continuing that of the Crescent, and forming, with it, a covered promenade of considerable extent. Connected with the range of stabling at the back, is a spacious covered ride; altogether, there is accommodation for about 1500 visiters; and during its season (from June to Oct.) from 12,000 to 15,000 usually resort to the town. The church is an elegant modern structure, also built by the late Duke of Devonshire. There are four dissenting chapels; an endowed school, on Bell's plan; and a "Bath Charity," supported by subscription, for poor invalids coming from any part, with a proper testimonial from the minister of their parish: they have the gratuitous use of a bath, and maintenance for a month. From 1100 to 1200 are thus annually relieved. At the W. end of the Crescent stands the old hall, built by the Earl of Shrewsbury, in the reign of Elizabeth, in whose custody Mary Queen of Scots was placed; who, being occasionally permitted to visit Buxton, occupied apartments in it. It is now an inn. The public and private baths are numerous, and fitted up with every attention to comfort. St. Anne's Well, where the waters are usually drunk, is a handsome Greek building: it supplies both hot and cold water from springs that rise at a short distance from each other: the temperature of the latter is 66° Fahr.; that of the Buxton hot waters is, in all seasons, invariably 82° Fahr. Besides these (which are properly *the Buxton waters*), there is a chalybeate spring, issuing from a chalk stratum behind the Crescent, which has a building over it, and is occasionally drunk: when mixed with that of the other springs, it forms a purgative. These mineral waters rise on the western edge of the limestone range which occupies that portion of Derbyshire called the Peak Forest, extending from Castleton southwards, and consisting of alternate beds of limestone and amygdaloid (road stone), the former abounding in polypiferous and other fossils. A large fault traverses the whole, and in this dyke the thermal springs, both of Matlock and Buxton, rise; the latter being at the S. end of the out-cropping of the lowest limestone bed. Buxton waters have been celebrated for their medicinal virtues from the Roman period. According to Mr. Gardner the following is their analysis:

	Cub. in. per gall.
Carb. acid	1·50
Azote	4·64
Gaseous matter	6·14

	Grs. per gall.
Hydrochlo. magnesia	·58
Ditto soda	2·40
Sulph. lime	·60
Carb. lime	10·40
Extractive matter and loss	1·02
Solid matter	15·00

The water is hard, in consequence of the calcareous matter, but perfectly clear; nor does it become turbid by any length of exposure. It is used as baths, or topically, by pumping on particular parts of the body; and is also taken internally, in quantities varying from ½ pint to 1½ pint, in the course of a day: it is considered beneficial in dyspeptic cases; and as a bath in cases of gout and rheumatism. The chalybeate spring has ½ grain carbonate of iron in 1 gallon: it is very soft water.

There is a weekly market on Saturday, and annual fairs on Feb. 2, April 1, May 2, and Sept. 8; this last is for cattle. The ann. val. of real prop. in 1815 was £5810. The sale of the mineral productions of the district, and the manufacture of ornamental vases, &c., from fluor and alabaster, occupies many of the natives. About half a mile W. of the town, lime is quarried and burned to a considerable extent, and conveyed along the High Peak railway for some distance. There are many public walks laid out with great taste, and the neighbourhood in all directions is most interesting and romantic. Near the lime quarries is Pool's Hole, an immense natural cavern covered with stalactites, which have a very brilliant appearance when lighted by the guides who show the cave; beyond this is the Diamond Hill, so named from the profusion of well-defined hexagonal crystals dispersed through the soil. Five miles in the direction of Castleton is a curious intermittent spring. Buxton was a Roman station, and two great military roads intersect near it: vestiges of a Roman bath, and many Roman coins, have been discovered.

Buxton, p. t., York co., Me., 65 m. S.W. Augusta, 539 W. Incorporated in 1772. Bounded W. by Saco river, which has here a fall of 80 feet, affording great water-power. It contains twelve stores, two fulling-mills, two grist-mills, twelve saw-mills, six tanneries, one pottery, fifteen schools, 1271 scholars. Pop. 2688.

BUZANCOIS, a town of France, dep. Indre, cap. cant., partly on the banks of the Indre, and partly on islands in its channel; the connexion between its different divisions being maintained by means of five bridges, 14 m. N.W. Chateauroux. Pop. 4587. But though the situation be exceedingly good, the town is very ill-built, and presents a confused mass of old houses, interspersed with narrow,

crooked, and gloomy streets. There are in its environs some considerable foundries, and it carries on some trade in wool. (*Hugo*, art. INDEX, &c.)

BUZZARD'S BAY, situated on the S. shore of Mass. and is 30 m. long, with a medial breadth of 7 m. It approaches within 5 m. of Cape Cod bay, to which it has been proposed to cut a canal.

BYBERRY, p. t., Philadelphia co., Pa., 113 m. E. by S. Harrisburg, 14 m. N.E. Philadelphia, 155 W. Watered by Poquessing creek, which flows into Delaware river. 60,000 corn brooms are exported annually. First settled in 1682. It contains a Friend's church, five stores, two flouring-mills, three saw-mills, one academy, 26 students, five schools, 183 scholars. Pop. 1055.

BYFIELD, p. v., Essex co., Mass, 35 m. N. by E. Boston, 6 m. S.W. Newburyport, 468 W. Situated partly in Rowley town., and partly in Newbury t. Parker river has falls of near 40 feet within a mile of tide-water, and affords extensive water-power. Dummer academy was founded here in 1756 by Lieut. Gov. Dummer, who gave an extensive and valuable farm for its support. On the lower falls was erected the first woollen factory in New-England, and perhaps in America. It contains a Congregational church.

BYRAM, r., in the S.W. part of Connecticut, enters Long Island sound, and, in its lower part, separates Connecticut from the state of New-York. It is 18 m. long.

BYRAM, t., Sussex co., N. J., 8 m. S.E. Newton. Situated on South mountain. Bounded S. by Musconetcong river. Iron ore is found. It contains four stores, four forges, two grist-mills, five saw-mills, one distillery, eight schools, 294 scholars. Pop. 1153.

BYRD, t., Brown co., O. It has five schools, 314 scholars. Pop. 2421.

BYRD, t., Cape Girardeau co., Mo. It has five schools, 123 scholars. Pop. 2575.

BYRON, p. t., Genesee co., N. Y., 10 m. N.E. Batavia, 234 m. W. by N. Albany. Drained by Black creek, which affords water-power. It contains several sulphur springs. The village has two churches, three stores, several mills, thirty dwellings, and about 200 hundred inhabitants. The t. contains four stores, two fulling-mills, one flouring-mill, three grist-mills, five saw-mills, nine schools, 400 scholars. Pop. 1907.

C.

CABARRUS, county, N. C. Situated in the S. part of the state, and contains 300 sq. m. Drained by the head branches of Rocky river, which flows into Yadkin river. It contained, in 1840, 10,816 neat cattle, 9142 sheep, 21,600 swine; and produced 86,300 bushels of wheat, 2034 of rye, 418,180 of Indian corn, 51,998 of oats, 17,276 of potatoes, 174 pounds of silk cocoons, 4,568,726 of cotton; and produced gold to the amount of $3,761. It had fifteen stores, eighteen flouring-mills, twenty grist-mills, twelve saw-mills, four academies, 107 students, twenty-two schools, 513 scholars. Pop.: whites, 6971; slaves, 2179; free coloured, 109; total, 9259. Capital, Concord.

CABELL, county, Va. Situated in the W. part of the state, and contains 100 sq. m. Bounded W. by Big Sandy river. Drained by Guyandott river. It contained, in 1840, 9261 neat cattle, 9631 sheep, 19,606 swine; and produced 39,327 bushels of wheat, 379,121 of Indian corn, 96,285 of oats, 17,138 of potatoes, 6375 pounds of tobacco. It had twenty-two stores, two flouring-mills, thirteen grist-mills, eight saw-mills, four tanneries, one academy, 15 students, twelve schools, 324 scholars. Pop.; whites, 7574; slaves, 567; free coloured, 22; total, 8163. Capital, Barboursville.

CABES, or GABES, a sea-port and city of Barbary, reg. Tunis, at the bottom of the gulf of the same name (*Syrtis Minor*), near the foot of mount Hancara, on the right bank of a small river; lat. 33° 53′ 55″ N., long. 7° 44′ 1″ E. Pop. doubtful, but said by Mr. Blaquiere to amount to 30,000. It is defended by a castle in pretty good repair. Streets regular, but narrow and filthy. Owing to the gradual filling up of the bay, its port is now only accessible to vessels of small burden. The chief article of export is a powder made of the odoriferous leaves of a plant called *hennah*, raised in the surrounding gardens. This powder is used as a pigment by the ladies of the East, and is, consequently, in great demand.

Cabes is said by Dr. Shaw to be the *Epictus* of Scylax, and the *Tacape* of other ancient geographers. Ruins of the ancient city, among which are several square granite columns, 12 ft. in length, are met with on a rising ground, about ½ m. from the new city. The little river which runs through the city (the *Triton* of the ancients) is diverted into a great number of channels, for the purpose of watering the hennah gardens. (*Shaw's Travels*, p. 113, 4to ed.; *Blaquiere's Letters from the Mediterranean.*)

CABINDA, a sea-port town of Lower Guinea, cap. Ed-Goyo, on the Atlantic, 50 m. N. from the mouth of the Zaire, lat. 5° 33′ S., long. 15° 40′ E. Pop. unknown. It is distinguished by its beautiful situation, and the fertility of its territory, which have obtained for it the title of the paradise of the coast. Its harbour is safe and commodious. The exports are slaves, ivory, honey, and wax. The natives are uncivilized, and difficult to deal with. The Portuguese have frequently attempted, but without success, to get a footing in this place.

CABIN POINT, p. v., Surry co., Va., 43 m. S.E. Richmond, 14 m. W.N.W. Surry C. H., 166 W. Situated S. of Chipoak creek. It contains a store, and about twenty dwellings

CABOT, p. t., Caledonia co., Vt., 20 m. N.E. Montpelier, 535 W. Drained by Winooski or Onion river, which affords water-power. Joe's pond in its N.E. part flows to Passumpsic river, and thence to Connecticut river. It therefore occupies the height land between the Connecticut and lake Champlain, to both of which its waters flow. Chartered in 1781, first settled in 1785. It contains a Congregational and a Methodist church, four stores, two fulling-mills, one woollen factory, one grist-mill, nine saw mills, two tanneries, fifteen schools, 450 scholars. Pop. 1440.

CABOTVILLE, p. v., Springfield t., Hampden co., Mass., 95 m. W. by S. Boston, 367 W. Situated on the S. side of Chicopee river, near its entrance into Connecticut river. It contains three churches, one Congregational, one Universalist, and one Baptist, seven-cotton factories, with 35,000 spindles, which manufacture to the amount of over $1,000,000 annually. It contains numerous other manufactories, and has over 2000 inhabitants.

CABRA (an. *Ægabrum*), a town of Spain, prov. Cordova, near the source of the river of the same name, partly on two hills and partly in a plain planted with vines and olives; 28 m. S.S.E. Cordova. Pop. 11,890. Some of the streets are wide and straight, with streams of water running through them, and good houses with magnificent fronts. There is a large, but irregular square; many public and private fountains and promenades; some ancient mosques, and other ruins. Here is, also, a college, with classes for the study of grammar, philosophy, mathematics, and design. The products consist of tiles, bricks, white soap, coarse linen and hempen cloths, with wines, brandy, vinegar, oil, and flour. There are nearly four hundred gardens attached to the town, which supply most parts of the district with fruit and vegetables. The neighbourhood produces marble of various kinds, gypsum, and clay for bricks and pottery. The crater of an extinct volcano is situated in the precincts of the town. It was a place of consideration among the Romans, and also with the Moors. (*Mifiano.*)

CABRERA, a small island of the Mediterranean, belonging to Spain, 9 m. S. Cape Salinas, Majorca.

CACCAMO, a town of Sicily, prov. Palermo, cap. cant., 24 m. S.E. Palermo. Pop. 6563.

CACERES, a town of Spain, prov. Estremadura, cap. district; 41 m. N. Merida; on a mountain ridge, washed by three rivers, along one of which there are nearly 3 m. of gardens; 24 m. W. Truxillo. Pop. 10,000. It has an episcopal palace, some good public buildings, with many good private houses. It has, also, a Jesuits' college, the most sumptuous in the prov.; a public school; a seminary, or college, with professorships of grammar, and the Latin and Oriental languages, philosophy, divinity, medicine, and jurisprudence; a hospital for infirm persons, widows, and orphans. It was formerly united to Portugal, and was then of much more consideration than at present. It has some flour-mills, fulling-mills, with tanneries, *lavaderos* for washing wool, dyeing works, &c. It appears to have been a Roman station, some magnificent ruins having been discovered in and within a short distance of the town. (*Mifiano.*)

CACHAO, or KE-CHO, often called by the natives *Bakthan*, the largest city of the empire of Anam, cap. of its N. div. or Tonquin, on the right bank of the Tonquin river, about 80 m. W. the gulf of Tonquin, and 325 m. N.N.W. Hué; lat. 21° N., long. 105° 34′ E. Pop. probably not far short of 100,000. (*Crawfurd.*) It is of great extent, but defended only by a bamboo stockade. Chief streets wide, and mostly paved with brick or small stones; the others narrow and unpaved. Some houses, chiefly those belonging to foreigners, are built of brick; but the greater number are of only mud and timber. Public edifices spacious, especially one royal palace, and the ruins of another; the walls surrounding each of which are reported to be of vast extent. It has a considerable trade, and had formerly both English and Dutch factories. The imports are long cloths, chintzes, arms, pepper, &c.; the exports, gold, fine silk fabrics, and lacquered wares, the best of the East. The N. branch of the Tonquin river, which once admitted much larger ships, is said, in consequence of the accumulation of

sand at its mouth, to be now impracticable for those above 200 tons burden. The city, being composed to so great an extent of inflammable materials, is very subject to destructive fires; and a rigid police is always on the alert to prevent the use of those for domestic purposes for more than a few hours in the day. It was nearly burned to the ground by some incendiaries in the course of the 17th century. (*Crawfurd, Emb. to Siam, &c.; Hamilton, &c.*)

CACHAR, or HAIRUMBO, a territ. of India beyond the Ganges, formerly governed by its own rajah, but, since 1832, substantially a British gov., subordinate to the presid. Bengal. It lies between lat. 24° and 27° N., and long. 92° and 94° E.; having N. Assam; E. Cassay, S. Tipperah; and W. Sylhet and Jynteah: length N. to S. about 140 m.; area and pop. as follows (*Pemberton*, 1835):

	Sq. m.	Pop.
S. Cachar	2,866	50,000
Central Cachar	2,224	14,000
N. Cachar	1,417	(6,000)
	6,507	70,000

This prov. is surrounded on three sides by mountain chains: on the N. the Naga mountains cut it off from the Dharmpoor district and the valley of the Brahmaputra; on the W. the boundary is formed by the same chain, which, running S., forms the E. frontier of Chittagong and Aracan, and opposite Sylhet and Munepoor is from 2000 to 4000 feet high: on the S. is an elevated chain, running E. and W., and inhabited by the Kookies. Another range runs parallel to the latter, in about lat. 25° 20′ N., dividing Southern from Central and Northern Cacha, and from 4000 to 6000 ft. high; all these ranges are covered from base to summit with vast forests. The plains are mostly in S. Cachar, where their height above the sea is about 200 feet. (*Pemberton.*) The chief rivers are the Barak, Capilee, Jumona, and Dhunseree. The first rises among the mountains between Cassay and Assam, in lat. 25° 30′ N. and long. 91° 20′ E., and flows with a very tortuous course for 180 m. through S. Cachar, which it leaves at Banga (Sylhet). It varies considerably in width, but is sometimes 150 or 200 yds. across, and is navigable for boats of some burden to 20 m. above Banskandee: during the rains it has 30 or 40 ft. depth of water, and the country through which it flows is inundated from June to November. The mountain-streams afford ready access to the forests, and are of farther service in floating down timber, rattans, bamboos, &c., from which much revenue has been realized by the former rajahs. No lakes have been enumerated. During the S.W. monsoon there are frequent and long-continued falls of rain, beginning in February or March, from which period vegetation proceeds with great rapidity. The excessive moisture renders the climate unhealthy; and ague, dysentery, and diarrhœa, are frequent: but it modifies the heat in summer, reducing it four or five degrees below the temp. of Calcutta. In the cold season fires, morning and evening, are found essential to comfort. The fertility of the soil is very great: rice and other grain, sugar-cane, and cotton, the latter especially, N. of the central hills, grow luxuriantly. Timber is very abundant in the mountain ranges, and has always been an important source of wealth: in other parts a dense and lofty reed and grass jungle rapidly springs up after the rains, affording cover for vast numbers of wild deer, buffaloes, elephants, &c.

S. Cachar is a valuable addition to our Eastern possessions; its fertile plains, which are continuous on the W., with the well-watered ones of Sylhet, extend E. as far as Jeree river, a tributary of the Barak. There are 1850 sq. m. of surface S. the Barak; 1700 of which are a fertile plain, now almost wholly unoccupied, although the traces of numerous villages abound on the banks of the rivers. N. of the Barak there are 1000 sq. m. of surface, 480 of which are estimated to be arable land of a very fine quality. This tract is daily becoming better inhabited, and immediately along the banks of the Barak is a belt of rich cultivation not surpassed in any part of Bengal, and the tracts contiguous to it are in process of being cleared: a considerable emigration appears to have taken place thither from Bengal. The pop. of S. Cachar consists of three or four different classes, viz., 1. Cacharees; 2. Musulman Bengalese, who are the chief of the petty landholders; 3. Hindoo Bengalese, and, 4. Mixed tribes, as Nagas, Kookies, and Cassayers: the first two have long inhabited the S. and E. hills, but tendered little homage to the Cachar rajahs; and the Cassayers have been settled there by the British government, and, by their bold and military qualities, form a valuable protection against the other hill tribes to the inhabitants of the plains. From 1831 to 1834 the revenue of S. Cachar increased from 30,600 to 40,400 rupees: the gross charges in the latter year were 31,000 rupees.

From the central ridge, looking N., is seen a vast mass of dark and dense forest, bounded by the Koplii, Jumona, and Dhunseree rivers; extending for about 70 m., broken only by a few specks of cultivation, and the scattered huts of a few Cacharees and Kookies, who earn a livelihood principally by the cultivation of cotton, which they barter for other produce to the inhabitants of Assam and Dhurrumpoor. About 6000 of the pop., in Central Cachar, are probably aborigines: the remainder are Kookies and Loloongs, most likely from the S. and S.E. Emigration from Sylhet into Cachar has been greatly encouraged by the assignment of lands at the low rate of 3 annas per bega, to be held rent free for 1000 days, at the end of which time the quantity of land cleared was to be assessed. Capt. Pemberton thinks that for some years neither N. nor Central Cachar will yield much revenue; but the tranquillity insured to their W. neighbourhood by the possession of these districts, renders them important. The revenue derived from the whole prov. by a former rajah is said to have been a lac of rupees a year. The people of the central hills bring cotton, ivory, wax, iron-ore, and bamboos into Central Cachar: about 2000 jarool timbers (half the number formerly exported) are sent down the Barak into Sylhet, for building large *chunaw* boats. The other exports are salt, coarse silk, and limestone.

Routes.—Three routes through Cachar into Cassay part from Banskandee near the E. extremity of the cleared plains: viz., those of Aquee, Kala Naga, and Khonginee. By the former, or most N., the distance from Banskandee to Jasenagur, in the Cassay central valley, is 86 m.; the first 30 m. of which pass through a dense forest abounding in swamps, and intersected with small streams, which rapidly become impassable after rains. The Kala Naga route is in all these respects preferable, and also crosses the Juree river 8 m. from its confluence with the Barak, up to which point the latter is navigable for boats of 500 maunds. The third route passes over the hilly country of the Kookies, and is useless for military purposes. (*See* CASSAY.) Several roads towards the central hills traverse S. Cachar, which all unite in one valley, and thence run through the central and N. divisions towards Assam, into which there are three separate routes through Cachar from Sylhet. The military protection of this prov. is entrusted to two companies of the Sylhet light infantry. Cospoor is the ancient capital, but Silchar, S. the Barak, is the present residence of the chief authorities. The Cacharees are strong, robust, fairer than the Bengalese, and like the Chinese in features. The original Hairumbian dialect is said to have been monosyllabic, but is now nearly extinct; the language and written character of Bengal having usurped its place. The Kookies, who have been for years gradually advancing it, are supposed by Capt. Pemberton to be of Malay origin; they are seldom much more than 5 ft. in height; their complexions nearly as dark as those of the Bengalese; voices soft, and language harmonious. Small parties, of from ten to thirty of them, formerly made frequent secret incursions within our frontiers, in search of human heads, which would seem to be necessary articles at the performance of certain of their religious ceremonies, if we may so abuse the phrase. Although checked, these incursions are still far from being prevented.

Cachar was unknown to the British until 1763, when Mr. Verelst led a small force into it. In 1774 it was invaded by the Birmese, and some time after rendered tributary by them. In 1810 they placed the rajah of Munnipoor on the throne of Cachar; and, from 1818 to 1823, a civil war for supremacy between that chief and his two brothers devastated the province. By the treaty of Zandaboo, in 1826, Cachar was placed under British protection, and the rightful rajah re-established; but on his death, in 1830, without any heir, it became, in 1832, an integral part of the British territory. (*Pemberton's Rep. on the E. Frontier*, p. 188–210.)

CACHET, Greene co., Ark. It has one school, 25 scholars. Pop. 804.

CADDO, parish, La., situated in the N.W. corner of the state, and contains 2500 sq. m. Bounded E. by Red river. It contains Caddo lake, a large body of water, in its N. part. It contained in 1840, 5310 neat cattle, 144 sheep, 14,927 swine; and produced 177,515 bushels of Indian corn, 45,230 of potatoes, 2,891,300 lbs. of cotton. It had sixteen stores, three saw-mills, one tannery, one printing-office, one weekly newspaper, two academies, 45 students, three schools, 42 scholars. Pop.: whites, 2416; slaves, 2837; free coloured, 29; total, 5282. Capital, Shreveport.

CADDO, t., Clark co., Ark. Pop. 661.

CADDO, t., Hot Spring co., Ark. It has one school, 27 scholars. Pop. 907.

CADEROUSSE, a town of France, dep. Vaucluse, on the left bank of the Rhone, which at this point encloses a considerable island, 3 m. S.W. Orange. Pop. 3362. It has silk filatures, and produces corn, silk, and madder.

CADIZ, a famous city and sea-port of Spain, in Andalusia, on the Atlantic, 63 m. S. Seville, and 60 m. N.W. Gibraltar; lat. 36° 31′ 7″ N., long. 6° 18′ 52″ W. Pop. (1838) 58,525. The city occupies the rocky and elevated extremity of a long, low, narrow tongue of land, projecting about 5 m.

N.N.W. from the Isle of Leon, and enclosing between it and the main-land a spacious bay, which has everywhere good anchorage, and some excellent harbours. The port of Cadiz is formed by a mole projecting from the city into the bay; but it is accessible only to small vessels, ships of large burden anchoring ¾ m. off shore. The bay is divided into the inner and outer bays by the promontory, having at its extremity the fort of Matagorda. The isthmus joining the city to the main-land is in parts not more than from 200 to 300 yards across, and is very strongly fortified: the access to the city from the sea is in some places rendered impracticable by the steepness of the rocks, the occurrence of sand-banks and of sunken ledges; and being everywhere defended by ramparts, bastions, and detached forts, it would, were these kept in proper repair and well garrisoned, be all but impregnable; so that, as respects convenience and security, Cadiz, with its bay and dependencies, is probably unmatched, and certainly not surpassed as a naval dépôt. Streets straight, and though rather narrow, are remarkably well paved, clean, and lighted with lamps. The houses, in general lofty, have a court in the centre; they are mostly built of white freestone, and some of them are ornamented with painted balconies. There are several squares; but, with the exception of that of San Antonio, in the centre of the city, they are all of very limited dimensions. The ramparts afford, perhaps, the finest marine promenade that is anywhere to be met with: the view on the E. side extends across the bay to St. Mary's and the other towns by which it is lined, and to the mountains in the distance: on the W. the eye ranges over the boundless expanse of the Atlantic.

With the exception of the fortifications, Cadiz has no public buildings of any importance. The most conspicuous is the light-house of San Sebastian, on the bastion of that name, having the lantern elevated 172 ft. above the level of the sea. There are two cathedrals—an old and a new; but the latter is unfinished, and, when the city was visited by Mr. Inglis, its interior was converted into a rope-walk, and other parts into a mahogany warehouse. There is a custom-house, several hospitals, churches, convents, &c.; but none of them require any particular notice. The town labours under a great deficiency of water, having none that is potable but what is brought in vessels across the bay from St. Mary's, or what is collected in cisterns. Being almost surrounded by the sea, the climate is comparatively temperate; the summer heats are, in fact, less violent than in Madrid, though it be so much farther south, while the cold of winter is not nearly so severe. It is not unhealthy; but, like most other towns on the S. coast of Spain, is occasionally visited by epidemics. The great drawback upon it as a place of residence is its want of trees and shade, and the impossibility of getting into the fields or the country, except by crossing the bay, or travelling the whole length of the isthmus. There is a tolerable theatre, where Italian operas are sometimes performed; but those who wish to enjoy the national diversion of bull-fights must cross the bay to St. Mary's. Morals here are said to be, if possible, even at a lower ebb than in other Spanish cities. Lord Byron's statements (*Childe Harolde*, i., § 65) may, perhaps, be suspected of poetical exaggeration; but, according to Mr. Inglis, "female virtue is a thing almost unknown, and scarcely appreciated."

The *Caracca*, or royal dockyard, is situated at the bottom of the inner bay, about 6 m. from the city, on the channel separating the isle of Leon from the main-land. This used formerly to be a very complete establishment; and as many as 5000 men were kept constantly at work in it. Now, however, it is all but deserted, and is said not to possess the means of fitting out a single ship. (*Scott's Ronda and Granada*, ii., 74.)

The commerce of Cadiz was formerly very extensive. For a lengthened period, indeed, she possessed a monopoly of the trade with the vast possessions belonging to Spain in the New World; and notwithstanding the abolition of the monopoly in 1778, she continued to engross by far the larger portion of the trade with the countries in question down to their emancipation. This event gave a blow to the commercial importance of Cadiz, from which it has not recovered. Its influence might, no doubt, have been in a great measure obviated, had the Spanish government adopted a more liberal policy in relation to its intercourse with other countries. But oppressive duties and restrictions have gone far entirely to destroy the foreign trade of Spain; and have thrown what little remains almost wholly into the hands of the smugglers; and Cadiz not being very suitable for the operations of the latter, has suffered accordingly. To raise its commerce from the depressed situation into which it had fallen, government made it, in 1829, a free port, that is, a port into which goods might be imported, and from which they might be exported, free of duty. In consequence of this privilege, it immediately became a principal dépôt for the foreign products destined for the Spanish market; and the smuggling carried on from the town was so great, that, in 1832, government not choosing to reduce the duties which occasioned it, and being unable otherwise to repress the abuse, withdrew the privilege, so that the trade again relapsed into its state previously to 1829. It has still, however, a larger share than any other Spanish town of the trade with Cuba, Puerto Rico, and Manilla, the only remaining colonies of Spain; and it, or rather its dependency, St. Mary's, is the centre of the sherry trade, all the wines of Xeres being shipped either from the one or the other.

The principal articles of import are fabrics of linen, wool, silk, and cotton, of which, however, a large proportion is destined for re-exportation; sugar, cocoa (of which there is a very great consumption in Spain), coffee, and other colonial produce; timber, tobacco, hides, salted fish, &c. Wine forms by far the principal article of export; the quantity shipped from Cadiz and the different ports round the bay may be estimated at about 30,000 butts a year, of the value of near £1,000,000 sterling; of which about a half in quantity, and far more than a half in value, comes to England: the other articles of export are—quicksilver, provisions, brandy, salt, wool, oil, &c. In 1834, the value of the articles imported is said to have amounted to £1,156,000, and that of the exports to £1,700,000. In 1837, the import of sugar was 150,534,774 lbs.; of coffee, 36,654,515 lbs.; of leaf tobacco, 1,196,185 lbs.; and of cigars, 143,704,500 in number. Subjoined is a statement of the navigation of the port with foreign countries and the transatlantic possessions of Spain, in 1834:

Ships of	Entered.		Sailed.	
	Ships.	Tons.	Ships.	Tons.
England	290	32,962	264	27,825
United States	43	8,390	55	13,471
Russia	21	5,093	25	6,718
France	45	7,107	17	1,773
Sweden	7	1,664	20	4,339
Portugal	57	5,160	20	805
Brazil	4	501	15	2,440
Hanse Towns	18	2,656	10	1,139
Sardinia	8	1,396	11	2,143
Holland	14	2,463	5	652
Belgium	10	2,110	1	120
Peru	3	713	6	1,587
Buenos Ayres	6	1,049	4	987
Monte-Video	2	513	7	1,380
Denmark	2	192	11	1,621
Other countries	36	1,523	37	3,562
Colonies	99	13,506	62	9,620
Totals	665	86,938	570	80,822

The pop. and wealth of the city have declined with its trade. The number of inhab. has fallen off from about 70,000 to under 60,000; and many of the houses are unoccupied, and even rapidly falling to decay. The sea-wall erected on the S. side of the city, to defend it against the encroachments of the sea, and which is justly regarded as one of the greatest works of the kind ever undertaken and completed, has been allowed, for want of timely repair, to fall into a state of dilapidation. The fortifications are also getting into a bad state; and the appearance of the city is characteristic of the paralyzed and abased state of the monarchy.

Cadiz is very ancient, having been founded by the Phœnicians. In 1596 it was taken and sacked by the English, by whom it was again ineffectually attacked in 1623 and 1702. In 1809 it became the asylum of the Cortes, and was blockaded by the French till 1812. In 1823 it surrendered to the French under the Duc D'Angoulême. (*Scott's Ronda and Granada*, ii., 64–75; *Inglis's Spain in 1830*, ii., cap. 15; *Penny Magazine*, May, 1839; *Dictionnaire du Commerce*, art. *Cadiz; Miñano; Townsend, &c.*)

CADIZ, p. t., capital of Harrison co., O., 114 m. E.N.E. Columbus, 284 W. The village contains a large brick court-house, three churches, two Presbyterian, both of brick, and one Methodist; a steam grist-mill, one academy with 20 students, three schools, 253 scholars. Pop. 1098. The t. contains one academy, 25 students, five schools, 327 scholars. Pop. 1366.

CADIZ, p. v., capital of Trigg co., Ky., 226 m. W.S.W. Frankfort, 753 W., situated on the S. side of Little river, 9 m. from its entrance into Cumberland river. It contains a court-house, jail, one church, and a male and female seminary. It has considerable trade, particularly in tobacco, and contains about 450 inhabitants.

CADRON, t., Conway co., Ark. Pop. 312.

CAEN, a town of France, dep. Calvados, of which it is the capital, in an extensive valley between two large meadows, at the confluence of the Odon with the Orne, about 8 m. from the embouchure of the latter, 30 m. S.W. Havre; lat. 49° 11′ 12″ N., long. 0° 21′ 38″ W. Pop., ex com., 39,886. This is a well-built, improving town. The streets are generally broad, straight, and clean; and the houses of freestone have a good appearance. It was formerly a place of considerable strength, being defended by a castle, and surrounded by massive walls, flanked with towers. The latter

and the walls have almost disappeared: the castle, which was of great size and strength, was partly demolished at the Revolution; the portion of it that still remains is now used as a prison. There are four squares, of which the Place Royale, ornamented with a statue of Louis XIV., is the finest. A *cours*, or public walk, shaded by magnificent elm-trees, extends for nearly a mile along the banks of the rivers. There are some fine old churches, of which the most interesting is the *Abbaye aux Hommes*, built by William the Conqueror; it is a large, plain building, with two very high spires; and contains, among other interesting monuments, the tomb of the Conqueror; but the latter was violated by the Huguenots, in 1562, and the bones dispersed. The *Abbaye aux Femmes*, also very ancient, is now the Trinity Hospital, one of the best managed establishments of the kind anywhere to be met with. The church of St. Peter has the finest spire in Normandy; and several of the other churches deserve notice. Among the other public buildings are the hotel of the prefecture, the Hôtel de Ville, the Palace of Justice, the Hôtel Dieu, &c. Caen has been long celebrated for its university, founded in 1431, by Henry VI., king of England. It was remodelled after the Revolution, and now exists under the title of an *académie universitaire*. There are here, also, a royal college, or high-school, with from 450 to 500 pupils; a secondary school of medicine; a primary normal school; a school of hydrography; a public library, containing 47,000 volumes; a botanical garden, with a good collection of plants; a school of architecture and design; a deaf and dumb school; museums of pictures and natural history; with numerous societies for the promotion of literature and the fine and useful arts; a theatre, &c. It is the seat of a royal court for the depts. of Calvados, Manche, and Orne; and for tribunals of original jurisdiction and commerce. In its vicinity is a *maison centrale de détention*, which, in December 1833, had 481 male, and 288 female inmates: when finished, it will contain 1600. Manufactures important and valuable. They consist principally of laces, and of thread and silk, the making of which employs a vast number of people; stockings and caps, table linen, a variety of cotton fabrics, coarse and fine earthenware, cutlery, hats, with brewery, oil-works, &c. At high water, vessels of 150 or 160 tons come up the river as far as the town, where they lie alongside fine quays. In 1837, the value of the imports amounted to 1,092,980 fr., and that of the exports to 151,585 fr.

Several large fairs are held for the sale of the products of the town, and of the horses, cattle, butter, fowls, &c., of the surrounding country. In consequence of its excellent establishments for education, and other advantages, Caen is a favourite resort of English families. It has produced several distinguished men; among whom are Malherbe, the father of French poetry; the learned Huet, bishop of Avranches, Tannegui, Lefèvre, &c.

Caen is not very ancient. It became of importance under the dukes of Normandy, by whom it was fortified. It has undergone several sieges, and fell finally into the possession of the French in 1448, when it was taken from the English by Dunois. It was taken by the Protestants in 1562, when it suffered severely. (*Hugo*, art. *Calvados*.)

CAERLEON, a decayed town of England, co. Monmouth, hund. Usk, par. Llangattock, on the Usk, 18 m. S.W. Monmouth. Pop. in 1831 only 1071. This was the *Isca Silurum* of the Anglo-Romans, and was then of great importance, being the cap. of the prov. of Britannia Secunda. At a later period, it was celebrated as a seat of learning, and, in the 12th century, Giraldus Cambrensis gave a lively, though perhaps exaggerated, picture of its wealth, and magnificence. Several Roman antiquities have been dug up in the town and its vicinity, and in several parts the Roman walls are still visible. An elliptical concavity, the longest diameter measuring 74 yards, and the shortest 64, and 6 yards in depth, is situated in a field close by the Usk, near the S.W. side of the town. The country people call it Arthur's Round Table; but no doubt it is the remains of an amphitheatre. Within the course of last century stone seats were discovered on opening the sides of the concavity; and, in 1706, an alabaster statue of Diana was found in it. It has a well-endowed charity school for maintaining and educating 30 boys and 20 girls, till they attain the age of 14, when they are apprenticed, the former having £7 and the latter £4 each. (*Beauties of England and Wales. Coxe's Monmouthshire, &c.*)

CAERMARTHEN, a marit. co. of S. Wales, having S. Caermarthen bay, which unites with the Bristol channel, E. the cos. of Glamorgan and Brecon, N. Cardigan, and W. Pembroke. Area, 623,360 acres, being the largest county in the principality. Surface very various, in part mountainous, and in part consisting of low, fine vales: the largest and most celebrated of the latter is the vale of Towy, stretching for about 30 m. along the river of that name, by which the co. is intersected, with an average breadth of about 2 m. Exclusive of the Towy, Caermarthen is separated from Cardigan by the Taafe, and in part from Glamorgan and Pembroke by the Longhor and the Taafe. The portion of this co., S. and E. of the Towy, adjoining Glamorgan, is included in the great coal-field of S. Wales: at Llanelly there is also an abundant supply of iron-stone, and considerable iron-works. Soil of the arable land mostly a sandy loam, easily wrought, admirably adapted to the turnip husbandry, and in general very productive. But agriculture here, and indeed in the greater part of Wales, is in an extremely backward state. The occupiers are, for the most part, uninstructed, and strongly attached to ancient practices. Drainage, though the first and most essential of improvements, is almost wholly neglected; tenants are not usually under any restrictions as to management, and the common practice is to take corn crops in uninterrupted succession from the land till it be completely exhausted. The farm implements and stock are also bad; and the whole system evinces the want of intelligence, capital, and industry. (*Kennedy and Grainger on Tenancy*, p. 169.) Average rent of land in 1810, 7*s.* 2½*d.* an acre. Manufactures unimportant. Principal towns, Caermarthen, Llanelly, and Kidwelly. It contains 8 hunds. and 78 pars., and had, in 1841, 23,407 inhab. houses, and 166,482 inhab., of whom 50,795 were males and 55,795 females. It returns two mem. to the H. of C. for the co., and one for the bor. of Caermarthen. Registered electors for the co., in 1837–38, 5125. Sum paid for the relief of the poor only, in 1837–38, £37,564. Annual value of real property in 1815, £282,030.

CAERMARTHEN, the cap. of the above co., and a co. by itself, finely situated on an irregular acclivity on the N.W. bank of the navigable river Towy, 7 m. N. from its embouchure in Caermarthen Bay, Bristol channel; lat. 51° 51′ 10″ N., long. 4° 19′ W.; 180 m. W. by N. London. Pop. (1821) 8906; (1841) 37,512. A few of the streets are tolerably wide, well paved, lighted with gas, and contain many respectable houses; but the rest are narrow and crooked, and those leading to the river steep, and the pop. much crowded: the best houses are on the Milford line of road. The supply of water is bad and inadequate. There is a large plain church, several dissenting chapels, and a grammar school, from which scholars were admitted to take orders previously to the estab. of Lampeter college; a Presbyterian college for young men intended for that ministry (of which the corporation nominate the master and 6 scholars), a Lancastrian and a national school. The guildhall, a handsome edifice raised on pillars, has under it the market-place for corn. It has also a theatre, and bor. and co. jails; the latter is on part of the site of the old castle (of which some remains are still left), on the brow of the hill rising abruptly from the river; along which the quay extends. The river is crossed by a fine bridge of seven arches. Markets, Wednesday and Saturday; and cattle fairs, April 15, June 3 and 4, July 10, Aug. 12, Sept. 9, Oct. 9, Nov. 14 and 15. There are no manufactures of any importance in the town; but, as it furnishes the populous district in the vicinity with articles of general consumption, its trade is considerable. Principal exports (all coastwise), bark, marble, slate, lead ore, leather, corn, butter and eggs; imports, general cargoes of British and colonial produce, and manufactures, and timber and deals. At an average, 10 cargoes a year are imported from abroad, the vessels sailing outward in ballast. Custom duties between £2000 and £3000 a year. About forty vessels belong to the port, and vessels of 50 to 150 tons are built here. It is a creek, comprised in the port of Llanelly. Vessels of 200 tons may ascend to the bridge at spring tides; but many obstructions are suffered to accumulate in the river, so that they are frequently obliged to discharge 2 m. below. The salmon fishery, which was once very extensive, has much decreased. Races are annually held in Sept., 4 m. up the vale of the Towy. It is the central town of a poor law union of sixteen pars.; its own average rates amount to £4,026.

Caermarthen has returned one mem. to the H. of C. since the reign of Henry VIII. The limits of the present parl. bor. coincide with those of the ancient bor., but Llanelly is now joined with it, as a contributary bor. Previously to the Reform Act, the elective franchise in Caermarthen was exercised by persons admitted *de jure* burgesses, under qualifications of a freehold estate within the bor., *ex gratiâ*, and servitude of apprenticeship for seven years. Registered electors in both bors., in 1837–38, 868. The election of a mem. for the co. takes place here. The limits of the municipal bor. are now restricted to the town and a small space round it. It is divided into two wards, and governed by a mayor, six aldermen, and eighteen councillors; a sheriff and recorder. Courts of petty sessions are held weekly; fortnight courts, for the recovery of debts, and courts of general sessions twice a year, for the bor.: the assizes and three of the general quarter sessions of the co. are also held in the town.

Its ancient castle, in the last civil war, was at first garrisoned for Charles I., taken subsequently by the parlia-

mentary forces, and dismantled by order of Cromwell, in 1648. Caermarthen meet, on the whole, be considered a flourishing and increasing town. A column has been erected at its W. end by public subscription in memory of the public services of Sir T. Picton, who fell at Waterloo, and had previously represented this bor.

CAERNARVON, a marit. co. of N. Wales, separated from Anglesea by the Menai strait, extending from Conway, on the N., in a S.W. direction along the shore to the extremity of the peninsula of Lleyn opposite Bardsey island, having E. part of Cardigan bay, and the cos. of Merioneth and Denbigh. Area 348,160 acres. This is the most mountainous co. in the principality, being traversed in its whole extent by the Snowdon range (*see* SNOWDON): it has, however, some limited tracts of comparatively low fertile land. The Conway, which has its sources in the co., and forms for a considerable distance the line of demarcation between it and Denbigh, is the principal river; but there are several streams of inferior dimensions, and some small lakes. Lead and copper ores have been found within the co., and have been wrought to some extent, but not with much success. The slate quarries belonging to Lord Penryhn, near Bangor, employ about 1600 men and boys, and are the most extensive and valuable in the empire; and other slate quarries in this co. employ about 1700 men and boys. Soil of the greater part of the arable land hazelly loam. Agriculture, though a good deal improved, is still in a comparatively backward state: leases are either not granted, or they contain no proper regulations as to management; a proper rotation of crops is not generally observed; the land is not generally clean and in good heart; and the implements are still, in many instances, defective. Oats is the principal corn crop. Breed of cattle small and hardy. Average rent of land in 1810, 5*s.* 2½*d.* an acre. The older class of farm buildings and cottages, especially the latter, are as bad as possible; but luckily they have been in many parts replaced by others of a new and improved character. Manufactures unimportant. Principal towns, Bangor (a city), Caernarvon, and Conway. Caernarvon is divided into ten hunds. and sixty-nine pars.; and had in 1841, 16,869 inhab. houses, 14,553 families, and 81,068 inhab., of whom 39,600 were males and 41,468 females. It sends one mem. to the H. of C. for the co., and one for the town of Caernarvon and its contributary bors. Registered electors for the co., 1837–38, 2050. Sum expended for the relief of the poor only, in 1838, £18,803. Annual value of real property in 1815, £131,213.

CAERNARVON, a sea-port and parl. bor. of N. Wales, cap. of the above co., on the S.E. side of the Menai strait, at the mouth of the Seiont, 7 m. S.W. from the Menai bridge, and 205 m. N.W. London. Pop. in 1821, 5210; in 1831, 6977. This town, with its magnificent castle, was built by Edward I., between 1282 and 1284, as a place of strength to secure his newly achieved conquest of Wales. The walls, constructed by the conqueror round the town, are still pretty entire. They are flanked with round towers, and had originally two principal gates, but others have been since added. Within the walls, the streets, though narrow, are regular; but of late years, new streets and buildings have been erected without the walls, and the whole town has been much improved; it is well supplied with water, and lighted with gas. Pennant says of it, that it "is justly the boast of N. Wales, for the beauty of its situation, the goodness of its buildings, the regularity of the plan, and, above all, the grandeur of the castle, the most magnificent badge of our subjection." (*Tour in Wales*, ii., 404, 8vo ed.) The par. church is ½ m. from the town; but the latter has a handsome chapel of ease, and four dissenting chapels, and a British and a national school. The town-hall is over one of the ancient gateways, and one of the old towers is fitted up as a prison: there is also a co. hall, a small theatre, and a modern market-house for provisions, the old one being now used for corn. Many opulent families reside in the neighbourhood, and the town is much resorted to in the proper season by sea-bathers. To accommodate them and other visiters, an excellent hotel has been built by the marquis of Anglesea, and there are also hot and cold baths, assembly and billiard-rooms, &c. Outside the walls is a fine terrace walk along the Menai, resorted to in the summer evenings by all descriptions of people.

There are no manufactures of any importance. The harbour, which has of late been a good deal improved, admits vessels of 400 tons, but the trade of the port, which is mostly with Liverpool, Bristol, and Dublin, is principally by small coasting vessels and steamers. The principal export is slate, brought from the quarries by a railway. The removal of the coast duties on slate has occasioned a great increase of demand here and in other ports whence it is exported. (*Boundary Report.*)

Previously to the Reform Act Caernarvon returned one mem. to the H. of C., conjointly with the contributary bors. of Conway, Criccieth, Nevin, and Pwlheli, the right of voting being in the resident and non-resident burgesses. To these contributary bors. the Reform Act added Bangor. The limits of the ancient bor., with which the parl. bor. coincides, are about 8 m. in circ. Registered electors in all the bors. in 1837–38, 1099. The limits of the municipal bor. extend about 1½ m. round the town. Corporation revenue about £700 a year. The assizes and general quarter sessions for the co. are held here. Market-day, Saturday; fairs, March 12, May 16, Aug. 12, Sept. 20.

Caernarvon Castle is one of the noblest and most magnificent ruins of its kind in the empire. The walls, which enclose an area of about 3 acres, are 7 ft. 9 in. thick, have within them a gallery with slips for the discharge of missiles, and are flanked by thirteen strong pentagonal, hexagonal, &c., towers. A narrow chamber in the Eagle Tower was the birthplace of Edward II., the first Saxon prince of Wales. Near the steep bank of the river Seiont, at a small distance from the castle, is an ancient Roman fort, the walls of which are still pretty entire. At a small distance from this, and 1½ m. from the Menai, is the site of the ancient Roman station of *Segontium*, whence, it is most probable, Edward I. derived part of the materials for building the castle and town of Caernarvon. (*Pennant's Wales; Bingley's ditto, &c.*)

CAERNARVON, t., Berks co., Pa. It contains two stores, one flouring-mill, three grist-mills, three saw-mills. Pop. 639.

CAERNARVON, t., Lancaster co., Pa. It contains seven stores, two forges, one fulling-mill, one woollen-factory, four flouring-mills, six grist-mills, four saw-mills, three tanneries, three distilleries, seven schools, 210 scholars. Pop. 1599.

CAERPHILLY, a town and chapelry of S. Wales, co. Glamorgan, hund. Caerphilly, par. Eglwyse-islan, between the Taaf and the Rumney, 7 m. N. Cardiff. Pop. of the par. in 1831, 2818. The town is an irregular collection of ancient and modern houses; but it has a good appearance, and being surrounded by mountain ranges that open on the E. and W., the scenery is grand and picturesque. It has a neat Episcopal chapel, and three dissenting places of worship. Market, Thursday, and fairs for cattle, corn, and cheese, April 5, Trinity Thursday, July 19, Aug. 25, Oct. 9, and Nov. 16. Manufactures of checks and linsey-woolsy shirting for miners, employ about 100 persons; the rest are engaged in the mines and quarries of the neighbourhood or in agriculture. It was anciently a bor., but lost its privileges in the reign of Henry VIII. Its castle, whose magnificent ruins show that it must have been one of the finest in the kingdom, was of Norman origin, and enlarged at successive periods, but chiefly by the favourite of Edward II., Hugh le De Spencer, for whom it was wrested from the Mortimers, its ancient possessors.

CÆSAREA, a ruined and deserted coast-town of Palestine; lat. 39° 23′ 27″ N., long. 34° 44′ 35″ E. Under the Romans, it was the cap. of the district in which it stands, and the residence of a proconsul. An artificial harbour, a castle, the walls of the city, and two aqueducts, are among the most perfect remains, but a great extent of ground is covered with the ruins of public and private buildings. It owed its existence, or importance, to Herod the Great, who named it *Cæsarea*, in compliment to Augustus, B.C. 22. It figures in the early history of Christianity as the place where Peter converted Cornelius and his house (Acts, x., 1), and as the scene of Paul's memorable speeches to Felix and Agrippa (Acts xxiv., xxv., and xxvi.). Vespasian made Cæsarea a Roman colony, under the name of Flavia Caesaria, and it continued to flourish till A.D. 635, when it fell into the hands of the Saracens. In 1101 it was taken by the Crusaders, and in the wars of this period it sank never to rise again. (*Robinson*, i., 189–192; *Hogg*, ii., 185; *Pococke*, v., 16; *Josephus, Bel. Jud.*, xxi., 5.)

CÆSAR'S CREEK, t., Green co., O. Watered by Cæsar's creek, which flows into little Miami river. Pop. 1738.

CAFFA. *See* KAFFA.

CAGLI (an. CALLIS), a town of the Papal States, delegation Urbino and Pesaro, at the foot of mount Petraro, at the confluence of the Cantiano and Busso, 14 m. S. Urbino. Pop. 4000. It has a cathedral, and four convents for monks, and four for nuns.

CAGLIARI (an. *Calaris*), a marit. city of Sardinia, of which it is the cap., on a bay of the same name on the S. shore of the island, lat. 39° 12′ 13″ N., long. 9° 6′ 44″ E. Pop. about 26,000. (*Smyth.*) In the middle ages, it appears to have been restricted to a triangular space, on the summit of a hill about 400 ft. above the beach, now called the "Castle," which is walled round, and has a citadel on its N. side. To this were successively added the Marina, a portion extending down the W. face of the hill from the castle to the sea, which is surrounded by a slight wall, flanked by some bastions, and farther defended by a wide but shallow ditch; the quarter of Stampace, to the W. of the castle; and that of Villanova to the E. The modern city consists of these four portions; there is, besides, a suburb nearly a mile in length, called S. Avandrès. Cagliari has an imposing appearance from the sea. The Marina is in-

tably well built, but Villanova quite otherwise; and the streets generally are narrow, irregular, dirty, steep, and paved with round pointed stones. There are, however, some excellent and even splendid public buildings, and many spacious private houses. The castle is the part in which the nobility and state officers reside. It contains the vice-regal palace, a fine edifice; the cathedral, built by the Pisans, with a front in great part of marble; a handsome mausoleum of Martin, king of Sicily; a celebrated cryptic sanctuary; the citadel, and three large square towers, good specimens of Pisan art; the university, with its four faculties of theology, law, medicine, and philosophy, and between 200 and 300 students; and other public seminaries. The Marina is inhabited chiefly by merchants, and by the foreign consuls; it contains a good bonded warehouse, an arsenal, lazaretto, and mole. In Stampace are the corn-market and storehouses. Cagliari contains besides about thirty churches, twenty-one convents, to one of which, belonging to the Jesuits, there is a very handsome and richly ornamented church attached; two hospitals, a female orphan asylum, a public library, with 15,000 volumes, museums of antiquities and natural history, a college of nobles, a *seminario*, a small theatre, mint, three prisons for galley-slaves, &c. At the S. angle of the Marina wall there is a very commodious *darsena*, or pier-harbour, capable of containing fourteen or sixteen vessels of a tolerable size, besides small craft. The port is one of the best and safest in the Mediterranean. Ships usually lie about a mile S.W. by S. from the mole, in 6 or 8 fathoms water, on an excellent bottom of mud. The gulf of Cagliari, which extends from Pala on the W. to cape Carbonara on the E., 24 m. across by 12 m. deep, has good anchorage everywhere, after getting into soundings. The city being placed on a hill, is healthy, notwithstanding the immediate proximity on its W. side of the stagnant lagune of Cagliari, 6 or 7 m. long by 3 or 4 m. broad. This lake abounds with fish and aquatic birds. To the E. of the city, there are some good salt-works. Cagliari possesses a royal manufactory of tobacco, and has manufactories of cotton fabrics, cake saffron, soap, chairs, and other furniture, tanneries, &c. Its trade is chiefly in corn, legumes, salt, oil, and wine. From the portion of commerce it enjoys, Cagliari has, on the whole, a busy appearance. Provisions of all kinds are cheap and plentiful, except water. The castle is supplied from cisterns and extremely deep wells. Extensive remains exist of a fine ancient aqueduct, which might be restored at a comparatively small expense. There are several other Roman antiquities, including a tomb in tolerably good preservation, and an amphitheatre excavated in the rock near the city walls. Vestiges of the ancient Greek city may be still traced beyond Stampace. A good carriage-road of recent construction connects Cagliari with Sassari.

Cagliari is the seat of a royal *audiencia*, or head tribunal, and of the *cortes*, or states-general of the island; of a tribunal of commerce, an intendent-general, a general-commandant, and an archbishop with the title of primate of Sardinia.

The city is very ancient, its foundation being carried back to the fabulous ages. It was the residence of the king of Sardinia from 1798 to 1814, during the occupation of his continental dominion by the French. The latter bombarded it unsuccessfully in 1793. (*Smyth's State of Sardinia*, p. 205–222, &c.; *Marmora, Voyage en Sardaigne.*)

CAHABA, river, Ala. It is 120 m. long, and flows into Alabama river, at Cahaba v. on its W. side, 195 miles above its junction with Tombigbee river.

Cahaba, p. v., capital of Dallas co., Ala., 92 m. S.S.E. Tuscaloosa, 853 W. Situated on the W. side of Alabama river, immediately below the junction of Cahaba river. It contains a court-house, jail, a U. States' land-office, and a number of stores and dwellings.

CAHER, an inl. town of Ireland, co. Tipperary, prov. Munster, on the Suir, 96 m. S.W. by S. Dublin. Pop. in 1821, 3998; in 1831, 3408. Pop. of par. in 1834, 6026; of whom 113 are of the established church, and 5913 Roman Catholics. The town is well built; the parish church and Roman Catholic chapel are large fine buildings; the Society of Friends have also a meeting-house. There is a market-house, bridewell, fever hospital, dispensary, schools on the foundation of Erasmus Smith, and large cavalry barracks. The staff of the Tipperary militia, and a party of the constabulary, are stationed here. The earl of Glengall's mansion is in the town. Races take place annually in the neighbourhood. A manorial court is held every six weeks; petty sessions weekly. The linen and straw-plat manufacture are carried on upon a small scale; much is done in the corn trade. Markets are held on Fridays; fairs on 8th February, 12th April, 26th and 27th May, 20th July, 18th and 19th September, 20th October, and 7th December. The post-office revenue in 1830 was £388, and in 1836, £511. The contemplated railroad from Tipperary to Killaloe will pass through the town, as does one of the mail-coach roads from Dublin to Cork, and that from Waterford to Limerick The mail car from Clonmel to Limerick also passes through Caher. (*Railr. Rep.*)

CAHOKIA, p. v., St. Clair co., Ill., 98 m. S. by W. Springfield, 811 W. Situated on the E. bank of Mississippi river, 5 m. S.E. St. Louis. It was founded by the French in 1683, had fifty families at the commencement of the Revolutionary war, and was early engaged in the fur-trade. The Mississippi once washed its border, but in three years it receded a mile and a half from it.

Cohokia, creek, Ill., enters the Mississippi river, 2 m. above the ferry at St. Louis. It passes through the American bottom, and a dam near its mouth sets the water back for 15 m. Along its border are 60 or 70 mounds of various shapes and dimensions.

CAHOES or CAHOOS FALLS, Albany co., N. Y., are on the Mohawk river, 3 m. above its entrance into Hudson river. They have a perpendicular descent of 70 feet, and in time of high water, they present a grand and imposing spectacle. The banks below consist of perpendicular rocks about 100 feet high. About a mile below the falls the river is crossed by a bridge, from which a fine view of the cataract is presented. A little above the falls the Erie canal crosses the river in a fine aqueduct. By a dam near its mouth, the Champlain canal crosses in the bed of the river, the dam serving as a tow path. Half a mile above the falls, where is a dam, the water of the river is taken out in a canal 2 m. long, with an entire descent of 190 feet, affording a vast water-power.

CAHORS, a town of France, dep. Lot, of which it is the cap., on the Lot, 60 m. N. Toulouse; lat. 44° 25′ 59″ N., long. 1° 27′ 17″ E. Pop., ex com., 10,944. It stands principally on an eminence, almost surrounded by the Lot, and is for the most part ill built, with narrow, crooked streets. It was formerly defended on the land side by towers and ramparts, that stretched across the isthmus; but of these only the ruins now remain. It is traversed by the great road from Paris to Toulouse, and has three bridges over the river, one of which, built in the 13th century, is surmounted by three enormous towers. The cathedral has been supposed to be partly of Roman construction; but it is pretty certain that the most ancient part of the building is not older than the 6th century. With the exception of the hotel of the prefecture, the ancient episcopal palace, few of the other public buildings deserve notice. It is the seat of a bishopric, and has tribunals of primary jurisdiction and of commerce. Cahors had a university, founded in 1339: the famous jurist Cujas was, for a while, one of its professors, and Fenelon was of the number of its pupils. The university was united to that of Toulouse in 1751. At present it has an *académie universitaire*; a royal college or high school, with about 250 pupils; a diocesan seminary, with 150 pupils; a primary normal school; a public library with 12,000 volumes; a theatre; a society of agriculture, &c. The manufactures, which are not very considerable, consist principally of some descriptions of woollen goods and paper. There is contiguous to the town a departmental nursery. The excellent red wine, called the *vin de grove*, is raised in its territory; and it has a good deal of trade in that and other wines, and in oil, hemp, flax, &c.

Cahors is supposed to be the ancient *Divona*, the capital of the *Cadurci*. The Romans embellished it with several fine edifices, of some of which there still remain a few vestiges. The principal of these are a portico, supposed to have made a part of the public baths; with the ruins of a large theatre or circus, and of an aqueduct for conveying water into the town. There have also been dug up fragments of columns, mosaics, and numerous medals of Tiberius and Claudius. In more modern times, it has undergone many vicissitudes. In 1580, it was besieged by Henry IV., and being taken, after an obstinate resistance, it was, despite Henry's efforts to the contrary, given up to military execution. (*Martinière*, art. *Cahors*; *Hugo*, art. *Lot*, &c.)

CAIPHA, or KAIFA, a small marit. town of Palestine, at the foot of Mount Carmel, on the W. side of the bay of Acre. The harbour is one of the best along the coast (*see* Acre), and the ancient river Kishon flows past the town. It has a fortress with a garrison; but the most important and interesting building in the place is a hospice maintained by the monks of Mount Carmel, where strangers of all nations and religions are lodged and entertained. The Kishon is referred to in the song of Deborah and Barak (Judges, v., 21). It is famous also as the place where Elijah slew the prophets of Baal (1 Kings, xviii., 40). (*Robinson*, i., 193; *Hogg*, ii., 176.)

CA IRA, p. v., Cumberland co., Va., 57 m. W. by S. Richmond, 147 W. Situated on the W. side of Willis river, a branch of James river, which is navigable 12 miles above this place, and 60 miles from its mouth. It contains a church free to all denominations, three stores, one tobacco warehouse, one flouring mill, forty dwellings, and about 240 inhabitants.

CAIRO, or KAHIRA (*El Cha'hirah*, Arab., "the Victorious," called by the inhabitants *Masr*), the modern cap. of Egypt, and the second city of the Mohammedan world; chief residence of the Pacha, and seat of his government, near the right or E. bank of the Nile, about 12 m. above the apex of its delta, 112 m. S.E. Alexandria, 97 m. S.S.W. Damietta, and 75 m. W. Suez; lat. 30° 3′ 21″ N., long. 31° 18′ 45″ E. Pop., including its port of Boulac, Old Cairo, &c., about 240,000 of whom about 190,000 are Egyptian Moslems, 10,000 Copts, from 3000 to 4000 Jews, and the rest strangers from various countries. (*Lane's Mod. Egypt, &c.*) Shape oblong, being nearly 3 m. in length, by 1½ to 2 m. in breadth, on sloping ground, midway between the Nile and the E. mountain range of Mokattem, and occupying an area of about 3 sq. m. The distance of its N. extremity from the Nile at Boulac is upward of a mile; but from its S. extremity to the bank of the river where Old Cairo stands, is somewhat less than ½ m. The intervening tract is laid out in gardens or otherwise cultivated, and watered by a canal. Viewed from a distance, Cairo has a magnificent and interesting appearance; but, like most other E. cities, its interior has a very different aspect from its exterior. It has, however, though still susceptible of much improvement, been, within these few years, quite changed from the wretched place so often depicted by travellers. Filth of every description, putrid ditches, drains never cleaned, unburied carrion, fragments of vegetable matter, all in various states of decomposition; want of free circulation of air, clouds of dust, and multitudes of deformed beings, are among the nuisances formerly complained of; but, according to more recent observers, the rigid police established by Mehemet Ali has already effected so desirable a change, that, for cleanliness, as well as order, quiet, and the absence of crime, Cairo "may now rank with the best governed capitals of Europe." (*MS. Account of Cairo.*) The clouds of dust, apparently the most difficult to deal with, have, as well as the want of a free circulation of air, been in a great measure obviated by the removal of a number of high mounds of sand, scoriæ, ashes, earth, broken pottery, and other rubbish, which formerly encircled the city, some of them elevated 150 ft. above its level; and by the continual watering of the public thoroughfares.

On entering Cairo, the European visiter is gratified and interested with the entire contrast this city presents to all he has left behind him in Europe. In the words of a British resident, "here everything is oriental; the style of the buildings, the shaded streets, the aspect and costumes of the people, the quiet and repose universally prevailing; no rattling of carriages and carts; no rushing, busy crowds, intent on their different pursuits; but in their stead, the solemn camel and his patient little attendant, the donkey, making their noiseless way under their burdens; the people gathered in groups around the doors of the *cafés*, chatting or smoking; the shopkeeper listlessly reclining in his stall; the sentinel, half asleep at his post, while the guard within lie stretched in profound repose; all yielding to the influence of a climate as delightful as it is salutary, and which fortunately acts as an opiate, to some extent, against the many physical ills the people are exposed to from a bad and rapacious government." Cairo at present contains 240 principal streets, forty-six public places (squares), eleven bazaars, 140 schools for the instruction of children, 300 public cisterns, 1166 coffee-houses, sixty-five public baths, 400 mosques, and several considerable hospitals. The whole city is enclosed by a stone wall, terminated on the S.E. by a detached and scarped rock rising more than 200 ft. above the level of the Nile, on which stands the citadel. This fortress, with the city walls, was built or restored by Saladin, about 1176. The walls have battlements, and lofty towers at about 100 yards apart. They are, however, of little strength, and have been suffered, in many parts, to fall to decay. There are four gates, praised for their grandeur and magnificence. The streets still continue to be unpaved, and are mostly so very crooked, narrow, and irregular, that they might more properly be called lanes. There is but one as wide as Cranbourne Alley. Though deprived of a great deal of light, they are rendered cool, by the upper stories of the houses projecting over them, so as not unfrequently to meet each other. "By a stranger who merely passed through the streets, Cairo would be regarded as a very close and crowded city; but that this is not the case, is evident to a person who overlooks the town from the top of a lofty house, or from the minaret of a mosque. The great thoroughfare streets have generally a row of shops along each side. Above the shops are apartments, which do not communicate with them, and which are seldom occupied by the persons who rent the shops. To the right and left of the great thoroughfares are by-streets and quarters. Most of the by-streets are thoroughfares, and have a large wooden gate at each end, closed at night, and kept by a porter within, who opens to any persons requiring to be admitted. The quarters mostly consist of several narrow lanes, having but one general entrance, with a gate, which is also closed at night; but several have a by-street passing through them." (*Lane's Mod. Egyptians*, i., 7, 8.) The Jewish quarter is, as in all other cities, the filthiest; the Copts, Franks, and other nations, generally speaking, inhabit distinct quarters, though there is no restriction in this respect, the whole city being free to all. In the Frank quarter, where also many of the Armenian and Syrian Christians reside, the streets are rather wider than elsewhere. The houses are solidly constructed and lofty, being mostly two stories high, and frequently more; their lower parts are built or cased with the soft calcareous stone of the Mokattem mountains, the layers of which in front are often painted alternately red and white; their upper parts are commonly of brick; their roofs, which are flat, serve for many domestic purposes, and are the resort of the family in the cool of the evening. Most considerable houses enclose an open unpaved court, into which the doors and windows of the principal apartments open. The windows of the upper apartments generally project 1½ ft. or more, and are commonly formed of wooden latticework, close enough to shut out much of the light and sun, and to screen the inmates from observation, while they admit the air; occasionally, glass windows, which sometimes are finely stained, are made use of. The front doors of the larger houses are handsomely carved, painted, decorated with Arabic inscriptions, and furnished with iron knockers and wooden locks. The court-yard and ground floors commonly contain wells, fountains, pools, stables, and other domestic offices, and a hall sometimes very handsomely fitted up, in which the master of the house receives his visiters; the upper apartments are those of the women and children. Lodging-houses, or caravanseras, called by Mr. Lane *wekaleh*s, and designed for the reception of merchants and their goods, are somewhat differently laid out; and such persons as have neither a wife nor a female slave are usually obliged to take up their abode in one of these buildings. (*Lane*, i., 30.) There are several open spaces or squares: *Esbekieh*, the principal, is surrounded by many of the finest palaces and other structures in Cairo; its centre is laid out as a garden, and is, like some of the other squares, annually overflowed by the inundation of the Nile. The waters of that river are conducted into the city by a canal, believed by Pococke, Shaw, and others, to be the *Fossa Trajanus* (ΤΡΑΙΑΝΟΣ ΠΟΤΑΜΟΣ) of Ptolemy's Geog. (lib. iv., c. 5), and which, commencing at Old Cairo, runs through the whole length of the modern town, filling a number of public and private basins, and irrigating numerous gardens planted along its banks.* The citadel is, in many respects, one of the most interesting monuments in Cairo. Clarke (*Trav.*, v., 127–129) adduces several authorities to prove that it stands upon the spot once occupied by the Acropolis of the Egyptian Babylon, erected by Cambyses upon the site of the still more ancient Latopolis, a city almost as old as Memphis. This much, however, seems certain, that a similar structure existed here previously to the time of Saladin, to whom, according to Shaw (*Trav.*, 295), the restoration, rather than the construction, of the citadel should be ascribed. The rocky hill on which it is built is separated by a chasm about 400 yards wide from the Mokattem hills. Its walls are massive, rest on a foundation of scarped rock, and have recently been put into a respectable state of repair: but, being commanded by the Mokattem hill, on which a fort has been placed, and being open both on the E. and W. to the fire of artillery, it could not hold out for any length of time against a European force. Within its precinct are the palace and harem of the pacha, the mint, the council chamber or divan, a mosque built by Mehemet Ali, a military arsenal, and various other public offices and works of the Mameluke monarchs. The pacha's palace and harem are plain white-washed buildings, presenting nothing remarkable, and the new mosque has some bas-reliefs in marble, imported from Genoa, conceived and executed in the worst taste. The Egyptian coin is all struck in the mint, but the process hitherto pursued has been of the rudest kind. The arsenal contains foundries for brass and iron cannon, manufactories of small arms, and workshops for the supply of all sorts of military equipments. Taken altogether, it is the finest establishment in Egypt. But the greatest curiosity in the citadel is Joseph's Well, supposed to have been dug by Saladin. It is 45 ft. in circ. at its mouth, being cut through soft calcerous strata to the depth of 276 ft., or to the level of the Nile, from which its water is most probably derived. A winding staircase conducts to its bottom, and Clarke observes, that for the general perfection of the work, "it may be compared rather to the labours of the ancient Egyptians than to any modern undertaking."

* Previously to the annual inundation, the mouth of this canal is closed by a mound or pillar of mud, which, Dr. Clarke says, is called *Aous*, or "the Bride." The rushing in of the water carries away this mound; and this circumstance is believed by several authors to have given rise to the fabulous story of the *annual sacrifice of a virgin to the Nile*. (See *Clarke*, v., 99, 100; *Niebuhr's Trav.*, i., 69, &c.) The opening of the canal is celebrated with great rejoicings.

From the ramparts of the citadel is displayed a noble panorama. To the E. are seen the obelisk of Heliopolis and the tombs of the Mamelukes, backed by an arid desert; to the S., the lofty quarries of mount Mokattem, with ruined castles, mouldering domes, and the remains of other edifices, above, below, and stretching beneath the heights far into the plain: S.W. and W. are the grand aqueduct, mosques, and minarets, the Nile, the ruins of Old Cairo, and the island and groves of Rhoda: beyond the river, on the S.W., the town of Ghizeh, amid groves of sycamore, fig, and palm trees; still more remote, the pyramids of Ghizeh and Saccara; and beyond these the great Libyan desert. N.W. and N., may be discovered the green plains of the delta, sprinkled with white edifices: and N. to N.E., at the feet of the spectator, is the city of Cairo, surrounded in the latter direction by heaps of sand. In 1811, this fortress was the scene of the massacre of the Mamelukes, by order of Mehemet Ali. In 1824, 4000 individuals, and a great portion of the citadel, were destroyed by the explosion of a powder magazine.

Much yet remains in Cairo to evince the success with which the dynasties of Mussulman princes, who governed Egypt previously to the Ottomans, strove to beautify this city; and we might look in vain throughout the modern Saracenic world for any works at all approaching in excellence the metropolitan mosque of El-Azhar, with those of Sultan Hassan, the Muristan, Hassan Ain, El Ghoree, and Zittesenab, the gate called Bab-el-Nasr (*Gate of Victory*), and one or two of the other gates; the aqueduct on the road to Old Cairo, and the tombs of the Mamelukes. The principal mosque—that of El-Azhar, or Lazarus—is in the middle of the most populous quarter. That of Sultan Hassan, said to be a work of the 13th century, is the largest mosque; its dome is considered the finest in Cairo, and beneath it, in its interior, is the handsome tomb of the sultan whose name it bears. The body of the mosque is closed by a bronze door, beautifully inlaid with silver, and is surrounded by a large open square court, with shrines under fine bold arches. This mosque is also remarkable for the height of its two minarets, the variety of marbles used in its construction, its arabesque ornaments, mosaics, and inscriptions. The mosque of Tagloum is the most ancient of all, having been erected about 887, by the sultan Achmed Ebn. Tagloum, the founder of a new dynasty in Egypt, nearly a century before the city of Cairo was built. It consists of a vast open court surrounded by a colonnade of marble and granite pillars, supporting a double row of arches of the latest Saracen style, and bearing a great resemblance to the Patio de los Naranjos adjoining the mosque at Cordova. It contains rich and delicate carving, but is now much neglected. The mosque of Hassan Ain, on the contrary, is greatly thronged, being considered by far the most holy in Egypt, and surpassed in sanctity by few in the Mohammedan states. Outside the walls of the city, and between them and the Mokattem hill, are the celebrated tombs of the Mameluke sovereigns, some of which are fine bold specimens of the Arabic style of architecture of the 13th and 14th centuries: they are chiefly of white marble, and abound with fine arabesque ornaments and carving. There are several other cemeteries in different parts of the environs.

Old Cairo, which is believed by Pococke to have succeeded to the town and fortress of the Egyptian Babylon (*Descr. of the East*, i., 95), is chiefly occupied by Copts: it contains twelve Christian churches, some of them large and sumptuous buildings; the ancient granaries, bearing the name of Joseph; a grotto, castle, &c., and a machine for raising the water of the Nile into the ancient aqueduct. This, which is exclusively appropriated to the supply of the citadel with water, is raised on arches, and proceeds from Old Cairo by a winding course, and a length of about 2 m. Boulac, the port of Cairo, contains the principal manufactures, and is the seat of most of the trade. It is dirty, nearly as large as Blackwall, and presents the same busy scene, attended with much more noise. "On the banks of the river," says Captain Scott, "are heaped up pyramids of millet, peas, and corn, the property of the government, and placed there, exposed to the sun, dew, and rain, ready for shipment. The shore is lined with boats of all descriptions, discharging their cargoes or advertised for hire." Along the banks of the Nile, between Boulac and Old Cairo, embosomed in groves of orange, sycamore, and acacia, are a number of handsome palaces, the most conspicuous of which is that belonging to Ibrahim Pacha. This palace is built in the Turkish style, and contains some handsome apartments, gaudy furniture, and a large collection of Egyptian antiquities. Its extensive gardens and plantations occupy the plain between it and Cairo; towards the Nile the grounds are laid out in terraces ornamented with statuary, which give them quite a European appearance. In the Nile, immediately opposite Cairo, are the two considerable islands of Boulac and Rhoda; the latter, which is nearly 2 m. in length, is almost entirely the property of Ibrahim Pacha, and is laid out as pleasure-grounds, open to the public. Its S. extremity, however, between Old Cairo on one bank, and Ghizeh on the other, is occupied by powder magazines and mills. Here also is the celebrated Nilometer, a graduated pillar in a large square well, having a subterraneous communication with the river. From a court leading to this structure a flight of steps descends to the water, called the Steps of Moses, from a tradition of that being the spot where the deliver of the Jews was found among the bulrushes.

Most of the higher class of Turks, and individuals holding chief public employments, have their residences in Cairo, where they live in much splendour. These are principally in the square of *El Esbekiah*; and it was in the garden of one of these that the French general, Kleber, was assassinated. Some of the public baths are very spacious, and greatly ornamented; and several public fountains are worthy of notice. There are about twenty stone bridges over the canals of the city and plain, but none worthy of special notice. The coffee-houses are generally very plain, and the shops are merely small recesses capable of holding two or three persons. Each separate bazar is usually devoted to one kind of commodity.

The commerce of Cairo appears at present to be in a very depressed state, owing, as is said, to the injuries inflicted on it by the pacha's monopoly system, the rapacity of his government, the insecurity of property, the alleged corruption of the courts of law, the depreciation of the currency, and various other causes. The plan now acted on, of transporting all the produce to Alexandria to be disposed of, has also occasioned the removal of many of the principal merchants to that city. Numerous houses are becoming untenanted, and falling to ruin; and the new ones that are raised are comparatively mean and poor. There is now no display of Cashemeres, rich silks, jewellery, &c., as we are told the bazars exhibited in the times of the Mamelukes; no crowding of strangers to the capital of Egypt. Matters are every year getting worse; and we are assured that, "unless a change of system takes place soon, Cairo may be blotted out of the map as a place of commerce." The most flourishing trade is that of slaves, for which there is a regular market. Georgians, Nubians, Abyssinians, &c., are met with; but the principal supply comes from Darfur, and other countries in the interior. Black slaves are met with in every family in Cairo. Two English hotels have been opened for travellers since the steam communication with India has been established; but neither steam conveyances nor railroads, though much talked of, have yet come into operation to aid the commerce of Cairo. The only Egyptian steam-boat on the Nile is the private property of the pacha, and is reserved for his own use.

Within the city Mehemet Ali has established an extensive cotton factory; a gun factory, furnishing annually 10,000 muskets; a manufactory of saddles, bridles, knapsacks, belts, and every other leather equipment required for the army; a copper-mill, and machinery for boring gun-barrels, both driven by steam; a paper-mill, &c. At Boulac he has a foundry, a cotton-mill, a woollen cloth factory, with dye-works attached; a cotton-printing establishment, chemical works, &c.; and at Mabletta, not far distant, there is a large cotton factory worked by steam, and furnished with the newest machinery in use in Europe. Besides these, the pacha has large gunpowder and saltpetre factories in the neighbourhood, and a large tanyard on the road to Old Cairo. These establishments supply the clothing and accoutrements required for the army and navy, as well as most articles in common use throughout the country.

Cairo has always been, and still is, the seat of the best schools for Arabic literature and Mohammedan theology. The mosque of El Azhar has attached to it a library and college, where lectures on the Koran, law, ethics, mathematics, medicine, &c., were formerly delivered to students, who flocked to it from every part of the Mohammedan world. But Mehemet Ali having appropriated the greater part of the property belonging to this mosque to the service of the state, the college attached to it has considerably declined. This, however, is but a trifling deduction from the advantage that has already resulted, and which, no doubt, will continue to result, from the teaching, introduced by the pacha, of the rudiments of European arts and sciences into the public schools. Nothing short of government interference could have effected this signal improvement. There are three primary schools in Cairo, which afford education to 600 boys, who are also clothed and fed. At Boulac there is a school of engineers, with 180 pupils. At Aboosabul, within a mile of the city, is a preparatory school, with 1500 pupils; a school of medicine, with 200 students; a veterinary school at Schoobra; a school for accountants, &c.; and schools for the artillery and cavalry service at Ghizeh, and elsewhere in the vicinity. The prejudice against these schools was at first so strong that the pacha was obliged to resort to compulsion to obtain scholars, and to give them regular pay. The latter is still continued; but compulsion

is no longer necessary to obtain pupils. Regimental schools are also established, and primary schools are attached to the greater number of the mosques. The pacha has established a printing-press at Boulac, from which a weekly paper in Arabic issues; and at which many popular works in history and science have been printed for the use of students. The principal charitable institutions in and near Cairo are—a military hospital, in the square of El-Esbekiah, capable of accommodating 1000 patients; another large military hospital about a quarter of a league from the city, composed of four ranges of buildings, enclosing a square, and containing 64 spacious apartments, with 40 beds each; museums of physic and natural history; a chemical laboratory, and all necessary offices. In the city is a hospital for the Egyptian navy, with two general hospitals; and a lying-in hospital, under the direction of a French female practitioner, with a number of pupils. There is also a lunatic asylum; but the unhappy inmates are caged and chained, and present a melancholy and revolting sight. All the medical establishments are under the superintendence of the well known Clot Bey, the originator of most of them. The courts of law are held in a large new building, erected by the pacha.

Most European nations have vice-consuls resident at Cairo; it is the seat of the patriarch of the Coptic church; there are both Roman Catholic and Greek convents, presided over by dignitaries called patriarchs; and two English missionaries are established in the city. There are, however, comparatively few European inhabitants in Cairo, and they are for the most part poor and without influence. The city is usually garrisoned by two regiments of 4000 men each, one stationed within the citadel, and the other encamped outside the walls.

The neighbourhood of Cairo abounds with places and objects possessing great interest. The pyramids, and the remains of the city of Heliopolis, the *On* of the Scriptures, are treated of under the articles GHIZEH, EGYPT, &c. About two m. N. from the city, the country palace of Shoobra, belonging to the pacha, is pleasantly situated on the bank of the river, and connected with Cairo, for the whole distance, by a fine avenue of acacias and sycamores. Mehemet Ali resides here without any pomp for a great portion of the year, and the grounds, which have been agreeably laid out, are generally open to the public. A few m. to the N.E. of Shoobrah, is the scene of the victory obtained by Kleber over Yousef Pacha, in 1800.

Cairo is supposed to have been founded by Jauhar, an Arab general under the first Fatimite caliph, in 970. The caliph Moez afterwards made it the capital of his dominions, which distinction it retained till the overthrow of the Mameluke sovereignty by the Turks, in 1517. It was the residence of the pacha of the Turkish province of Egypt till 1798, when it was taken by the French, who retained it until its capture by the English and Turks, in 1801. Not long after the re-instatement of the Turkish rule in Egypt, Mehemet Ali became viceroy; and under him Cairo has once more become the capital of a virtually independent and extensive empire. (*MS. Account of Cairo; Lane's Modern Egyptians*, vol. i.; *Clarke's Trav.*, vol. v.; *Scott's Egypt and Candia*, p. 125, 217, *&c.*)

CAIRO, p. t., Greene co., N. Y., 10 m. W. Catskill, 44 m. S.S.W. Albany, 346 W. Watered by Catskill cr. and its branches. It contains ten stores, two woollen-factories, four grist-mills, two saw-mills, eight schools, 252 scholars. Pop. 2862. The village contains four churches, one Presbyterian, one Methodist, one Episcopal, and one Baptist, six stores, one woollen-factory, one grist-mill, one saw-mill, sixty dwellings, and about 400 inhabitants. The county poor-house with 100 acres of land attached is located here.

CAITHNESS, a marit. co. of Scotland, occupying its N.E. extremity, having W. Sutherland, and N.E. and S. the ocean. Dunnet Head, on the N. shore of this co., lat. 58° 40½′ N., long. 3° 22′ W., is the most northerly point in G. Britain: area, 446,080 acres, of which above 90,000 are cultivated, 6400 waste, and the remainder mountains, moors, and mosses. The mountains lie principally along the confines of Sutherland, terminating to the S. in the stupendous precipice called the Ord of Caithness. But with this exception, the rest of the country is mostly undulating or flat, consisting principally of vast tracts of mossy moors, covered with low stunted heath, and destitute of wood. Principal rivers, Thurso, Wick, and Dunbeath. Owing to its being nearly surrounded by the sea, the winters are less severe than might have been expected, but the summers are in general cold and wet. Property in a few hands, and mostly entailed. Farms often small; and the practice of underletting, and of stipulating for payment of a portion of the rent in services of various kinds, used to be very prevalent. These practices are now, however, on the decline; and notwithstanding its remote situation, this co. has astonishingly improved within the present century, by the opening of new roads, consolidating small farms, taking in waste land, improving the breeds of cattle and sheep, &c. A great number of superior farm-houses and offices have been constructed of late years; but, generally speaking, the huts of the peasantry are still poor and miserable. Oats, bear or bigg, and potatoes, are the principal crops. Average rent of land in 1810, 1*s.* 5*d.* an acre. Wick and Thurso, its only towns, are, at present, the principal seats of the British herring fishery. Limestone is abundant, and is burned with turf. The inhab. of Caithness are of Scandinavian or Gothic origin; and, except along the border of Sutherland, Gaelic or Erse is neither spoken nor understood. All ranks and orders speak English. Caithness contains ten pars., and had in 1841, 6962 inhab. houses, and 36,197 inhab., of whom 16,993 were males, and 19,204 females. It sends one mem. to the H. of C. for the co., and Wick unites with other boroughs in returning a representative. Co. constituency in 1838–39, 433. Valued rent, £37,256 Scotch; annual value of real property in 1815, £35,469.

CAJAZZO, a town of Naples, prov. Terra-di-Lavoro, cap. cant., on a hill near the Volturno, 11 m. N.E. by E. Capua. Pop. 4080. It is very ancient, and is defended by a castle built by the Lombards. Besides a fine cathedral, it has several other churches, with convents, a college, a hospital, and a seminary. Its territory produces good wine.

CALABOZO, an inl. town of Venezuela, prov. Caracas, in the *llanos*, near the Guarico river, 11 m. N.E. by E. Capau; lat. 8° 55′ N., long. 67° 42′ W. Pop. 5000. It has a good church, and several villages surrounding it: many of its inhab. are prosperous cattle-farmers. The pools in its neighbourhood swarm with electrical eels. (*Humboldt's Pers. Nar.* iv.)

CALABRIA, an extensive prov. of the Neapolitan dominions, the most S. portion of Italy, between 37° 46′ and 40° 7′ N. lat., and 15° 39′ and 17° 13′ E. long.; having N. the prov. Basilicata, N.E. the gulf of Taranto, S.W. the Strait of Messina, and in the rest of its extent the Mediterranean: it comprises the chief of the two peninsulas at the extremity of Italy, and forms what is called the foot of the Italian boot. Shape very irregular; it is 165 m. in length, N. to S., but varying in breadth from 15 to 70 m. Area 6789 sq. m. Pop. (1833) 969,180.

In most points, Calabria affords a striking contrast to the peninsula of Otranto, on the other side of the Tarantine gulf; its shores are extremely irregular, and present many capes or headlands: the principal are those of Colonne and Rizzuto, on the E.; Spartivento, on the S.; and Vaticano, on the W. coasts: the principal gulfs are those of Taranto (which it assists in forming) and Squillace, on the E.; Gioja and S. Eufemia, on the W. shores. By far the greater part of Calabria is mountainous; the principal Apennine chain enters it at Mount Pollino, and runs at first S. near the shore, as in N. Italy, then E., and lastly in a S.W. direction to its extremity. It gives off a lofty and remarkable branch to the E., the Silese mountains, which occupy most of the central and wider region of Calabria. The Apennines here attain a greater height than in the central prov. of the king. of Naples, and the summits of many of them are covered with snow from Dec. till March. Monte Sila is 4632 feet, Monte Alto (Aspromonte), 4110 feet, and the pass of Nicastro, 3246 feet above the level of the sea.

The plains are few, and of no great extent; the largest are in the N.E., on the banks of the Crati and Coscile, and on the E. coast; in the W. the lowlands consist of only a succession of narrow valleys. The mountain streams are numerous, discharging themselves into both seas; the larger rivers, which, however, require no particular notice, are mostly in the central parts of Calabria. There are many small lakes around the E. shore, but none worthy of especial notice. Calabria produces corn, rice, oil, wine, agrumi, and fruits of every kind; silk, sugar, manna, wild honey, tobacco, saffron, resins, liquorice, many medicinal plants, and dyes; forests of oak, elm, chesnut, &c.; it has also veins of gold and silver, iron, marble and alabaster; and yields besides crystal, rock salt of the purest kind, and sulphur. Great numbers of fish surround the coasts, and game abounds in its forests. It is divided as follows:

	Area.	Pop.	Chief Towns.	Pop.
	Sq. m.			
Calabria Citra	2619	385,260	Cosenza . .	15,[illegible]
			Rossano . .	
			Cassano . .	
			Bisignano .	
Calabra Ultra I.	1494	2 0,366	Reggio . .	17,[illegible]
Calabria Ultra II.	1786	333,000	Cantanzaro .	11,[illegible]
			Monteleone .	
			Squillace . .	

No part of Europe presents more magnificent scenery than Calabria. On entering it from the N., at Monte Gordano, the undulating hills are lost; the Apennines assume a bold and steep character, and are broken by deep hollows and ravines, and clothed with forests of massive timber.

The Bruttian forest of Sila, which occupies to a great extent all the S. part of C. Citra, and the N. of C. Ultra II., consists of oak, elm, sweet-chestnut, beech; and pine and fir toward the summits of the mountains: in other parts the Apennines are covered almost to their tops with woods of fine cypress, laurel, hazel, olive, orange, and cedar trees; near Cariati the manna ash prevails. There are many pastures, however, in the region of La Sila; but habitations are very thinly scattered through it, and towns or hamlets are very few. Around the coast of Calabria Citra there are some cultivated tracts; that near Roseto yields olives, capers, saffron, corn, and cotton, on the high lands near the sea; the latter is cultivated also at Cassano. Trees are wanting on the banks of the Neto, and the country about Cotrone is one of the most uninteresting in Calabria. From Cantanzaro to Squillace the ground is level; the soil full of broken shelly deposit, and fertile in corn, maize, and mulberry-trees. At Chiaravalle the fields are cultivated with flax; the vines are few, cherry orchards numerous, and hedges of holly, woodbine, and sweet-brier, and banks of hearts-ease and wild strawberry. S. Calabria has many towns and villages, various culture, and fine woods; its scenery is decidedly superior to that of Sicily. The environs of Reggio are celebrated for their beauty, and its neighbourhood is well stocked with cattle; from Tropea to Monteleone the country is like a park, but quite unenclosed, adorned with large clumps of olive-trees. Thence to the Apennines is a wooded vale, through which the Angitola winds; beyond this is a marshy country; and on the banks of the Amato is the field of Maida, celebrated for the action fought there in 1806. N. of Nicastro the main road passes through a fine plain embraced by the mountains, and on the high grounds hence to Cosenza the breaks in the woods display on either side views of wooded vales, sprinkled with towns and villages, and the sea beyond. Some flat grounds prevail N. of Cosenza, as on the banks of the Crati, which are fertile in corn, vines, and mulberry-trees, but subject to malaria; towards the gulf of Policastro there is a tract of pasture land, feeding many flocks of sheep.

Calabria is subject to earthquakes: a most terrific visitation of this sort occurred in 1783, which swallowed up a great many towns and villages. Near S. Basile there are traces of former volcanoes, and the soil is one mass of lava. Several spots are renowned for the events of ancient history; numerous are the sites of ancient Greek cities, as Sybaris, Crotona, &c.; near cape Vaticano, Sextus Pompeius defeated at sea the navy of Augustus. Alaric the Goth, the conqueror of Italy, was buried under one of the tributary streams of the Crati. No Italian prov. of equal extent possesses so many Gothic remains.

The arts and manufactures of Calabria are in a very depressed and backward state. Silkworms are cultivated largely in some places, and silk is produced in tolerable quantity, and of good quality. It has a darker colour than in other Neapolitan provinces, in consequence of feeding the worms on the leaf of the red mulberry, which prevails in every part of this territory. The condition of the peasantry is generally bad; a consequence, principally, of the feudal privileges and exactions of the barons. Smuggling is very prevalent, and outlaws and mendicant friars are both very abundant. The country and its inhabitants, though susceptible of the greatest improvement, are alike uncultivated and savage. No attention is paid to the education of the peasantry, so that the grossest ignorance and superstition are widely prevalent.

The peasants are neither so tall nor so good-looking as those of the rest of Italy. The outline of their faces is African; their complexion a pale olive, or copper colour; their hair coarse, black and frizzled; but they have beautiful teeth, and their countenances are expressive, and mixed with a look of melancholy and wildness. They are vigorous, agile, active, and nervous; quick, gay, courageous, faithful, and hospitable; but irritable, and prone to passion. In the N. a solidity, like that of the Germans, is manifest in their disposition: while, in the S., their manners approach more to those of the Greeks. Many Greeks reside in S. Calabria, who are much handsomer in their persons and dress than the Calabrese. The dress of the latter varies; in the S. it is like that of the Sicilians, and bonnets are worn; in the N. they wear hats; the men dress in a short close jacket, and close hose, both of black cloth; leathern gaiters, and shoes of undressed skin, ties with thongs of the same; or else in a coarse long jacket, coming down far below the waist; wide hose, full of plaits; and ill-cut gaiters of coarse cloth, fastened across with cords: the females wear a large full-plaited petticoat of dingy scarlet. The Calabrese speak a peculiar Italian dialect, pronouncing the *d* and *t*, the *p* and *b*, alike, &c. They are generally poor; the marriage portion of a girl is frequently only a small piece of vineyard, or even a single fruit-tree. Gipsies are numerous, occupying themselves in making small iron articles, bodkins, &c.

History.—Before the dominion of the Romans, Calabria was subdivided into many republics, forming part of Magna Græcia, a region that comprised all Italy S. of Naples. After the fall of the Western empire, it fell successively under the rule of Odoacer, Theodoric, and subsequently of the Greek emperors, who possessed it till the year 929, when the Arabs, from Sicily, established themselves in a few forts, whence they extended their rule over the rest of the province. A century and a half afterwards, it was conquered by the Normans, when it formed a part of the dominions of Robert Guiscard, Duke of Apuglia, with the history of which province its own is subsequently connected. (*Rampoldi, Corografia dell' Italia*, i., 350—352; ii., 350; *Hoffmann, Europa und Seine Bewohner*, i., 41; *Swinburne's Two Sicilies*, i., 281—339; ii., 426—472; *Craven's Tour in the S. Prov. of Naples*, 201—340.)

CALAHORRA (an. *Calagurris Nasica*), a city of Spain, prov. Soria, on the Cidacos, near its confluence with the Ebro; 24 m. S.E. Logroño, 43 m. S.S.W. Pampeluna. Pop. 6667. It has a cathedral and an episcopal palace. The neighbourhood produces grain, pulse, hemp, flax, fruit, wine, and oil. This was a Roman town of some note, the reputed birthplace of Quintilian.

CALAIS, a sea-port town of France, dép. Pas-du-Calais, cap. cant., on the straits of Dover, 29 m. N.N.E. Boulogne; lat. 50° 57′ 31″ N., long. 1° 51′ 16″ E. Pop. 10,865. The town is of a square form, and is well fortified; being surrounded by walls and bastions, and protected on the W. side by a strong citadel, commanding the town and harbour, and towards the sea by several forts; the country round may, also, in case of necessity, be laid under water, by means of sluices. It is generally pretty well built, the houses being of brick, and the streets broad and straight; but it is said to be *peu animé*, and *triès-monotone*. It labours under a great deficiency of spring water, the want of which is but indifferently supplied by the rain water, collected in cisterns. In the middle of the town is the *place d'armes*, having round it several good houses, and a handsome Hôtel de Ville. The gate on the road to Paris, constructed in 1685, is a fine piece of architecture. The parish church, erected by the English, is a large, fine building, with a lofty spire. A tower, near the Hôtel de Ville, serves as a light-house; the light, which is revolving, being elevated 118 feet above the level of the sea. A pillar has been erected on the spot where Louis XVIII. landed on his return to France in 1814. The Hôtel Dessin, comprising, besides an excellent inn, a theatre, public baths, and a posting establishment, is the finest building in the town. The ramparts, which are planted with trees, form an agreeable promenade. Calais derives its principal importance from its being the nearest French port to England: it is only 20½ m. from the South Foreland, and 22½ m. from Dover, with which, and Ramsgate, London, and other English ports, it has daily or very frequent communication. The entrance to the harbour is between two wooden piers, nearly ¾ m. in length. Unfortunately it dries at ebb tide, and within the piers has only from 15 feet to 18 feet at high water, according to the winds. There is, however, excellent anchorage-ground in the outer road, from two to three m. N.W. from the harbour. There is here a tribunal of commerce, schools of hydrography and design, a public library, with 12,000 vols., &c. Manufactures trifling, consisting of soap and oil-works, salt refineries, &c. Vessels are fitted out for the cod, herring, and mackerel fisheries, and a considerable trade is carried on in salt and spirits; at present, however, its principal dependence is on the resort of travellers to and from England. It communicates with the Aa, and consequently, with St. Omer, by means of a canal about 21 m. in length.

Edward III. took Calais, after a lengthened and memorable siege, in 1347. The obstinate resistance made by the besieged is said to have so much incensed the conqueror that he determined to put to death six principal burgesses of the town, who, to save their fellow-citizens, had magnanimously placed themselves at his disposal. But, if he ever really formed any such resolution, he was driven from it by the tears and entreaties of Queen Philippa. The English retained possession of Calais for more than two centuries, or till 1558, when it was taken by surprise by the Duc de Guise. In 1596 it was taken by the Archduke Albert; but in 1598 was restored to France by the treaty of Nervins. It deserves to be mentioned, to the honour of Calais, that it is one of the very few towns of France in which no individual lost his life on account of politics during the Revolution. (*Hugo*, art. *Pas-de-Calais*; *Purdy's English Channel*; *Hume's England*, cap. 15.)

CALAIS (St.), a town of France, dep. Sarthe, cap. arrond., on the Anille, 26 m. E.S.E. Mans. Pop. 3783. It has a fine Gothic church, a large square or place, and two promenades; and is the seat of a tribunal of primary jurisdiction, and of a communal college. There are manufactures of serges, linen and cotton stuffs, with tanneries and glass-

works. The country round is barren, being principally occupied with heaths and forests.

CALAIS, p. t., Washington co., Me., 200 m. E.N.E. Augusta, 786 W. Situated on the S. side of the St. Croix river, nearly opposite to St. Andrew's, New-Brunswick. The falls in the river afford extensive water-power. Vessels of the largest class come to the lower village, where is a tide of 20 ft. It contains three foreign commercial houses, thirty retail stores, six lumber-yards, one grist-mill, twenty saw-mills, ten schools, 1217 scholars. Pop. 2934.

CALAIS, p. t., Washington co., Vt., 10 m. N.E. Montpelier, 526 W. Watered by branches of Winooski or Onion river. It contains a church common to several denominations, one store, two saw-mills, four oil-mills, seventeen schools, 487 scholars. Pop. 1709.

CALASCIBETTA, a town of Sicily, val Calatanisetta, cap. cant., 15 m. N.E. Calatanisetta. Pop. 3073. There are in the environs numerous caverns.

CALATABELLOTA, or CALTABELLOTA, a town of Sicily, val di Girgenti, on the summit of a lofty mountain near to, and overlooking, the course of the river of the same name, 10 m. N.E. Sciacca. Pop. 4662. It is very difficult of access, and is said by Swinburne to be the worst situated place, as respects the comforts of life, he had ever seen.

Triocala, a strong city of ancient Sicily, was situated within a short distance of the modern town. This city is famous in history, from its having been the stronghold of the revolted slaves during the dangerous servile insurrection that broke out in Sicily, 104 or 105 years B.C. Owing to the strength of the city, and the talents of their leader Athenio, the insurgents were able to defend themselves for four years; and were not subdued till a considerable army, headed by Aquilius, the colleague of Marius, was sent against them. (*Ancient Universal Hist.*, xiii., 20, 8vo ed.) In more modern times, Roger I. defeated the Saracens, with great slaughter, in the vicinity of this town. (*Swinburne's Two Sicilies*, ii., 258, 4to ed.)

CALATAFIMI, a town of Sicily, val di Trapani, cap. cant., 7 m. S.W. Alcamo. Pop. 8283. It is ugly and ill built. Its castle, now in ruins, stands on the summit of a hill, in a commanding situation. The environs are well cultivated. (*Swinburne*, ii., 231.)

CALATAGIRONE, or CALTAGIRONE, a town of Sicily, val di Catania, cap. distr., on the declivity of a mountain, 35 m. S.W. Catani. Pop. 21,616. It stands in a salubrious situation, and is said to be the richest and best governed city of Sicily. Streets clean, spacious, well paved, and tolerably lighted; many of the palaces and other public buildings are handsome, and the market is well supplied with provisions at moderate rates. It is the seat of a bishopric; has several churches and convents, a royal college, a hospital, and an orphan hospital. The inhabitants are industrious, and are said to have made the greatest proficiency of any in the island in the useful arts. A kind of soft argillaceous earth is found here, and manufactured into tolerable imitations of the Saxon porcelain; groups of figures, in the various costumes of Sicily, are also formed from it with infinite taste. The neighbourhood affords saffron and yellow ochre, bistre, soda, and other colouring materials. A grand festival and fair is held for fifteen days in October, during which great sales are made of cattle, cloth, honey, wax, poultry, and agricultural produce. It is supposed, from the existence of sepulchres and other remains of antiquity, to occupy the site of the *Hybla Hæræa* of the ancients. (*Swinburne*, ii., 307; *Smyth's Sicily*, p. 197.)

CALATANISETTA, a town of Sicily, cap. prov. of the same name, in a large and fertile plain, near the right bank of the Salso, 62 m. S.E. Palermo. Pop. 16,563. It is well built; has broad and straight streets, a fine square; is defended by a castle, and has a civil and criminal court. In its environs, at a place named Terra Pilata, are two salses that emit hydrogen gas.

CALATAYUD (an. *Bilbilis*), a city of Spain, Aragon, cap. district, on the Jalon, at its confluence with the Jiloca, at the foot of a hill, 45 m. S.W. Saragossa, 115 N.E. Madrid; lat. 41° 25′ N., long. 1° 33′ W. Pop. 8998. It has a large square, full of shops; pleasant and shady promenades; a fountain with eleven *jets d'eau*, and a magnificent *lavadero*; an episcopal palace; a hall for the meetings of the Junta; a house of industry, two hospitals, and barracks for 4000 troops. Streets and houses regularly built, and there are three bridges over the river. It has several elementary schools, and two grammar schools, with manufactures of common cloths, brown paper, leather, &c. The soil abounds in cathartic salts, and there are several chalybeate springs, and extensive caverns, from whose roofs hang concretions, said to be sulphate of lead. The town has three suburbs. It is rather a desirable place to live in, though dull, provisions being good and abundant. This was a Roman town, and is celebrated as being the birthplace of Martial, who has eulogised its manufactory of arms. (*Miñano.*)

CALATRAVA LA VIEJA, in Spain, the remains of the ancient city of Calatrava, the *Oretum* or *Oria* of the Romans, on the Guadiana, prov. La Mancha, 12 m. N.E. Cuidad Real, 15 m. N. Almagro. The order of the Knights of Calatrava had its origin here. The city being menaced by the Moors, in 1158, was abandoned by the Templars, who had held it for ten years, and Sanchio III. promised it to any one who would undertake its defence. Raymond, abbot of Fitero, and Diego Velasquez, offered themselves for the task, and were furnished with money, arms, munitions, &c. A crusade was proclaimed, and plenary indulgences were granted to all who should be found at the defence of Calatrava. The Moors, alarmed at the report of these preparations, abandoned their enterprise, and Velasquez, in his turn, made several incursions into their territories. On this, the king confirmed the grant, with new donations. The order was then regularly organized in two classes, one for the service of the choir, and the other for the field; but the knights, on the death of Raymond, separated themselves from the monks, and chose a grand master distinct from the abbot, who returned with his monks to Fitero. The knights subsequently acquired great fame and riches in their contests with the Moors; but, having sustained serious reverses, and quarrelling among themselves, the pope adjudged the grand-mastership in perpetuity to the crown of Spain. The order has at present about eighty commanderies. (*Perrot. Collect. Historique des Ordres de Chevalerie*, p. 79, Paris, 1820; *Miñano*, ii., 265.)

CALCASIEU, parish, La. Situated in the W. part of the state, and contains 5000 sq. m. Bounded W. by Sabine river, which separates it from Texas, and S. by the gulf of Mexico. Watered by Calcasieu river and its branches. It contained, in 1840, 13,557 neat cattle, 552 sheep, 4564 swine; and produced 16,670 bushels of Indian corn, 6387 of potatoes, 45,600 pounds of cotton, 6000 of sugar. It had four stores, one tannery, two schools, 28 scholars. Pop.: whites, 1349; slaves, 482: free coloured, 226; total, 2057. Capital, Lisbon.

CALCASIEU, river, La., runs chiefly in the parish whose name it bears, and passes through a lake 30 m. long and from 1 to 10 broad, a little before its entrance into the gulf of Mexico.

CALCUTTA, a celebrated city of Hindostan, prov. Bengal, cap. of the British dom. in the East, and seat of the supreme government, in a level tract on the E. side of the Hooghly river, an arm of the Ganges, about 100 m. N. of the bay of Bengal; lat. 22° 23′ N., long. 88° 28′ E. Pop. (1837) about 230,000, exclusive of perhaps 150,000 more, who come daily from the suburbs into the city. On approaching Calcutta from the sea, the stranger is much struck with the magnificence of its appearance; the elegant villas on each side of the river; the government botanical gardens; the spires of the churches and temples, and the strong and regular citadel of fort William. Including fort William, the esplanade, &c., Calcutta extends along the bank of the river, from Kidderpore to Cossipore, a distance of 6 m., with a variable breadth, but averaging about 1½ m. A handsome quay, similar in many respects to that of Petersburg, called the Strand, is continued for 2 or 3 m. along the bank, from the point at which the esplanade meets the city: it is raised 40 ft. above the low water mark, and furnished with about thirty principal *ghauts*, or flights of steps, for landing, &c. The Hooghly is here about a mile in width at high water, or at least twice as broad as the Thames below London bridge, and is, like that river, crowded with shipping; vessels of all descriptions, up to 600 tons burden, being able to lie almost close to the quay. The residences of Europeans are mostly detached from each other, built in the Grecian style of architecture, and situated in Chowringhee (the S. portion of the city, lying at the edge of a portion of the esplanade), or in the suburbs in that quarter, as Garden Reach, where the villas exhibit much beauty, and are surrounded by plantations of mango, jack, and other fruit trees. The citadel, or fort William, which stands near Kidderpore, about ½ m. S.W. the city, is not only the strongest and most complete fortress in India, but in the British dominions; it is, however, large, and would require for its proper defence 10,000 men. It is an octagon; the five faces on the land side are regular, the three others, towards the river, vary according to circumstances. The bastions have very salient orillons, and every curtain is covered with a large half moon, mounting twenty-six pieces of cannon: the outworks are very extensive, but not much raised above the level of the surrounding country, and fort William does not, therefore, make an imposing appearance from without. It contains an excellent arsenal, and a cannon-foundry, &c.: its interior is beautifully laid out in walks and grass-plots, shaded with rows of trees, intermixed with piles of shells and cannon balls. It is usually garrisoned by one strong European regiment, two native regiments, and a strong detachment of artillery; was built by Lord Clive soon after the battle of Plassey; and has cost the E. I. Comp., from first to last, £2,000,000. Cal-

cutta has no defence other than this fortress; the ditch and mound, constructed by the early settlers as a barrier against the Maharattas, were destroyed by Marquis Wellesley, and their place is now occupied by the "circular road," which marks the boundary of the liberties of Calcutta, and of the administration of English law. Between the fort and the city there is an extensive open plain, called the Esplanade, being a continuation of the glacis, the fashionable resort for driving and riding, as Hyde Park is in London. On it is the government house, in a line with which there is a range of very handsome dwelling houses. Chowringhee, formerly a collection of huts, is now a village of palaces, and extends for a considerable distance into the country. Calcutta, when viewed from the Chandpal ghaut, or from any other spot to the S., certainly gives the impression of a very noble city; this impression, however, as is common in all Eastern cities, is soon dissipated on penetrating into its interior. Behind Chowringhee, the native or "Black Town" stretches along the river to the N., and exhibits a remarkable contrast to the part inhabited by Europeans. Its streets are dingy, narrow, and crooked, and consist of "huts of earth baked in the sun, or of twisted bamboos, interspersed here and there with ruinous brick bazars, pools of dirty water, cocoa-trees, and little gardens, and a few very large, very fine, and generally very dirty houses, of Grecian architecture, the residences of wealthy natives. There are some small mosques of pretty architecture, and very neatly kept, and some pagodas, but mostly ruinous and decayed; the religion of the people of Bengal being chiefly conspicuous in their worship of the Ganges, and in some ugly painted wooden or plaister idols, with all manner of heads and arms, which are set up in different parts of the city. Fill up this outline with a crowd of people in the streets, beyond anything to be seen even in London; some dressed in tawdry silks and brocades; more in white cotton garments; and most of all black and naked, except a scanty covering round the waist; besides figures of religious mendicants with no clothing but their long hair, and beards in elf locks; their faces painted white, yellow, or dirty red; their heads in one ghastly lean hand, and the other stretched out like a bird's claw to receive donations; marriage processions, with the bride in a covered chair and the bridegroom on horseback, so swathed round with garlands as hardly to be seen; tradesmen sitting on the ground in the midst of their different commodities; and old men, looking on, perched, naked as monkeys, on the flat roofs of the houses; carts drawn by oxen, and driven by wild-looking men with thick sticks, so unmercifully used as to undeceive perfectly all our notions of Brahminical humanity; attendants with silver maces pressing through the crowd before the carriage of some great man or other; no women seen, except of the lowest class, and even these with heavy silver ornaments on their dusky arms and ankles; while coaches, covered up with red cloth, are seen conveying the inmates of the neighbouring seraglios to take what is called "the air;" a constant creaking of cart-wheels, which are never greased in India; a constant clamour of voices, and an almost constant thumping and jingling of drums, cymbals, &c., in honour of some of their deities; and add to all this a villainous smell of garlic, rancid cocoa-nut oil, sour butter, and stagnant ditches, and you will understand the sounds, sights, and smells of what is called the 'Black Town' of Calcutta." Under the administration of the Marquis of Hastings, large sums were spent in the improvement and ventilation of Calcutta; a street 60 ft. wide was carried through its centre in its longest diameter, and several squares were laid open, each having a tank or reservoir in the middle, surrounded by planted walks. The largest square, which is near the S. extremity, is 500 yards on each side, and contains a tank 60 ft. deep. There are no covered ways, as in the cities of Persia, Turkey, &c., though, from the violent heats and rains, such would be very desirable. The bazars in the native town are very inferior, and the shops and warehouses have all a mean appearance: the public buildings there are few and small, and there is not a single minaret in the whole place. The most remarkable public edifice is the government house, which is, "to say the least of it, a more showy palace than London has to produce;" it was built by the Marquis Wellesley, and consists of a centre and four wings, connected together by circular passages, so constructed as to obtain the benefit of the air from whichever quarter the wind blows. The wings contain the private apartments, and that on the N.E. the council room; the centre has two very fine rooms, the upper one of which is the ball-room, and both are lighted by a profusion of lustres, while, at the same time, they exhibit much good taste: the architecture of most of the buildings is of the Ionic order. The other chief edifices are the town and custom houses, the mint, St. John's cathedral, and another English church, all of which are contiguous to the government house; the Scotch Presbyterian church, a very handsome structure; the Portuguese, Greek, and Armenian churches; the courts of justice, barracks, jail, hospitals, &c. There are many public colleges and benevolent institutions; as the Hindoo, Mohammedan, and Anglo-Indian colleges, and the college at fort William; the Calcutta grammar, free, and other charity schools; the military and female orphan asylums; poor funds, &c.; besides many bible, missionary, and other religious associations. On the N.W. side of the river are the extensive suburb of Howrah, opposite the 'Black Town,' and the botanic garden, opposite the citadel. Near the latter is the bishop's college, a handsome building in the Elizabethan Gothic style, occupying three sides of a quadrangle, 150 ft. square, erected in 1830, for the education of a clerical body, by the Society for the Propagation of the Gospel, at the suggestion of Bishop Middleton. The botanic garden is beautifully laid out, and covers 300 acres of ground: between it and the bishop's college there is an extensive plantation of teak, which, although not in its native soil, thrives exceedingly well. There are several dry and other docks on both sides the river, in which vessels of any size may be built and repaired; but the ships constructed here are of inferior durability to those built at Bombay, in consequence of the framework being of inferior wood, and the visible portions and upper works alone of teak; all the timber in Calcutta also, without the fact being outwardly obvious, suffers greatly from the devastations of the white ant. In every part, the city is covered by an amazing multitude of little pools, or reservoirs, yet the soil on which it stands is remarkably deficient in springs, none having been met with even after boring down 140 ft., till 1828, and subsequently, when Dr. Strong found some in isolated spots, at a depth of 70 ft. The drainings of the place, with such portions of the refuse as are not devoured by crows, kites, vultures, adjutants, and pariah-dogs, which abound in the streets, and at night by foxes and jackalls from the surrounding country, are conveyed away, by a canal, to a large shallow salt lagune about 4½ m. distant, towards the E. Between the city and this salt lagune the country is filled with gardens, orchards, and villages, but is little inhabited by Europeans. The tract to the N. is drier, healthier, and more open; and the two great roads to Dumdum, the artillery cantonment, and Barrackpoor, the country seat of the governor-general, lie over a vast extent of fertile country, divided into rice-fields, orchards, and gardens, and swarming with population. The vicinity of Calcutta is very pleasing; "as soon as its boundary is passed, the roads wind through beautiful villages, overhung with the finest and most picturesque foliage the world can show, of the banyan, the palm, the tamarind, and the bamboo. Sometimes the glade opens to plains covered with the rice harvest, or to a sight of the broad, bright river, with its ships and wooded shores; sometimes it contracts into little winding tracks, through fruit-trees, gardens, and cottages; the gardens fenced in with hedges of aloe and pine-apple; the cottages neater than those of Calcutta, and mostly of mats and white wicker-work, with thatched roofs and cane verandahs, with gourds trailing over them, and the broad, tall plantains clustering round them." The rainy season at Calcutta generally begins about June 12, and terminates October 14. The average fall of rain for three recent years was 59·83 inches; the annual mean of the barometer is 29·764; of the thermometer, 78° 13'. The most pleasant and temperate period of the year is from October to March; by the middle of April, the weather becomes oppressively hot, often rising to 100° Fahr. The lowest temperature in December 21, 1835, was found to be 62° 2' Fahr.

Calcutta enjoys a very extensive internal navigation, by means of the Ganges and its numerous arms and tributaries; and it monopolizes the whole of the external trade of Bengal. It is now, in fact, Canton perhaps excepted, the greatest emporium of the East: the gross amount of its imports and exports amounting to from £10,000,000 to £12,000,000 a year. The principal foreign trade is in the hands of English merchants, but there are others among the Persian, Hindoo, Portuguese, Greek, Armenian, &c., inhabitants, who are in an extensive way of business. The native Portuguese and Armenian merchants have latterly been declining, both in wealth and importance; while, on the other hand, the Parsees have increased in numbers and opulence, and there are several possessing a capital of £250,000.

Innumerable small craft daily arrive from the interior, laden with the produce and manufactures of the different provs., and the Calcutta market is well supplied with an abundance of excellent provisions: game, snipes, wild ducks, teal, and ortolans, are comparatively cheap; stall-fed venison is as fat as in England, but without flavour: an immense variety of fruits of fine quality appear on European tables; and an exquisite luxury is met with in the *tapaswi* or mango-fish (so called because it is in season with the mango-fruit), and which has been hitherto found only in the rivers of Bengal, the Birman empire, and Camboja rivers.

The population of the city is unequally distributed: its N. and central portions, especially the former, are very densely inhabited; the S. part much less so, owing to the dwellings of Europeans being so much more widely dispersed. The following is the latest census (1837), giving the relative proportions of the different races of resident inhabitants:

Hindoos	137,651	Brought up	209,466
Mohammedans	58,744	Chinese	362
Half Castes	4,746	Jews	307
English	3,133	Arabs	351
Portuguese	3,181	Madrassees, Parsees, and Native Christians	144
French	165	Low Castes	19,084
Armenians	636	Total	229,714
Mughs (Aracanese)	683		
Persians, called Moguls	527		
Carry forward	209,466		

Males	144,911	229,714
Females	84,803	

The number of houses, huts, &c., in 1837, was 65,495, exclusive of the suburbs. Calcutta is the seat of the chief Protestant bishop of India of the Established Church of England; of the supreme courts of justice; of one of the courts of circuit and appeal for the presidency of Bengal; of a vicar-apostolic of the Romish Church, with authority over fourteen priests and ten churches, one of which is in that city.

European society in Calcutta is gay and convivial; and fêtes and dinner-parties, both numerous and splendid, are given by the government officers and wealthy private individuals. A certain degree of formality and stiffness is, however, very prevalent; and the Brahminical institution of *castes* would appear to have communicated itself to all ranks and classes of Europeans.

Bishop Heber observes, that the large dinner-parties, in addition to the geographical situation, and other local peculiarities; the aspect and architecture of the place; the multitude of servants, want of furniture in the houses, &c., tend, except in respect of climate, to give Calcutta a striking resemblance to Petersburg. Besides private parties, there are public subscription assemblies, with *conversazioni*, concerts, and a theatre, though the latter is but little frequented. It is usual with Europeans to rise early, the pleasantest part of the day being the first of the morning; after *tiffin* (lunch), which is taken between two and three o'clock, many persons, during the summer heats, retire to sleep for two or three hours; at sunset the fashionable drives of the Esplanade are crowded with European vehicles of all sorts, and the dinner-hour soon after succeeds. The equipages of Calcutta embrace barouches, chariots, tilburies, gigs, &c., as in England, drawn by a breed of horses which have been greatly improved through the government stud and importations from Europe and Arabia: but a grotesque and peculiar appearance strikes the eye of the European in the intermixture of Asiatic costumes, black coachmen, &c. in the scene. Most visits at a short distance are paid in palanquins, the bearers of which are from Balasore, Behar, or the northern Circars, and run silently, bare-headed, and almost naked. The Anglo-Indian, or half-caste population, the product of an intercourse between Europeans and natives, are more numerous in Calcutta than anywhere else in India; they are intelligent, industrious, and generally well educated, and possess a degree of consideration in the eyes of the native population, though they are without any political influence. All of them speak English, as well as the native dialect. Many of the half-caste females, daughters of mothers of high caste, are educated in the seminaries in and near Calcutta, and often marry Europeans, when they are said to make most unexceptionable wives and mothers: their children, in this case, lose in one or two generations all distinctive mark of their Indian origin. A considerable number of the new zemindars, and the retired traders who have become wealthy, reside in Calcutta, where they have houses handsomely furnished in the European style; drive the best horses and equipages; have adopted some English habits and tastes; speak the English language; enter into the politics of the British empire, and are not ignorant of English literature. With all this, the education of their sons is often miserably neglected, and they turn out mere spendthrifts; but the fact is sufficiently and generally manifest, that the native inhabitants of all ranks show a willingness to learn and speak English, an increasing anxiety to send their children to our schools, and a growing neglect of caste and other national prejudices; tendencies which, if properly taken advantage of, may, ere long, be turned much to our mutual benefit.

The great bulk of the natives have a very bad character, being proficients in intrigue, falsehood, and chicanery; prone to perjury, theft, gambling, and all kinds of dishonesty; and of a cowardly disposition: but it is generally admitted that the morality of the native inhabitants of Calcutta is at a lower ebb than that of those in the provincial districts. A perceptible amendment in the morals and pursuits of the people is, however, said to be taking place. The Bengalee dialect, which had long been looked on with much prejudice by the natives of India, is now reviving, and various works are published in it every year. Numerous periodical works, newspapers, &c., issue from the press in Calcutta; among which are the Bengal Hurkaru and Chronicle, the Calcutta Courier, and the Englishman, daily; one paper twice, and another three times a week; six weekly ones, of which one is in the native tongue; and another, the Reformer, an English paper, conducted by native gentlemen; various other native publications; and five monthly, and two yearly (English) journals. There are several distinguished scientific, literary, and other associations, in Calcutta; as the Asiatic Society, which owes its origin to Sir W. Jones; the Medical and Physical, Agricultural and Horticultural, Societies; the Chamber of Commerce, Trade Association, &c. To the very able monthly journal of the Asiatic Society we have been much indebted in this and various articles of the present work.

In 1698 the British factory was removed thither from Hooghly; but in the early part of the last century Calcutta was but a paltry village, belonging to the Nuddea district, and inhabited chiefly by husbandmen. Chowringhee was also but a straggling village; and a forest jungle, interspersed here and there with patches of cultivated land, covered what is now the Esplanade, so late as 1756. In that year Suraja-ul-Dowlah, the soubahdar of Bengal, dispossessed the English of their settlement; on which occasion 146 Englishmen, who had been left to defend the factory, were shut up at night in the black hole (a part of the old fort, taken down in 1818), of which number only 23 were found alive next morning. Col. Clive, with some Madras troops, retook Calcutta Jan. 1, 1757; since which it has been quietly retained by the British, and risen to its present degree of importance. (*Hamilton's E. I. Gaz.*, i., 315–325; *Hamilton's Hindostan*, i., 48–61; *Heber's Journal, &c.*; *Journals of the Asiatic Soc. of Great Britain and Bengal, &c.*; *Med. Trans.*, ix., 36–115.)

In the Year 1837–38 the Value of Imports at, and Exports from, the Port of Calcutta was as follows:

	Imports.	Exports.
	£.	£.
Great Britain	2,868,438	2,719,822
France	155,536	221,205
Sweden	3,992	10,672
South America	44,625	5,019
North America	72,945	130,737
Madras Coast	128,920	114,439
Ceylon	8,357	5,488
Maldives and Laccadives	19,249	4,732
Bombay and Malabar	171,528	277,112
Arabian and Persian Gulfs	138,476	157,287
Singapore	238,880	317,521
Penang and Malacca	93,779	65,291
China	673,494	2,054,573
New Holland	6,144	38,715
Java and Sumatra	8,156	14,715
Pegu	142,697	144,697
Mauritius	46,795	154,995
Bourbon	13,695	59,870
Cape and St. Helena	6,402	23,057
Total	4,889,962	6,504,634

The principal Articles of Import and Export were as follows:

	Quantity.	Value.
		£
Imports.		
Betel nut	121,688½ bazar mds.	65,044
Books and pamphlets		28,980
Chanks	1,194,584 No.	15,489
Glass wares		29,671
Guns and pistols		3,231
Metals	438,509 bazar mds.	457,482
Ironmongery, &c.		18,153
Pepper	50,043 —	36,945
Piece goods		665,889
Salt (duty paid)	317,415 —	134,891
Spirits, ale, cider, &c.		69,655
Twist and Yarn	5,357,269 lbs.	512,258
Wines		28,729
Woods		45,488
Woollens		94,459
Exports.		
Opium	19,600 chests	2,129,539
Indigo	95,361 bazar mds.	1,194,769
Sugar	814,771 —	671,591
Saltpetre	458,796 —	263,287
Rice	1,695,881 —	247,583
Raw cotton	203,981 —	188,117
silk	12,479½ —	485,452
Piece goods	1,176,104 pieces	470,643
Gunny bags	4,087,851 No.	92,541
Hides	1,130,500 —	89,571
Lac	47,867½ bazar mds.	109,282

AN ACCOUNT showing the Total Amount of the Import and Export Trade of Calcutta in 1836–37 and 1837–38; showing also the Amount of the Trade with each Country, and the proportion *per cent.* which the Trade with each Country bears to the Total Amount of the Trade. (*Bell's Review of the Commerce of Bengal for* 1836–37 *and* 1837–38.)

Countries.	Import Trade.				Export Trade.			
	1836–37.		1837–38.		1836–37.		1837–38.	
	Value.	Per centage.	Value.	Per centage.	Value.	Per centage.	Value.	Per centage.
EUROPE.	£		£		£		£	
United Kingdom	2,240,471	60·1	2,059,483	50·6	2,837,997	42·3	2,719,292	41·8
France	156,739	1·2	155,586	3·8	284,258	4·2	221,806	3·4
Denmark	. .	. .	3,993	. .	200			
Sweden	. .	. .	. .	0·1	. .	. .	10,673	0·2
Portugal								
Total Europe	2,397,210	64·3	2,219,062	54·5	3,122,455	46·5	2,951,701	45·4
ASIA.								
Coromandel Coast	89,736	2·4	126,909	3·1	177,131	2·7	115,439	1·8
Ceylon	3,537	0·1	8,387	0·2	14,205	0·2	6,489	0·1
Coast of Malabar	246,965	6·6	171,538	4·2	278,686	4·1	277,122	4·2
Maldive and Laccadive Isles	15,591	0·4	13,959	3	5,969	0·1	4,733	0·07
Arabian and Persian Gulfs	86,403	2·3	123,474	3·0	159,861	2·4	157,387	2·4
China	339,003	9·0	673,404	16·6	1,889,478	28·2	2,054,378	31·6
Singapore	173,051	5·0	292,659	7·2	278,052	4·1	317,581	4·9
Penang and Malacca	68,541	1·8	99,279	2·4	48,416	0·8	65,230	1·0
Java and Sumatra	11,885	0·3	8,156	0·2	24,515	0·4	14,715	0·2
Manilla	12	. .	. .	. .	58			
New Holland	2,222	0·06	6,144	0·2	19,694	0·3	38,715	0·6
Pegu	139,527	3·7	142,667	3·5	141,578	2·1	144,697	2·2
Total Asia	1,175,842	31·6	1,665,876	40·9	3,036,974	45·4	3,196,487	49·07
AFRICA.								
Mauritius	25,457	0·7	46,795	1·1	138,399	2·0	154,905	2·
Bourbon	10,505	0·3	13,405	0·3	40,835	0·6	55,670	0·
Cape of Good Hope	4,808	0·1	6,402	0·2	11,344	0.2	23,078	0·
Total Africa	40,769	1·1	66,602	1·6	190,577	2·8	233,652	3·5
AMERICA.								
North America	103,531	2·7	72,944	1·9	349,890	5·2	120,737	2·0
South America	9,208	0·2	45,465	1·1	7,844	0·1	2,019	0·03
Total America	112,739	3·0	118,410	3·0	357,725	5·3	122,756	2·03
Grand Total	3,726,560	100	4,069,950	100	6,707,741	100	6,504,596	100

CALDER, a river of England, in Yorkshire, rises on the S.E. side of Bolesworth hill, in the grand central range of English mountains, and flowing in an E. direction, at a little distance from Halifax and Dewsbury, and past Wakefield, unites with the Aire at Castleford. This river is of great importance in the canal system of Yorkshire and Lancashire, and has been rendered navigable for a great part of its course. Another river of the same name rises on the W. side of the same hill, and, flowing W., falls into the Ribble. It is of very inferior importance. (*See* HUMBER.)

CALDWELL, county, N. C. Situated in the N.W. part of the state. Drained by Yadkin river. The Blue ridge lies on its N. border. Organized since 1840. Capital, Lenoir.

CALDWELL, parish, La. Situated towards the N. part of the state, and contains 560 sq. m. Drained by Washita river, and branches of Little river. Pop.: whites, 1354; slaves, 649; free coloured, 14; total, 2017. Capital, Columbia.

CALDWELL, county, Ky. Situated in the W. part of the state, and contains 600 sq. m. Bounded S.W. by Tennessee river. Watered by Cumberland river. It contained, in 1840, 11,191 neat cattle, 10,045 sheep, 35,189 swine; and produced 53,109 bushels of wheat, 2113 of rye, 601,965 of Indian corn, 15,995 of potatoes, 2,567,625 pounds of tobacco, 17,154 of cotton, 8205 of sugar. It had twenty-nine stores, one furnace, one forge, four flouring-mills, thirty-eight grist-mills, nine saw-mills, six tanneries, two potteries, thirteen distilleries, one printing-office, one weekly newspaper, one college, 76 students, three academies, 69 students, sixteen schools, 377 scholars. Pop.: whites, 8091; slaves, 2171; free coloured, 103; total, 10,365. Capital, Princeton.

CALDWELL, county, Mo. Situated in the N.W. part of the state, and contains 432 sq. m. Drained by Crooked creek and branches of Grand river. It contained, in 1840, 1495 neat cattle, 693 sheep, 5056 swine; and produced 62,222 bushels of Indian corn, 15,190 of oats, 3510 of potatoes, 2950 pounds of tobacco. It had six stores. Pop.: whites, 1397; slaves, 61; total, 1458. Capital, Far West.

CALDWELL, p. t., capital of Warren co., N. Y., 63 m. N. Albany, 436 W. The village is pleasantly situated on the S.W. end of lake George, and contains a court-house, jail, county clerk's office, one church, two stores, one grist-mill, one saw-mill, one plaster-mill, thirty-five dwellings, and about 200 inhabitants. The remains of old fort William Henry and of fort George are near this place. A steamboat plies on lake George, 36 miles, to its outlet, and presents to the traveller much beautiful and romantic scenery. The town contains one grist-mill, four saw-mills, six schools, 239 scholars. Pop. 693.

CALEDONIA, county, Vt. Situated towards the N.E. part of the state, and contains 700 sq. m. Bounded S.E. by Connecticut river. Watered by Passumpsic river, which flows into Connecticut river, and by head waters of Winooski and Lamoille rivers, flowing to lake Champlain. It contained, in 1840, 32,668 neat cattle, 100,886 sheep, 18,991 swine; and produced 52,109 bushels of wheat, 1799 of rye, 52,350 of Indian corn, 12,291 of barley, 342,433 of oats, 1,066,848 of potatoes, 2011 pounds of hops, 665,397 of sugar. It had fifty-three stores, one furnace, eighteen fulling mills, nine woollen-factories, thirty grist-mills, 107 saw-mills, three oil-mills, twenty-seven tanneries, three potteries, two printing-offices, two weekly newspapers, four academies, 322 students, 205 schools, 7398 scholars. Pop. 21,891. Capital, Danville.

CALEDONIA, p. t., Livingston co., N. Y., 229 m. W. Albany, 363 W. Bounded S.E. by Genesee river. On the W. an efficient mill-stream issues from a spring, which is supposed to discharge the lost waters of Allen's creek, 7 miles W. It contains five stores, one furnace, one grist-mill, two saw-mills, one brewery, twelve schools, 521 scholars. Pop. 1987. The village contains two churches, four stores, one flouring-mill, one saw-mill, one brewery, seventy dwellings, and about 450 inhabitants.

CALEDONIA, t., Shiawassee co., Mich. It contains one store, one saw-mill. Pop. 114.

CALHOUN, county, Ill. Situated in the W. part of the state, and contains 240 sq. m. Bounded E. by Illinois river, and S.W. by Mississippi river, containing a table land, 37½ miles long, and from 3 to 10 wide, extending from river to

river. It contained, in 1840, 2705 neat cattle, 869 sheep, 6097 swine; and produced 2791 bushels of wheat, 72,030 of Indian corn, 3810 of oats, 5673 of potatoes, 1460 pounds of sugar, 530 of tobacco. It had eight stores, one lumber-yard, two grist-mills, five schools, 119 scholars. Pop. 1741. Capital, Gilead.

CALHOUN, county, Mich. Situated S. of the centre of the state, and contains 720 sq. m. Drained by Kalamazoo and St. Joseph's rivers, and their branches. Organized in 1833. It contained, in 1840, 9457 neat cattle, 3057 sheep, 18,308 swine; and produced 176,630 bushels of wheat, 140,971 of Indian corn, 3338 of buckwheat, 20,553 of barley, 179,177 of oats, 132,319 of potatoes, 19,755 pounds of sugar. It had thirty-three stores, ten flouring-mills, five grist-mills, twenty-nine saw-mills, four distilleries, two printing offices, two weekly newspapers, two academies, 88 students, ninety-six schools, 2157 scholars. Pop. 10,599. Capital, Marshall.

CALHOUN, county, Florida. Situated in the W. part of the ter., and contains 1100 sq. m. Bounded E. by Apalachicola river, S. by Apalachicola and St. Joseph's bays, and the gulf of Mexico. It contained, in 1840, 1484 neat cattle, 29 sheep, 966 swine; and produced 4550 bushels of Indian corn, 4495 of potatoes, 5000 pounds of rice. It had seven commission houses, ten retail stores, nine lumber-yards, two grist-mills, two saw-mills, one printing-office, one weekly newspaper, three academies, 52 students, five schools, 108 scholars. Pop.: whites, 705; slaves, 420; free coloured, 17; total, 1142. Capital, St. Joseph.

CALICUT, a marit. distr. of Hindostan, prov. Malabar, which see.

CALICUT, a marit. town of Hindostan, cap. of the above district, and of the prov. Malabar, 85 m. S.W. Seringapatam, and 380 m. W.S.W. Madras; lat. 11° 18′ N., long. 75° 50′ E. Pop. 25,000? The principal exports are pepper, teak, sandal-wood, cardamoms, coir, cordage, and wax; but Calicut is destitute of any good harbour. This was the first place in India made by the Portuguese under Vasco de Gama, who arrived here 18th May, 1498. In 1509 the Portuguese were repulsed, with great slaughter, in an attack on the place, and their commander killed. In 1766 it was taken by Hyder Ali, and Tippoo afterward destroyed the fort and town, obliging the inhabitants to migrate to Nelluru; but on the conquest of the prov. by the British in 1790, most of them returned to it, and in 1800 Calicut again numbered 5000 houses. (*Hamilton's East India Gazetteer*, i., 326; *Journal of the Asiatic Society*, ii., 346.)

CALIFORNIA, a country of N. America, extending along its W. coast from 23° 48′ to 42° N. lat., and between long. 107° and 124° W., having N. the W. territories belonging to the U. States, E. Mexico and the gulf of California, and S. and W. the N. Pacific ocean. It is naturally divided into Old or Lower, and New or Upper, California; which, as they differ widely, both as to formation and products, we shall notice separately.

CALIFORNIA (LOWER), a long, narrow peninsula on the W. coast of N. America, between 22° 48′ and 32° N. lat., and 109° 18′ to 116° 30′ W. long., having N. Upper California, E. the gulf of California, which separates it in almost its entire length from the Mexican prov. of Sonora, and S. and W. the N. Pacific ocean; length about 700 m.; breadth varying from 30 to 100 m., with an average of 50 or 60 m.; area 38,000 sq. m. Pop. perhaps not more than 14,000 or 15,000. (*Forbes.*)

A chain of rocky mountains, not more than 5000 feet in height, runs through the centre of the peninsula from S.E. to N.W. The surface of the country consists of groups of bare rocks broken by ravines and hills, interspersed with tracts of a sandy soil nearly as unproductive. It is, in fact, one of the most barren and unattractive regions within the temperate zone. In some sheltered spots, where the soil has not been carried away by the torrents from the mountains, or in others which chance to be fertilized by small streams (which are very scarce), there is mould of great fertility; but such spots are rare and of small extent. There are some tolerable harbours; but the same barrenness reigns around them that prevails elsewhere, and renders them ineligible as situations for towns. Lower California is said to be rather rich in minerals. At its S. extremity there are argentiferous lead ores; in other parts there are mines of gold and silver; but of these none are now wrought, with the exception of those of San Antonio, in or about the 24th parallel, which afford a trifling produce. The climate is excessively dry and hot: unlike Mexico, the rains, except in the most southerly parts of the peninsula, occur during the winter months; summer rains scarcely occur N. of Loreto, near lat. 26° N. Violent hurricanes are frequent, but not earthquakes. Timber is very scarce, and by far the greater portion of the country is incapable of producing a single blade of corn. The sheltered valleys only, near the different missions, are cultivated with maize, and yield a variety of fruits. Dates, figs, &c., are dried, preserved, and exported; wine is also made and exported, and a kind of spirit is distilled from the muscat. Cattle are rather numerous as compared with the population, and feed in part on the leaves of the mosqueto tree, a species of acacia. Wolves, foxes, deer, goats, several snakes, lizards, and scorpions are among the wild animals; and the fertility of the sea, if properly taken advantage of, would make amends for the indomitable barrenness of the land. The pearl-fishery in the gulf of California has been famed from its first discovery, and in the 17th and 18th centuries large quantities of pearls were obtained by the Spanish adventurers. Violent means, attended with frequent loss of life to the Indians, were often resorted to, to carry on the fishery: it was customary with the Spaniards to kidnap and employ by force as divers all the inhabitants of the coasts and islands of the gulf they could lay their hands on. When the Jesuits had settled in California, they obtained the prohibition of such practices towards the Indians under their protection; and divers were then brought from the opposite or Mexican side of the gulf, in which none were allowed to fish for pearls but such as had the viceroy's licence. When prosecuted to its greatest extent, from 600 to 800 divers were employed; the fishery was carried on by vessels of 15 to 30 tons' burden. The oysters were divided as follows: two for the "armador," or owner of the vessel; two for the "buzos," or divers; and one for the king, whose fifth, at the commencement of the 17th century, often produced a value of no less than 12,000 dollars per annum for every bark employed. The oysters were then immediately opened. The pearls found in those belonging to the divers were equally divided among them, and either sold on the instant to the armador, to whom they were always indebted for their outfit and previous advances, or to dealers on shore, who supplied them with spirits, chocolate, sugar, cigars, &c., and who often reaped more profit than the armadors. In 1825, Captain Hall says the oysters were differently distributed: the largest were first laid aside for the Virgin, and of the rest, 8 were the share of the owners, 8 of the divers, and 2 only of the government. Sixteen or eighteen small vessels are now annually employed in the gulf, each of which obtains, in favourable seasons, from 500 to 1000 dollars' worth of pearls. In 1831, four tolerably large vessels from the opposite coast of Mexico, with 180 divers, together obtained pearls to the value of £2,660 (*Forbes.*) Pearls, tortoise-shell, a few bullock's hides, dried beef, dried fruits, cheese, soap, &c., constitute all the exports of Lower California, which are mostly sent to San Blas and Mazatlan, in small coasting vessels. The imports are—provisions, clothing, agricultural and domestic utensils, supplies for the ceremonies of the church, and a small amount of the ordinary luxuries of life.

This country was discovered by Hernando de Grijalva in 1534; but no settlement was made by the Spaniards till towards the conclusion of the succeeding century, when some Jesuits established themselves here, with the view of converting the natives. They found the latter feeble, timid, and indolent, little advanced above the rudest state of barbarism; living by hunting and fishing and the spontaneous produce of the soil, destitute of agriculture; the men without any covering whatever, and any fixed forms of government or religion apparently unknown. Loreto, considered the capital, and various other small settlements, were established in different parts of the country by the Jesuits, who instructed the natives in agriculture, and persuaded many of them to adopt settled habitations; but this civilization has taken no real root, and the Indians appear to be rapidly diminishing. Perhaps half the natives of Lower California have been nominally converted to Christianity. (*Forbes, Alex., California*, 1839, 1—75; *Coulter, Dr.*, in *Geog. Journ.*, vol. v., &c.)

CALIFORNIA (UPPER OR NEW), in its widest sense, comprises all that extensive portion of N. America between lat. 32° and 42° N., and long. 107° and 124° W. Within these limits it includes the territory discovered by Sir F. Drake, and named by him New Albion; and has N. the W. territories claimed by the United States; E. the river Colorado, which separates it from Mexico; S. Lower California; and W. the N. Pacific ocean. The E. and central parts of this region are occupied by the Rocky mountains, an immense chain running N. and S.; and on the W. side of these, by a dry and sandy plain or desert, about 700 m. in length, with a breadth of about 100 m. at its S., and 200 m. at its N. extremity. This plain forms the E. boundary of the inhabited, and indeed only habitable portion of Upper California.

The part inhabited by European and other foreign settlers is merely a tract extending along the shore of the Pacific for about 500 m., and bounded inland by the first range of hills, with an average breadth of 40 m.; area about 20,000 sq. m. Pop. (1831) 23,000. This territory has been thus divided:

Presidios or Jurisdiction.	Pop. 1831.	Ch. towns.	Pop.
San Francisco	6928	San Francisco . .	871
Monterey	4148	Monterey	708
Santa Barbara	5223	Santa Barbara . .	613
San Diego	7281	San Diego	1575

The first ridge of mountains met with on passing inland is a continuation of the central chain of Lower California, which, after entering this portion of the country, divides into several ranges, which diverge from each other as they advance N. Some of the more inland ranges are constantly capped with snow, and it is supposed in about 42° N. lat. they join the table-land, which divides the waters flowing into the Columbia river from those which fall into the bay of San Francisco. Surface of the country near the ocean very diversified; in some places elevated into ranges of hill from 1000 to 3000 feet high, in others spread out into extensive plains. Some of the hills seem chiefly composed of sandstone; the soil elsewhere is often light and sandy, though fertile, or of the richest loam: in some spots it is marshy, but generally it is characterized by dryness. Upper California possesses several good harbours: San Francisco, in lat. 38°, is one of the largest and best on the W. coast of America. The country immediately behind the first range of mountains is said to be superior even to that near the shore, and to consist of plains, lakes, and hills, beautifully diversified, very fertile, and abounding with timber. The plain between the first and second mountain-ranges contains the two Tule lakes. These, which are of very considerable dimensions, are connected by a river, which, following a N.W. course, falls, after escaping from the N. extremity of the upper lake, into the bay of St. Francisco. After the Rio Colorado, the largest rivers are those which fall into the bay of St. Francisco: the principal is the Sagramento; the only river in the country which has a S. direction, it is navigable for several hundred miles inland, and, like the Colorado, runs through a country capable of sustaining a large population. The San Joachim and Jesus Maria are both large and navigable streams, discharging themselves into the same bay; the Rio de San Buenaventura has a N.W. course of nearly 200 m., and falls into the bay of Monterey. The other streams are mere rivulets, and the general infrequency of rivers and springs is the chief defect of the country; though water may be obtained in most places by digging. The climate of California, and indeed of all the country on the W. side of the Rocky mountains, is considerably warmer than that of the country in the E. parts of America, in the same latitudes. Near the Colorado, the heat of summer is sometimes intense, reaching 140° Fahr. (Coulter): during the month of December, 1826, Capt. Beechey found the mean temperature at San Francisco 53° 2′ Fahr. So far as known, minerals are of very little importance; E. of Santa Ynez (about lat. 34° 30′), a small silver mine was wrought for some time, and small quantities of gold have been found in one of the streams falling into the S. Tule lake; but excepting these, limestone and clay, none else have been discovered of any value; and in this respect, as well as in its abundance of vegetable and animal life, and the fertility of some of its districts, it strikingly contrasts with Lower California. There is a profusion of forest trees, including oak, elm, ash, beech, birch, planes, and many varieties of pine, which grow to a large size, and are often spread out into extensive forests. Its abundance of timber, and the goodness of its shores, afford great facilities for ship-building and the acquisiton of maritime importance. Although many fine fruits are easily cultivated, few are indigenous. Among those which are, is a species of vine, producing grapes of considerable size, and so plentiful, that considerable quantities of brandy are made from them. Among the wild animals, Forbes reckons the American lion (*Felis concolor*), the American tiger (*Felis onca*), buffaloes, stags, roes, elks, the wild mountain cat, bears, wolves, jackals, numerous herds of wild cattle, foxes, polecats, otters, beavers, harps, rabbits, and a profusion of other kinds of game. The elk, and argali (*Ovis pygargus*, Cuv.) are domesticated; the bison is hunted for its skin, which is used in many parts of Spanish America as a bed or carpet. Birds are exceedingly abundant. Otters and beavers are found in all the rivers, lakes, and bays; but their numbers have greatly decreased, since the country began to be more settled. Captain Beechey estimated the annual export of skins in 1824 at 9000; and the quantity is now probably less than this, though it might no doubt be increased by a better system of hunting. The sea contains exhaustless stores of fish.

The Indians of Upper California are seldom much more than five feet in height, and of a dark copper colour; they have projecting lips, broad and flat noses, low foreheads, over which their hair, which is long and straight, grows down near the eyebrows; beard generally scanty. They have a timid carriage, are indolent, pusillanimous, and without any of the boldness, industry, and activity evinced by the Indians nearer the pole. Excepting those that have been converted in the different missions, the women go nearly, and the men entirely, naked. They are filthy in their habits, have few articles of furniture, and live in wigwams built in great part of a kind of bulrush, of which also they construct their rafts, and what clothing they use. In their primitive state they have no agriculture, but subsist on wild herbs, seeds, which the women collect and grind into a meal, fish, the *Testacea* on the shores, the products of the chase, and whale's flesh and blubber, whenever that animal is cast upon the shore; an event which occasions great rejoicing.

In 1831, 18,700 Indians, nominally converted to Christianity, resided in the 21 missions. The men are employed in agricultural labours, or in the warehouses and laboratories of the mission; the women are occupied in spinning, grinding corn, and other domestic duties. All are fed and clothed by the friars, to whom they are, in fact, slaves: their modes and condition of life have been somewhat improved; but their numbers are evidently diminishing. The whole of the free settlers, including those of mixed blood, do not exceed 5000. The greatest part of the lands, and especially those to the S. of Monterey, are in the hands of the missionaries; those parts, however, which, both as to fertility and climate, are best suited for emigrants, lie N. and E. of the bay of Francisco: these are as yet unoccupied, and peculiarly favourable for the culture of grain, and for the rearing of cattle. In 1831, the harvest produced 14,438 quarters, of which 7857 were wheat, and the rest maize, barley, &c.

The potato thrives in California, and, as well as all green pot-herbs, was introduced by the Europeans: the soil and climate are found very suitable for flax; hemp of good quality was formerly cultivated to a considerable extent. The vine (*Vitis vinifera*) thrives in an extraordinary degree, and wines and brandies of a superior quality are made in large quantities. California has analogous latitudes with the finest wine countries in the world, and will probably, at a future period, become celebrated for its wines. The olive is produced in very great perfection. Cattle, however, have hitherto been the staple produce of the country. Their increase since their introduction, in 1769–70, has been quite extraordinary, the stock in 1831 being of—

Branded Cattle	216,727	Mules . . .	2344
Sheep	155,456	Goats . . .	1373
Horses	32,201	Hogs . . .	834

besides numerous herds running wild. Its chief exports are hides, tallow, and cattle, with small quantities of wheat, wine, raisins, and olives; the whole amounting in value, perhaps, to £26,000 a year. The chief imports are various kinds of useful manufactures, with deals, salt, silks, candles, &c. The *presidios* are military governments, administered formerly, under the Mexicans, by a commandant, with a body of about 250 inferior troops. The head places of the presidios are commonly a square of about 100 yards, surrounded by a wall of unburned bricks, and containing a few houses, barracks, church, &c.; at a short distance from each is a small fort; but all are very ill kept and insignificant. In their neighbourhood are some *ranchos*, or national farms, set apart for the use of the soldiers. The various missions are clusters of houses usually built in a square, with a territory of about fifteen sq. m. each, free from government taxes, and each subordinate to a Franciscan friar, termed a *prefect*. There are small *free* towns, inhabited by retired soldiers, &c., which have their own mayor, town-council, and internal jurisdiction. This country was in part discovered by Cobrillo, a Spanish navigator, in 1542, and its N. part, called New Albion, by Sir F. Drake, in 1578. In 1768 it was first colonized by the Spaniards, and until after the revolution in Mexico, formed a province of that country. In Nov. 1836, the people of Monterey and its vicinity rose, attacked and subdued the garrison, expelled all the Mexican functionaries and troops, declared California independent, and established a congress of deputies for its future government. (*Forbes's California*, 1839, p. 78—325; *Coulter, Dr.*, in *Geog. Journal*, vol. v.)

CALLAH (EL), a town of Barbary, reg. Algiers, on a mountain, and surrounded by ramifications of the Atlas, fifteen m. N.E. Mascara. It is a dirty and ill-contrived town, having neither drains, pavement, nor causeways. It has a citadel, and a large manufactory of carpets and *burnooses*, or woollen cloaks. Several villages in the neighbourhood are engaged in the same employment. Dr. Shaw thinks, that it may have been the *Gitlui* or *Apfac* of Ptolemy. (*Shaw's Travels*, 2d ed., p. 25.)

CALLAN, an inl. town of Ireland, co. Kilkenny, prov. Leinster, on the King's river, an affluent of the Nore, 72 m. S.W. by S. Dublin. Pop. of the town, liberties, and parish, in 1821, 5678; in 1831, 6111; and in 1834, 6269; of which 197 were of the established church, and 6065 R.

Catholics. The town was anciently walled, and a place of considerable strength; but was stormed and dismantled by Cromwell in 1650. The streets form a cross, with lanes branching from them, and the houses are, in general, very indifferent. The parish church was anciently a monastic building; the Roman Catholic chapel is modern. There is also an Augustine friary, with a large chapel, a national school, a dispensary, and a loan fund. A party of the constabulary is stationed here. The corporation, which consists of a sovereign, burgesses, and freemen, returned two mem. to the Irish H. of C. till the Union, when it was disfranchised. The liberties extend to a considerable distance round the town. The only trade is in grain. Markets, held in a small market-house, on Tuesdays and Saturdays; and for pigs, on every Monday from January to May. Fairs held on 4th May, 13th June, 10th July, 21st August, 10th October, 4th November, and 14th December. Post-office revenue in 1830, £233; in 1836, £318. The mail coach from Dublin to Cork passes through Callan, and a car plies to it from Clonmell three times a week, conveying an average of four passengers each trip. (*Stat. Surv.; Railway Rep.*)

CALLANDER, a bor. of Scotland, co. Perth, valley of Menteith, beautifully situated on the left bank of the Teith, sixteen m. N.W. Stirling. It may be regarded as the threshold of the Highlands in this quarter, and is surrounded on all sides except the S. by stupendous mountains, forming part of the Grampians; Benledi, the highest and most striking, being 3009 ft. above the level of the sea. Pop. 1900. Gaelic and English are both spoken, and the Highland dress is partially worn. A classical interest has of late years been imparted to this town, and to the district with which it is connected, by Sir Walter Scott's poem of "The Lady of the Lake." Loch Katherine and the Trosachs ("bristled country"), so celebrated in that poem, lie 10 m. W. from Callander; and the activity and prosperity which mark this neat little town are chiefly ascribable to the advantages it derives from lying in the line of the great thoroughfare leading to these romantic scenes. Not fewer, at an average, than fifty strangers are said to sleep in Callander every night during five months of summer and autumn, on their way to and from the Trosachs. The place abounds with inns, and most families let beds for the accommodation of travellers. The head inn, lately built, would do no discredit to any town of the kingdom. Manufactures have not yet found their way to this place. The town is built on *feus*, or building leases, holding of the noble family of Perth, now represented by Lord Willoughby d'Eresby; to each of which is attached an acre or more of ground, varying in yearly rent from £1 10*s.* to £3, so that each family has a source of employment within itself almost peculiar to Callander. The only public building in the town is the parish church, a modern edifice, with a spire. It has also an efficient parish school.

CALLAO, a sea-port town of Peru, about six m. W. from Lima, of which it is the port, on the N. side of a projecting tongue of land, opposite to the barren island of San Lorenzo, which protects the W. side of its bay; lat. 12° 3′ 45″ S., long. 77° 4′ 10″ W. The houses in the town are mean and poor, with mud walls and flat roofs. It is well fortified. The roadstead is by far the best on the Peruvian coast, with good anchorage in from seven to ten fathoms. There is a rudely constructed pier, within which vessels of large burden may load and unload. There is a very good carriage road from Callao to Lima. The present town is of comparatively modern origin; the former town having been wholly destroyed and submerged in a dreadful earthquake that occurred in 1746, which also destroyed great part of Lima. In calm weather the ruins of the old town are still visible under the water at a short distance from the present town. In November, 1820, Lord Cochran cut out the Esmeralda, a large Spanish ship of war, from under the guns of the castles of Callao. These surrendered to the independents in the course of the following year. (*Stevenson's S. America*, i., 134, *&c.; Hall's S. America, &c.*)

CALLAWAY, county, Ky. Situated in the W. part of the state, and contains 600 sq. m. Bounded N. and E. by Tennessee river; by branches of which it is watered, the principal of which is Clark's river. It contained in 1840, 9227 neat cattle, 7758 sheep, 39,520 swine; and produced 54,911 bushels of wheat, 157,818 of Indian corn, 65,903 of oats, 11,428 of potatoes, 143,192 pounds of tobacco, 93,471 of cotton, 2421 of sugar. It had sixteen stores, three flouring-mills, ten grist-mills, seven tanneries, twenty-six distilleries, eighteen schools, 206 scholars. Pop. whites, 8670; slaves, 911; free colored, 13; total, 9794. Capital Wadesboro'.

CALLAWAY, county, Mo. Situated N.E. of the centre of the state, and contains 760 sq. m. Bounded S. by Missouri river. Drained by Big and Little Au Vase creeks, which flow into Missouri river. It contained in 1840, 11,693 neat cattle, 12,666 sheep, 29,493 swine; and produced 33,909 bushels of wheat, 1915 of rye, 234,539 of Indian corn, 127,057 of oats, 2686 of potatoes, 391,242 pounds of tobacco, 12,353 of sugar. It had twenty-four stores, six woollen-factories, five flouring-mills, thirty-four grist-mills, seven saw-mills, two oil-mills, one rope-walk, nine tanneries, nine distilleries; total capital in manufactures $33,510; two academies, 61 students, forty schools, 964 scholars. Pop. whites, 8601; slaves, 3142; free coloured 42; total, 11,785. Capital, Fulton.

CALLE (LA), a factory founded by the French African Company, on the N. coast of Africa, reg. Algiers, near the Tunisian frontier. It stands on a peninsulated rock nearly surrounded by the sea, and was well fortified. This was formerly the principal seat of the coral fishery carried on along the Barbary coast. It was nearly destroyed by the Algerines in 1827.

CALLIANEE, an isl. town of Hindostan, prov. Aurungabad, presid. Bombay, 24 m. N.E. that city; lat. 19° 15′ N., long. 73° 15′ E. It is the cap. of a distr. of the same name, and stands on the S. bank of the Callas river, surrounded by ruins: it is, however, populous, and carries on some trade in cocoa nuts, oil, coarse cloths, brass, and earthenware. It sustained many sieges during the wars between the Moguls and Mahrattas. The district of Callianee is a strong hilly country extending along the sea-coast, opposite the islands of Bombay, Salsette, &c., bounded E. by the W. Ghauts, and containing the towns of Bassein, Parwell, Chowl, Rajapoor, &c.: its towns are large and tolerably well peopled; but its villages small, meanly built, and thinly scattered. (*Hamilton's E. I. Geo.*, i., 327.)

CALLINGTON, a town and par. of England, co. Cornwall, middle div., E. hund. Area of par. 2600 acres. Pop. of do., 1388. The town, in a low and unpleasant situation, is 7 m. S.S.W. Tavistock. It was made a bor. in the 27th of Elizabeth, and returned two mem. to the H. of C. from that period down to the passing of the Reform Act, when it was disfranchised. The right of election was in the owners of burgage tenures paying scot and lot.

CALLOSA DE ENSARRIA, a town of Spain, Valencia, 18 m. S.S.W. Denia, near the confluence of the Gendalest and Algar, in a mountainous country that produces fine raisins, and excellent wine, almonds, and fruit. Pop. 6100.

CALLOSA DE SEGURA, a town of Spain, Valencia, 4 m. E. Orihuela, on the river Segura. Pop. 4443. Charcoal, known by the name of *granza*, is here manufactured from the stalks of hemp; it is said to be superior to any other for the manufacture of gunpowder, and is or was used in the preparation of that made for the Spanish artillery. (*Miñano, Sup.* p. 159.)

CALMAR, or KALMAR, a sea-port town of Sweden, cap. prefecture of same name, on the W. side of the narrow strait of the Baltic separating the island of Oland from the continent, 90 m. N.N.E. Carlscrona; lat. 56° 40′ 30″ N., long. 16° 26′ 15″ E. Pop. 5346. It stands on the small island of Quarnholm, which communicates with the mainland, where there is a suburb, by a bridge of boats. It is built of wood, and is strongly fortified. The castle, in the suburb, formerly looked upon as one of the keys of the kingdom, is now occupied as a house of correction. Calmar is the seat of a bishopric, and has an academy and a dockyard. The cathedral is a fine stone building; and the hotel of the prefect, the hôtel de ville, and some other public edifices, are of the same enduring material. Its port is small, but safe and commodious. There are manufactures of woollen stuffs, tobacco, and potash; with breweries, &c. Previously to the annexation of the provinces of Schonen and Blekingen to Sweden, this town was of much greater consequence than at present. Its importance as a fortress has declined; and its commerce, which was formerly very considerable, has been mostly transferred to Stockholm; but timber, alum, tar, hemp, &c., are still exported.

This is a very old town. Having been burned down in 1647, it was rebuilt on the island of Quarnholm, being previously situated on the mainland where its suburb now stands. It has been the scene of some very important events in Swedish history. Here, in 1397, was concluded the famous treaty which united the kingdoms of Sweden, Denmark, and Norway, under the vigorous sceptre of queen Margaret, surnamed the Northern Semiramis. But in its consequences this treaty was very ruinous to Sweden. Here also, in 1520, Gustavus Vasa disembarked to deliver his country from the domination of foreigners and of a sanguinary tyrant. Louis XVIII. resided at Calmar in 1804, and erected at Stensö a tablet in honour of Gustavus. In 1800 a fire destroyed a great number of the houses, with the buildings of the academy. (*Dict Géographique, &c.*)

CALNE, a parl. bor. market town, and par. of England, co. Wilts, hund. Calne, the bor. being situated on the great coach road from London to Bristol, 82 m. W. from the former, and 25 m. E. from the latter. The bor. formerly

comprised 883 acres, and had, in 1831, a pop. of 2640; but the Boundary Act made the limits of the parl. bor. coincident with those of the par., which includes an area of 7964 acres, and had, in 1831, a pop. of 4795. The town is well built with stone houses, and is well paved, and lighted with gas. "It is clean and respectable; but the manufacture of cloth, which used to be carried on to a considerable extent, has for some years been on the decline; and several factories, which appear in perfect repair, are now untenanted." (*Municipal Boundary Report.*) "It has become a mere country town of respectable appearance and considerable extent. It has the advantage of inland water communication by a cut from the Kennet and Avon canal, and is a place of much thoroughfare." (*Boundary Report.*) The church, a large ancient structure, has a tower by Inigo Jones; and there are various dissenting chapels. The town-hall was erected at the expense of the Marquis of Lansdowne. The grammar school, founded in 1660, has two exhibitions to Queen's College, Oxford; and there are British and national schools, Sunday schools, &c. A court for the recovery of small debts is held once every six weeks.

Calne is a bor. by prescription: it began to send mem. to the H. of C. in the reign of Edward I.; and regularly sent two mem. from the reign of Rich. II. down to the passing of the Reform Act, which deprived it of one of its mem., and at the same time extended the limits of the bor. as stated above. Previously to the Reform Act the right of voting was in the burgesses, who might be indefinitely increased. Registered electors in 1837–38, 178. The municipal limits coincide with those of the old bor. Bowood, the magnificent seat of the Marquis of Lansdowne, lies about 1½ m. W. from the town. Market-day, Tuesday; fairs, March 6, July 22.

CALVADOS, a dep. of France, so called from a chain of rocks of that name that stretches along part of its coast, bounded N. by the English channel, E. by the dep. Eure, S. by Orne, and W. by that of La Manche. Area 556,093 hectares. Pop. 501,775. Surface mostly flat, the only hills of any consequence being in the arrond. of Vire, in the S.W. corner of the dep. Soil of the plains composed principally of calcareous clay; the soil of the valleys, of which there are several of large extent, is principally alluvial, and that of the hilly parts sandy. Minerals unimportant, with the exception of coal, of which about 340 quint. (met.) are annually produced at Littry. Climate rather cold and moist. There are several rivers, but none of them is navigable for any considerable extent inland. Coasts in most parts inaccessible; and the dep. has no good harbour. Pasturage is more attended to than tillage; but the latter is in a more advanced state than in most other departments. The average produce of wheat is estimated at about 1,400,000 hect.; and that of barley, oats, rye, and buckwheat, may be taken at about as much more. Apples are largely cultivated, and cider is the common beverage of the country. The potato culture has recently been much extended. Oxen but little used in field labour. Meadows very extensive, extending over about 123,000 hectares, and their management well understood. In the valleys, large herds of cattle are fattened for the markets of Paris, Rouen, and Caen. They are bought lean in the departments of Finisterre, Côtes-du-Nord, Sarthe, Mayenne, &c. The dairy is also an object of much attention; and large quantities of superior butter and cheese are produced. Total stock of cattle estimated at 160,000 head. The horses of this part of Normandy are reckoned the finest in France: stock estimated at 80,000, exclusive of 12,000 mules and asses. Sheep have been vastly improved during the present century. Annual produce of wool 310,000 kilogs. Great numbers of hogs are fattened. The forests cover nearly 40,000 hectares. The lace manufactory is widely diffused, particularly about Caen; and the spinning and weaving of cotton and wool occupy a great number of hands; there are also paper-mills, oil-mills, tanneries, refineries of beet-root and foreign sugar, distilleries, &c. The mackerel and herring fishery is successfully carried on along the coast. The dep. is divided into seven arrond., and sends seven mem. to the Chamber of Deputies. Number of electors 4191. Public revenue in 1831, 18,943,556 fr. Principal towns, Caen, Lisieux, Bayeux, Falaise, Honfleur, and Vire. (*Hugo*, art. *Calvados.*)

CALUMET, county, Wis. Situated in the N.E. part of the ter., and contains 300 sq. m. Bounded W. by Winnebago lake. Drained by head branches of Manitowoc river, flowing E. into Lake Michegan. It contained in 1840, 255 neat cattle, 438 swine; and produced 1192 bushels of wheat, 3619 of Indian corn, 3803 of potatoes. Total capital in manufactures $1000. Pop. 275.

CALUMET, t., Pike county, Mo. It has five schools, 142 scholars. Pop. 2743.

CALVARY, t., Franklin co., Mo. It has one school, 16 scholars. Pop. 779.

CALVERT, county, Md. Situated in the S. part of the state, and contains 264 sq. m. Bounded E. by Chesapeake bay, W. and S.W. by Patuxent river. It contained in 1840, 6487 neat cattle, 6601 sheep, 12,617 swine; and produced 36,982 bushels of wheat, 166,592 of Indian corn, 55,775 of oats, 6056 of potatoes, 3,689,695 pounds of tobacco. It had 96 stores, twenty-five grist-mills, one saw-mill, five academies, 58 students, eight schools, 175 scholars. Pop.: whites, 3585; slaves, 4270; free coloured, 1474: total, 9,229. Capital, Prince Frederick.

CALVI, a sea-port town of Corsica, N.W. coast of the island, on an elevated peninsula in the gulf of the same name; lat. 42° 34′ 7″ N., long. 8° 45′ 16″ E. Pop. 1457. It has a good harbour and road; but derives its principal consequence from its strong citadel, flanked with five bastions. It was taken by the English in 1794, but not till after a siege of 51 days.

CALVIN, t., Cass co., Mich. It contains one grist-mill, one saw-mill, one school, 44 scholars. Pop. 209.

CAMANCHE, p. v., capital of Clinton co., Iowa, 60 m. E. Iowa city, 912 W. Situated on the W. side of Mississippi river, and contains about 200 inhabitants.

CAMARGUE (LA), a river island of France, dep. Bouches-du-Rhone, being, in fact, the delta of the Rhone. It is of a triangular form, and extends from Arles to the sea; having E. the Great Rhone, or main branch of the river, N. and W. the Little Rhone, and S. the sea. It is quite flat, and is supposed to contain about 55,000 hectares, of which about 12,000, lying principally along the river, are cultivated; the rest consists of lagoons, marshes, wastes, &c. The lagoons, particularly that of Vulcaris, are very extensive: they are mostly situated in the centre of the island and along the sea coast, where the ground is lowest. Except in certain districts, where sand predominates, the soil is, in general, very fertile. The cultivated portion produces excellent crops of wheat and barley; and the marshes and other grounds feed large flocks of sheep during winter, with great numbers of cattle and horses. The latter have many properties of the Arab horses, and are hardy, and highly esteemed for the saddle. The oxen are a small breed, but strong and active; and being bred up in a state of the most perfect freedom, are very wild. Considerable tracts are covered with a salt efflorescence, a consequence of the subsoil consisting of sea sand. The pernicious influence of this salt impregnation is in some parts counteracted by inundating the country with the waters of the Rhone. A good deal of salt is produced. It is proposed to attempt the drainage of the lagoon and marshes, by cutting a canal for that purpose. In summer the air is very unhealthy. (*Dict. Géographique;* Hugo (tom. 1., 223) estimates the area of the island at 142,451 hectares, or at between 1-3 and 1-4 part of the entire dep.; but this is an obvious exaggeration.)

CAMBAY, a marit. town of Hindostan, prov. Gujrat, in the Guicowar's dom., formerly a celebrated and flourishing sea-port, but now much decayed, through the filling up of the bay, at the head of which it stands, by the deposits brought down by the rivers. It is 72 m. N.N.W. Surat, 200 m. N. Bombay. Pop. about 10,000, almost equally divided between Hindoos and Mohammedans. Various Hindoo and Mohammedan edifices are still to be seen, among which is a very beautiful mosque, close to the nawaub's residence: its main court contains 360 pillars of a handsome red sandstone, the material for which was brought, it is said, from Cutch. There are also the remains of a subterranean temple, said by some to be of Jain, but believed by others to be of Buddhic origin: it consists of two chambers, one over the other, and about 20 ft. sq. In the lower chamber three sides are occupied by empty niches; in the fourth there is a double row of white marble idols, having in their centre a gigantic idol seven or eight feet high: they are all alike, with a mild aspect, the legs crossed, and a lotos flower on the sole of the foot. In the upper room the figures are similar, and in one corner there is a black marble idol of the same size and appearance as the one beneath; none of the other figures here are more than two feet high. Many emigrants from Persia formerly settled here, after the civil wars in that country and conquests of Nadir Shah; and it has still 30 or 40 Parsee families. The silversmiths here emboss very neatly, by filling the articles to be operated on with gum lac, and then punching the figures with a small chisel; but the chief industry consists in the manufacture of cornelian, bloodstone, agate, &c. ornaments. These stones, when intended for beads, are chipped into a roundish figure, and afterwards rolled together in bags for several weeks, till they become perfectly spherical: when a flat surface is required, the stones are sawn by means of a mixture of gum lac and quartzose substances, which readily fuse together, and harden as they cool, when they are formed into cutting instruments. Cambay formerly exported silks, chintzes, gold, stuffs, &c.; but these manufactures have dwindled away: the town was given up as a trading station by the E. I. Company, who keep only a

Parsee agent there. Heavy goods have almost ceased being shipped at Cambay, and most of the Gujrat cotton is now sent to Gogo. The surrounding country is pleasant and rich, but not generally well cultivated; it yields ample returns of wheat and Hindostanee grains, indigo, cotton, oil-seeds, and excellent tobacco: some grain and indigo are exported to Bombay, and tobacco, from which many imitations of Manilla cheroots are made. This city and territory prospered under the Moguls; in 1780 it was tributary to the Mahratta peishwa, since whose fall his rights have devolved on the British gov., to whom the nabob now yields allegiance. (*E. I. Gaz.*, i., 328; *Lord*, in *Journ. of Asiat. Soc.*, vol. ii.)

CAMBERWELL, a par. of England, co. Surrey, E. div. Brixton hund., a suburb of the metropolis, on its S. side. Area, 4570 acres. Pop. (including the hamlets of Dulwich, Peckham, and part of Norwood) in 1821, 17,896; 1841, 39,867. The more ancient part of what is usually designated the village of Camberwell, including the green, is mostly occupied by shops, &c., and is paved, and supplied with water from the works of the South London Company. The more modern mansions are mostly detached handsome houses, occupying the rising ground to the S. and S.E. of the former, known as the Grove, Champion, Denmark, and Hearne hills. These villas are mostly occupied by the families of merchants who either are or have been connected with the active business of the metropolis. The church, supposed to have been built in 1520, and enlarged and improved in 1786, is in the later Gothic style, having a low embattled tower, with many interesting monuments. There are three chapels of ease—Camden church, another on Denmark hill, and one beside the Surrey canal, built by the church commissioners in the Grecian style, and forming the district church of St. George. There are also three dissenting chapels; a free grammar school, founded in 1618, for 12 boys, is endowed with an estate valued at £200 a year, but is at present let on a beneficial lease, producing £60. There is also a green-coat school, on the national plan, on Camberwell green, and a similar one, attached to Camden church, founded in 1810; three or four other schools have small endowments; and there are some minor charities. The grounds of the S. Metropolitan Cemetery, in this parish, form an extensive enclosure, tastefully laid out, with a chapel and other offices, catacombs, &c. The agricultural portion of the parish is fertile; and market-gardens and nurseries employ part of the population. The majority, however, are more or less engaged in the general business of the metropolis. The Surrey canal terminates in it. On Ladland hill, S. of the village, is a quadrilateral Roman camp, with a double entrenchment. In digging the canal, in 1809, a Roman way was discovered, formed of square blocks of chalk, secured with oak piles, which has made some suppose that this was the place where the Roman legions first crossed the Thames: three ancient wells, on Well hill, in the parish, are supposed to have originated the name.

CAMBOJA, or CAMBODIA, a country of India beyond the Ganges, formerly one of the most flourishing in that peninsula; but at present divided between the empire of Anam and the kingdom of Siam. It lies between lat. 8° 30′ and 15° 30′ N., and long. 103° and 107° E.; having N. Laos, E. Cochin China, W. Siam, and S. the ocean. It is enclosed E. and W. by two of the great mountain chains, which, passing S. from Yunnan, traverse the Ultra-Gangetic peninsula: on the sea shore, it presents a vast alluvial flat, stretching for a considerable distance inland. It has several rivers, one of which, the Mekon, ranks among the largest in Asia; and another, the river of Saigon, is perhaps, in all respects, the finest river in that continent for navigation. (*Crawfurd.*) The interior of Camboja is scarcely at all known by Europeans: it contains large forests, producing some teak, and many *sao* trees, a hard black timber called *gue*, eagle, and rosewood, and various other woods fit for cabinet work, dye-woods, areca, stick lac, sugar-cane, pepper, &c. The celebrated gamboge gum is said to be obtained from a species of *Garcinia*, by making incisions in the bark, from which the gum exudes, and is collected in vessels, in which it soon becomes concrete, and fit for the market without farther preparation. Besides the articles already named, Camboja exports cardamoms, ivory, hides, horns, bones, dried fish, &c. in considerable quantities, and imports silks, China and lacquered ware, tea, sweetmeats, tin, and *tutenagus*. (*See* SAIGON.) In person, manners, laws, and state of civilization, the inhabitants more closely resemble the Siamese than any other people: most of them are Buddhists; but there are a few Christians. The latter faith was first introduced by the Portuguese Jesuits in 1624.

In 1809, in consequence of dissensions in the country, it was invaded by both the Siamese and Anamese, when the latter made themselves masters of Penompeng, the modern capital, together with the person of the king, and took possession of a large tract of country on the sea coast, from communication with which, the Emperor of Anam, in 1819, interdicted all foreigners, declaring Saigon the emporium of his S. provinces. In 1820, the final partition of this country took place. (*Crawfurd's Mission to Siam; Hamilton's E. I. Gaz.*)

CAMBOJA, an inland town of India beyond the Ganges, the ancient cap. of the above territory, on both sides the Mekon, nearly 200 m. from the sea; lat. 13° N., long. 104° 35′ E. The Chinese writers of the 13th century give a very florid description of its magnificence at that period (see *Ritter, Asien Erdkunde*): it is now in a state of decay.

CAMBOURNE, a town and par. of England, co. Cornwall, hund. Penwith. Area of par. 6900 acres. Pop. of do. 1821, 6219; 1831, 7699. This is a neatly-built, and, for the most part, modern town, on an elevated site, 12 m. W.N.W. Falmouth, near the S.W. limits of the chief mining district of the co., many of the oldest and most productive mines of tin and copper being in its immediate neighbourhood, and furnishing employment, not only to the inhab. of the town, but to the three or four considerable hamlets, and the cottages every where dispersed over the parish. The church is a handsome structure, in the later Gothic style; there is also a chapel of ease, and several large dissenting chapels, chiefly for the various sections of the Wesleyan Methodists; a free school, founded in 1763, for 12 boys and 8 girls, has a revenue of £21; there are also several large Sunday schools. Market, Saturday; fairs, chiefly for cattle, March 7, Whit-Tuesday, June 29, and Nov. 11. Petty sessions for the hund. are held weekly in the town.

CAMBRAY, a well-fortified town of France, dep. du Nord, cap. arrond., on the right bank of the Scheldt, 32 m. S. Lille; lat. 50° 10′ 37″ N.; long. 3° 13′ 47″ E. Pop. 17,846. Its fortifications were improved by Vauban, and it is further defended by a strong citadel. It is pretty well built, and has a magnificent *place d'armes*. Its principal public buildings are the cathedral, the hôtel de ville, and the theatre. It has a tribunal of original jurisdiction, a communal college, a diocesan seminary, with 330 scholars, a secondary school, a society of emulation; with schools of design, sculpture, painting, and anatomy; a public library containing 30,000 volumes, &c.

Cambray was formerly an archbishopric; and has to boast of having had Fenelon, who died here in 1715, among its prelates. It is painful to have to state that, in 1793, during the revolutionary phrensy, the body of Fenelon was torn from the grave, and the lead of his coffin cast into bullets! The old cathedral was, at the same time, totally destroyed. To atone as far as possible for these enormities, a handsome monument, the work of David, the sculptor, was erected to the memory of Fenelon, in the present cathedral, in 1825, under which his remains have been deposited. In 1802, the archbishopric of Cambray was changed into a bishopric.

This town has been long famous for its manufacture of fine linens and lawns, whence all similar fabrics are called in England *cambrics*. It also produces thread; carries on several branches of the cotton manufacture; and has soap-works, tanneries, salt refineries, &c. A great number of hands are occupied in the adjoining communes in the linen manufacture. It has a considerable trade in wool, flax, butter, hops, &c. The navigation of the Scheldt begins here, and it communicates with St. Quentin by a canal.

This is a very ancient city, having been a place of considerable importance under the Romans. It is celebrated in diplomatic history for the famous league, known by its name, concluded here in 1507, against the republic of Venice; and for a treaty of peace negotiated in 1529 between Francis I. and Charles V. It was taken from the Spaniards by Louis XIV. in 1667, and was confirmed to France by the treaty of Nimeguen. The British took it by escalade in 1815, after the battle of Waterloo. (*Dict. Géog.*; *Hugo*, art. *Nord.*; *Murray's Handbook*, &c. p. 169.)

CAMBRIA, county, Pa. Situated centrally in the W. part of the state, and contains 720 sq. m. The Alleghany mountain lies on its E. part, and the rail-road over it, connecting the parts of the Pennsylvania canal from Hollidaysburg, terminates at Johnstown, in the S. part of the co. The descent from the summit to Johnstown is 1171½ feet, a distance of about 26½ miles. The rise to the summit from Hollidaysburg, a little over 10 miles, is 1398¾ feet. The whole length is a little over 36½ miles, and the total rise and fall 2570¾ feet. Drained by Conemaugh river and its branches. It contained in 1840, 8518 neat cattle, 11,461 sheep, 10,769 swine; and produced 34,421 bushels of wheat, 22,704 of rye, 31,943 of Indian corn, 15,827 of buckwheat, 1473 of barley, 114,470 of oats, 87,856 of potatoes, 27,539 pounds of sugar. It had ten commission-houses, thirty-two retail stores, two lumber-yards, twenty grist-mills, sixty saw-mills, one rope-walk, six tanneries, one brewery, one pottery, one printing-office, one weekly newspaper; seventy-one schools, 269 scholars. Pop. 11,256.

CAMBRIA, p. t., Niagara co., N. Y.; 283 m. W. by N. Albany, 406 W. It contains one grist-mill, two saw-mills, one oil-mill, seventeen schools, 759 scholars. Pop. 2099.

CAMBRIA, t., Cambria co., Pa. Drained by Black Lick creek, and a branch of Little Conemaugh river. It contains seven stores, three grist-mills, three saw-mills, one printing-office, one weekly newspaper, eight schools, 320 scholars. Pop. 1156. It contains Ebensburg bor., the capital of the co., occupying a commanding situation, which has a court-house, an academy, three churches, one Baptist, one Congregational, one Roman Catholic, about forty dwellings, and 353 inhab.

CAMBRIDGE, an inland co. of England, having N. co. Lincoln, E. Norfolk and Suffolk, S. Essex and Hertford, and W. Bedford, Buckingham, and Northampton. Area 548,480 acres, of which about 500,000 are supposed to be arable, meadow, and pasture. Surface, except in the S. parts, where it is diversified, for the most part flat and naked. Soil clayey and stubborn. It is divided into two portions by the river Ouse, and is watered besides by the Cam and the Nene, or Nen. The most northerly portion of the co. consists principally of the district called the Isle of Ely, which has separate jurisdiction within itself. This district, which is naturally a marsh, is included within the great level of the fens; and is rendered habitable only by a most expensive system of drainage, by which the water is raised and conveyed away in channels, kept at a higher level than the surrounding country. Agriculture is in rather a backward state, the land under tillage being frequently foul and out of order. Wheat, oats, beans, and potatoes, are the principal crops in the fens; and barley in the elevated grounds. Flax and hemp are also raised in the fens; and cole is extensively cultivated as food for sheep. The rich meadows in the valley, watered by the Cam, are principally appropriated to the dairy husbandry, and Cambridge butter has long enjoyed a high reputation. The large, thin, cream cheese, made at Cottenham, is admitted to be the first of its class. Heavy cart horses are extensively bred. The rich grass lands are mostly depastured by short-horned cattle, and long-woolled sheep. Cambridge, as well as Huntingdon, is overrun with pigeon-houses. Estates of all sizes: some large, but many small, some being worth only from £20 to £50, and £100 a year. Size of farms equally various, and held mostly at will. Farm-houses inferior, and cottages decidedly "bad." Average rent of land in 1810, 16*s.* 6½*d.* an acre. Manufactures and minerals of no importance. The co. contains 14 hunds., exclusive of the Isle of Ely, and 167 parishes. Principal towns, Cambridge, Ely, Wisbeach. In 1841 it had 33,112 inhab. houses, and 164,509 individuals, of whom 81,513 were males, and 82,996 females. It sends seven members to the H. of C., viz., three for the county, two for the University, and two for the borough of Cambridge. Registered electors for the co. in 1837–38, 4040. Sum expended for the relief of the poor in 1837–38, £58,587. Annual value of real property in 1815, £705,372; ditto of trades and professions in do., £239,687.

CAMBRIDGE, a parl. bor. and town of England, co. Cambridge, hund. Hendish, the seat of one of the great English universities, on the Cam; 48 m. N. by E. London. Pop. (1821), 14,142; (1841), 24,453: houses at the latter date, 4795. It is situated in an extensive level tract, that scarcely presents any inequality, with the exception of the Gog Magog hills, 4 m. S.W. of the town; and the greater part of its public structures, with their walks and gardens, are embosomed in wood. Owing to these circumstances, the approach to Cambridge is unimpressive; but the noble chapel of King's College, the tower of St. Mary's, and the spire of Trinity church, rise above the trees, and break the general uniformity of the outline. The greater portion of the town stands on the S.E. bank of the river. The streets are mostly narrow and irregular. There are two principal lines, which unite on the N.E. side, near the iron bridge over the Cam; from these smaller streets diverge on either side, all of which are paved, sewered, and lighted by gas. The chief supply of water is derived from a spring 3 m. distant, and conveyed by an aqueduct, under some of the principal streets, to a public conduit in the market-place. For this the town is indebted to Hobson, the horse hirer, whose determination to let his horses in strict rotation gave rise to the well-known proverb of "Hobson's choice." There are fourteen distinct parishes, and a corresponding number of churches. St. Mary's, a stately Gothic structure, forms one side of a quadrangle, in which the public library and senate house are also placed; it is occupied both by the parish and the university; St. Sepulchre's, built in the reign of Henry I., in imitation of that of the Holy Sepulchre at Jerusalem; and Trinity Church, an ancient cruciform structure, are the only churches worth notice. The Baptists, Independents, Friends, Primitive Methodists, and Wesleyans, have each a chapel. There is a free grammar school, founded by Dr. Perse, in 1615, originally for 100 scholars, but now educating 16; they have preference of the Perse fellowships and scholarships in Caius Coll.: a national school, founded in 1808, and extended in 1816, educates 600 boys and girls: in this the old, or Whiston charity schools, have merged. In nine distinct sets of almshouses fifty-six poor persons are wholly or partially supported: there are also benefactions for various other charitable purposes, held in trust by the corporation; and a general infirmary, called, from its founder, Addenbrooke's Hospital, in which about 1000 patients are annually relieved. The market-place occupies two oblong squares in the centre of the town, at the head of which stands the shire-hall (built in 1747), and behind it the town-hall (rebuilt in 1782). The jail, built on Howard's plan in 1810, is in the yard of the ancient castle (of which little more than the gateway remains) at the N.W. end of the town—the only comparatively elevated portion: near it is an artificial mound, whence an extensive view is commanded. The various structures connected with the university form, essentially, a part of the town, mostly on its W. side, but these will be more appropriately noticed in the subsequent article. No dramatic performances are allowed in the town; but there is a theatre in the adjoining village of Barnwell, which is opened in fair time. There is a musical society on a large scale, and great musical festivals are held, at intervals, in St. Mary's Church. The Cam, formed by the junction of several small streams about 4 m. from the town, is made navigable for barges up to the town: it joins the Ouse not far from Ely, by which a water communication is continued to Lynn Regis. There is a daily market for general provisions; but the chief supply is on Saturday. Two annual fairs are held—the first, commencing June 23, lasts three days; it is held on a common near Jesus Coll., and called Pot Fair, from the quantity of earthenware brought to it: there is a large horse-fair on the first day. The other is Stourbridge fair, anciently the largest in the kingdom, and still of considerable resort, though much curtailed both in duration and importance: it is held in a field near Barnwell, and now lasts fourteen days; on two of these, horses are sold, and on the others the chief traffic is in wool, hops, leather, cheese, and iron. There are no manufactures carried on; but its situation, at the head of the inland navigation from Lynn, occasions a considerable trade in corn, coal, timber, oil, iron, &c. Since the more perfect drainage of the fens, and the formation of good roads towards and along the E., and S.E. coasts, over tracts previously impassable, it has become a considerable thoroughfare, and derives some business from that source; its chief traffic, however, is directly or indirectly, connected with the university, and the supply of its various wants. The ann. val. of real prop. is £91,501. Under the Poor Law Amendment Act its fourteen pars. are formed into a union, the average annual rates of which are £9907: there are thirty guardians. The paving and lighting are managed by commissioners under two local acts. The annual assessments levied for the purpose average £3000. The limits of the ancient bor. have been adopted both in the Parl. and Municipal Reform acts, and comprise an area of 3196 acres. It is divided into four wards, and governed by a mayor, ten aldermen, and thirty councillors. Courts of petty and quarter sessions, and a court of pleas, are held for the borough, from the jurisdiction of which the members of the university may claim personal exemption. The heads of it are united with those of the corporation in the commissions of peace that are issued for the borough. The police is also under their joint control. The improvements in the navigation (which of late years have been very considerable) are under the direction of conservators, three of whom are appointed by the university, three by the corporation, and three by the county magistrates. The ann. rev. of the town corporation averaged, in 1835, about £1700 a year, and is derived from rents of lands and tenements, and tolls of the fairs and markets, which they receive, though the entire control of these, as well as the licensing of public houses, be vested in the university: there are also 310 acres of common land under the management of the corporation, but on which the inhabitants generally have a right of pasturage. Cambridge has returned two mem. to the H. of C. from the earliest records of parliament. Previously to the Reform Act the right of election was limited to the freemen of the bor. not receiving alms. Registered electors, 1837–39, 1698. The quarter sessions and assizes for the county are held in this town. The first historic mention that occurs of Cambridge is in 871, when it was ravaged by the Danes. The castle was built by William the Conqueror. In 1249 the first notice of dissensions between townsmen and students occurs. In 1831 (the period of Wat Tyler's riots) the university charters were seized and destroyed by the townsmen, for which Richard II. deprived them of their own, and vested the university with their privileges. Henry VIII. restored their charter, but with modifications which made them, in many respects, still subordinate to the university. In 1643 the town was garrisoned by Cromwell, who had previously twice represented it in the H. of C. No subsequent event

of public importance is connected with its history. Bp. Jeremy Taylor and Rd. Cumberland (the dramatic writer) were natives of Cambridge.

CAMBRIDGE (UNIVERSITY OF). This celebrated seat of learning and education derives its origin from certain public schools, established in the town at a very remote but uncertain period, perhaps in the 7th century. The students who resorted to those seminaries lived in lodgings in the town; nor did they, till the 13th century, assume the regular form of a university, as that term was understood in the middle ages. In general, four branches of education, or faculties, were recognised: that of arts, initiatory to the others, and embracing the three superior, and four subordinate sciences, or as they were called in the language of the time, the *trivium* and *quadrivium*—the first comprising the study of grammar, rhetoric, and logic; and the second, that of arithmetic, music, geometry, and astronomy; and the faculties of theology, law, and medicine. In each of these, there were usually two degrees, that of bachelor and master; and the functions of a university, as at present, was to impart the necessary instruction in each, and to confer degrees, or certificates of proficiency. Except the public schools, there were, at first, no other buildings appropriated to academical purposes; but subsequently, public halls or hostleries came to be established for the convenience of the students, and the introduction of some better system of discipline. The students resorting to each of these chose a principal, or rector, from among themselves, whose appointment was sanctioned by the governing body of the university: residence in those halls was, however, never insisted on as an essential requisite. The colleges are of still later origin, and derive their existence from private munificence; the object being to provide lodging and subsistence to a limited number of the poorer class of students. Originally, the masters of arts were the public instructors, and were bound to teach others some of the subjects pertaining to their respective faculties: convenience ultimately came to limit this function to a certain number of masters, who also came to form chiefly, or wholly, the governing body; and hence the distinction of *regent*, and *non-regent* masters. The appointment of professors in the different faculties, paid by salaries, instead of fees (as was the case with the regent masters) completed the university system on the recognised plan of the period. The general right of lecturing was, however, retained down to a recent date. Such, probably, was the system pursued through the 14th and 15th centuries. The greatest number of students frequenting the university during the period when the public halls formed the residences of the great majority, was in the 13th century. From the earlier part of the 14th, downward, the numbers diminished considerably; partly from civil war, partly from the declining reputation of scholastic philosophy, and subsequently, from religious differences; so that, at the Reformation, the halls had been mostly deserted, and the greater part of the students were those on the foundation of the different colleges, which had become numerous, and were nearly the only institutions that survived the religious confusion of the age. These came in the 16th century to admit independent members in residence, who were not on the foundation; others came to be established, and the remaining halls were converted into colleges. The ascendancy of the college system, however, was effected gradually, through a considerable period, till completed in the reign of Elizabeth. The following are the existing collegiate establishments of Cambridge, in the order of their foundation:

Names.	Date of Foundation.	Founders.	Visiters.	On the Foundation.	Members in 1838. Of the Senate.	Members in 1838. Total on the Boards.
St. Peter's Coll., or Peterhouse	1257	Hugh De Balsam, Bp. of Ely	Bp. of Ely	14 Found. and 2 Bye Fellowsh. 55 Scholarsh. One fourth of Found. Fell. must be in Orders	94	194
Clare Hall	1326	Dr. Badew: but reconstituted by Elizn. De Burgh	Chancellor and 2 others app. by a grace of the Senate	10 Sen., 9 Jun., 3 Bye Fellowsh., 44 Scholarsh., 4 Exhib.	77	164
Pembroke Hall	1343	Countess of Pembroke	The Queen	14 Found., 2 Bye Fellowsh., 23 Scholarsh., several other bye ones	46	122
Gonville and Caius Coll.	1349	Edw. Gonville; John Caius, in 1558, increased and obtained a new charter	Master of Corpus Christi, Sen. Dr. of Physic, Mast. Trinity Hall	12 Sen., 17 Bye Fellowsh., 26 Scholarsh., 8 Exhib., 1 Scholarsh. in Chem., 4 in Physic	129	220
Trinity Hall	1350	W. Bateman, Bp. of Norwich	Lord High Chancellor	12 Fellowsh., 2 in Orders, 17 Scholarsh. Fellowsh. usually held by Graduates in Civil Law	47	149
Corpus Christi Coll.	1351	The Brethren of 2 Cambridge guilds	V. C., 2 Sen. D.D. in extraordinary cases, the Queen	8 open, 4 appropriated Fellowsh., 8 Found., many Bye Scholarsh. This Coll. possess a valuable M.S. library, left by Archbp. Parker	90	221
King's Coll.	1441	Henry VI.	Bp. of Lincoln	A Provost, 7 Fellows, and 70 Scholars: the latter supplied by a regular succession from Eton Coll. Scholars are exempted from Univ. exam. and authority of its officers within their own precincts, by a special composition between this society and the University	76	197
Queen's Coll.	1448 1465	Marg. of Anjou: refounded by Consort of Edw. VI.	The Queen	19 Found., 1 Bye Fellowsh., 26 Scholarsh.	128	245
Catharine Hall	1475	Robt. Woodlark	The Crown	4 Found., 6 Bye Fellowsh., 43 Scholarsh.	59	211
Jesus Coll.	1496	Jno. Alcock, Bp. of Ely	Bp. of Ely	16 Found., 1 Bye Fellowsh., 46 Scholarsh., and Exhib.	80	188
Christ's Coll.	1451 1505	Hen. VI., Countess of Richmond and Derby	V. C., and 2 Sen. D.D.	15 Clerical, 2 Law Fellowsh., 60 Scholarsh. and Exhib. This Found. is for Divinity	101	217
St. John's Coll.	1511	Countess of Richmond and Derby	Bp. of Ely	32 Found., 21 Appropria. Fellowsh., 114 Scholarsh.	575	1125
Magdalen Coll.	1519	Lord Audley	Possessor of Audley End	4 Found., 13 Bye Fellowsh., 42 Scholarsh.	79	139
Trinity Coll.	1546	Hen. VIII., augmented by Mary: it occupies the ground of several suppressed Coll. and hostels	The Queen	60 Fellowsh., 60 Scholarsh., &c. The Fellows are chosen from the Scholars: ineligible if M.A., or of sufficient standing for that degree. The Master is appointed by the crown	207	1754
Emmanuel Coll.	1584	Sir W. Mildmay	V. C., 2 Sen. D.D. in some cases Mast. of Christ's, and 2 Sen. D.D. in others	12 Found., 3 Bye Fellowsh., 4 Found., and several other Scholarsh.	112	214
Sidney Sussex Coll.	1596	Lady F. Sidney, Countess Sussex	Sir J. S. Sidney	9 Found., 3 Approp. Fellowsh., 20 Scholarsh. A mathematical Lectursh.	47	91
Downing Coll.	1800	Sir G. Downing	The Crown, by the Lord High Chancellor	This Coll. will consist of a Master, 2 Pro. 1 Engl. Law, 1 of Physic, 16 Fellows, and 6 Scholars. Charter states objects of Found. to be Law and Physic and other useful arts and learning: the buildings are being erected	27	32

Each of these colleges is governed by laws and usages of its own (for the most part established by the respective founders), and is subject to the inspection of its own visiter or visiters, appointed by the foundation charter. Except at King's and Trinity, the heads (masters) of these colleges are elected by the fellows, for life, from among themselves; in general, they must be in orders, and are allowed to marry; their incomes (which vary considerably) arise from the proceeds of a double fellowship, livings attached to the office, &c. They exercise supreme authority in the discipline of their college in respect to education, and the conduct of those *in statu pupillari*, and are associated with the general government of the university, as will subsequently be noticed; but, as respects the government of their college, they form part of the general legislative council, and are assisted by the foundation fellows, who form the governing body in each college. In regard to these last, the ordinary practice is to elect to vacancies, each from the respective students

of its own establishment, and, for the most part, from among those studying with a view to taking holy orders; time, however, is allowed by the statutes for graduates to make choice of a profession, and, consequently, those who decline after the limited period taking orders have to vacate any fellowships they have been appointed to; vacations also occur by acceptance of college livings (which, as they fall in, are offered by seniority to the respective fellows,) or by other livings or situations, statutably incompatible, or by marriage, which is against the statutes in all the colleges; so that from these and other circumstances, the succession of fellows, in most of the colleges, is tolerably rapid: when in residence, a considerable part of their board is provided. The incomes are very various, and in each college vary from year to year, being contingent on the college revenues, much of which is derived from rents, varying with the prices of corn, from the falling in of leases, &c. The college expenses also vary, and are paid from a fund set apart for general purposes, and derived partly from taxation of the fellowships, partly from room-rent, &c.

The *foundation scholarships* are subject to different regulations and conditions, peculiar to each college; but they are always elected from among the under graduates, and in the larger colleges, where these are numerous, they form a sort of minor prizes, to be contended for like those of the fellows. The emoluments attached to these scholarships are very various in amount; in regard to discipline and education, they are precisely on the same footing as the independent students.

The *exhibitions* are annual pensions, given in some instances by the colleges, but mostly by free endowed schools elsewhere, to assist such youths as, having been educated at them, are sent to the university: *exhibitioners* are not usually accounted on the foundation. Besides these, there are students of an inferior class, termed *sizars*, who are provided for wholly or in part by the foundation. The officers of the establishment, such as dean, bursar, &c., are selected by the fellows of each respective college from among their own body; as also the college tutors, &c., to whose charge all the students, whether on the foundation or not, are entrusted. The whole of these must necessarily be in residence; but in respect to the other fellows, this is not in general required, though a number usually do reside, some as private tutors, others for the purpose of study. In some colleges, probationers have to pass an examination previously to being admitted as fellows on the foundation. The instruction given at each of those colleges is preliminary to taking the first university degree of B. A.; and is exclusively adapted and directed to that object. This is chiefly attained, not through the public lectures of the university professors, but through the private labours of the respective college tutors. The character and extent of this instruction is determined by the university, by which the degree is granted; but no one is admissible unless he have been entered at, and resided within the jurisdiction of one of the colleges or licensed halls, and has been under the collegiate instruction of his house. Thus the university is formed by the union of seventeen colleges, devoted to academic pursuits and the study of all the liberal arts and sciences: it is incorporated (13 Eliz., c. 29) by the name of "The Chancellor, Masters, and Scholars, of the University of Cambridge;" and though, as we have seen, each college is a body corporate, bound by its own statutes, it is likewise controlled by the paramount laws of the university. The statutes of the 12th of Eliz., which were sanctioned by parliament, and confirmed some former privileges, are the foundation of the existing government, and form the basis of all the subsequent legislation; in fact, no grace of the senate is considered valid which is inconsistent with the statutes of Eliz., and certain nearly cotemporary interpretations of them; or with king's letters, that have been accepted and acted on by the university.

Each college furnishes members both to the executive and legislative branches, collectively termed the senate; the present number of which is 2705. It is divided into two houses, called the regents' and non-regents' house. The former, or upper house, is composed of masters of arts of less than five years' standing, and doctors of less than two years; its members wear hoods lined with white silk; all the rest, who retain their names on their respective college boards (for which a small annual fee is charged), constitute the lower house, and wear hoods of black silk; hence the distinction of white and black-hood houses. Doctors of more than two years' standing, and the public orator of the university (who may be considered as the secretary), may vote in either house, at pleasure. Besides these, there is a council called the *caput*, chosen annually on the 12th Oct. It consists of the vice-chancellor; a doctor in each of the three faculties of divinity, civil law, and physic; and two masters of arts, as the representatives of the regent and non-regent houses. In practice, these are mere nominees of the vice-chancellor; and as the approval of the caput is essential previously to any "grace," or legislative proposition, being voted on in either house, the substantive government of the university vests in him. He also fixes the days when congregations, or meetings of the senate, are to be held for transacting university business; these, in term time, are usually once a fortnight; but there are also certain fixed times by statute for congregations to be held, for conferring degrees, electing officers, &c. Graces which pass both houses, under the sanction of the caput, become acts of the senate, and, if of a public nature, become statutes of the university. An assembly of the senate held out of term time is called a convocation; but, by a grace passed *pro formâ*, it is converted to a congregation, and the business proceeds in the usual way. The chief officers of the university are, a chancellor, in whom the executive vests, except in matters of mayhem and felony, within the limits of the jurisdiction, which is a mile round, reckoned in any direction from any part of the suburbs; the office is biennial, or for such longer period as the tacit consent of the university may choose to allow. A high steward, who has special power to try scholars impeached of felony within the limits, and to hold courts leet, which is done by deputy. His election is by a grace of the senate. A vice-chancellor, elected annually by the senate (on the 4th of Nov.) from the heads of colleges. In the absence of the chancellor, the powers of that officer vest in him by the statutes, and he is also, *ex officio*, a magistrate for the university, town, and county. A commissary, appointed by the chancellor, to hold a court of record for all causes to be tried and determined by the civil and statute law and university custom, in respect to all privileged persons under the degree of M. A. A public orator, who may be said to be the speaker of the senate. The assessor, an officer to assist the vice-chancellor in his court. Two proctors, or peace officers, elected annually, to enforce proper discipline and behaviour in all who are *in statu pupillari*, as well as various other duties. They must be M. A. of two years' standing at least, and are nominated in turn by the different colleges, in a prescribed and peculiar cycle of 51 years. There are many other offices of minor importance; but the two moderators must be noticed, who are nominated by the proctors, and appointed by a grace of the senate, to act as the proctors' substitutes in the philosophical schools, and alternately superintend the exercises and disputations in philosophy, and the examinations for the degree of B. A; and also the eight classical examiners, nominated by the several colleges in term (according to the same cycle as the proctors), and elected by a grace of the senate; four of these are examiners of inceptory bachelors, and four of the junior sophs. in Lent term.

The University is represented in the H. of C. by two mem., chosen by the collective body of the senate, the vice-chancellor being returning officer. The privilege was granted by charter, in 1 James I.

The public professorships in this university are, Lady Margaret's, of divinity, founded 1502; the regius professorships of divinity, civil law, physic, Hebrew and Greek, founded by Henry VIII. in 1540; those of Arabic, one founded by Sir F. Adams, in 1632, the other, the Lord Almoner's; the Lucasian professorship of mathematics, in 1663; that of music, in 1684; that of casuistry, founded in 1683; of chemistry, 1702; the Plumian professorship of astronomy and experimental philosophy, in 1704; that of anatomy, in 1707 (there is a good anatomical museum connected with this); those of modern history and of botany, 1724; that of geology, in 1727, by Dr. Woodward, who left his collection of minerals in connexion with it; that of astronomy and geometry, founded in 1749; the Norrisian professorship of divinity, in 1760; of natural and experimental philosophy, in 1783; the Downing professorships of English law, and of medicine, founded in 1800; that of mineralogy, in 1808; and, lastly, of political economy, in 1828. These professors are paid from various sources; some of the foundations have estates appropriated to the purpose; others are paid by ancient stipends, in part; and some from the privy purse, or by government. One has £400, another, £200, the rest £100 annually. The appointment of some of them rests in the senate, of others, in the crown, and of others, again, in special bodies of electors. None of them can be said to be directly concerned in the education of the students, as the attendance on the courses of lectures given by them is not made essential to any of the students (with the exception of those proceeding to the bachelor's degree in civil law and medicine, who are required to bring testimonials of attendance on the courses connected with those subjects). The public income of the university arises chiefly from the proceeds of the rectory of Burwell, from matriculation, and other fees (about £3000 a year from all these sources), and from the trading profits of the Pitt or university press. The funds are managed by the vice-chancellor and specific trustees, and three annual auditors are appointed by the senate to pass the accounts. Its library claims (under the copyright act) a copy of every

volume, map, and print published in the United Kingdom; it is also endowed with a portion of the proceeds of two estates: besides this and occasional donations, a quarterly subscription of 1s. 6d. is paid by all the members, except sizars, towards its support. A new and splendid building, from designs by Mr. Cockerell, is now in course of erection, intended for the reception of the library, and for public lecture-rooms. As this was much wanted, and the university had no disposable funds for the purpose, a subscription was set on foot, and £20,000 have been collected to effect it. The printing establishment has also, within a recent period, been enlarged and improved, from funds appropriated to that purpose by the committee for managing the sums collected for a public memorial of the late Right Hon. Wm. Pitt. The Fitzwilliam museum, consisting of a splendid collection of books, paintings, drawings, &c., was left by Viscount Fitzwilliam to the university, in 1816, together with funds for the erection of a building to receive it, which was commenced in 1837. The university also possesses a collection of pictures, left by Mr. Mesman; an observatory, built in 1824, at an expense of £18,000; and a botanical garden of 3 or 4 acres. The Cambridge Philosophical Society may also be briefly adverted to here; it was established in 1819, for the promotion of scientific inquiry, and the advancement of philosophy and natural history; in 1832, it was incorporated by charter, and all, except honorary members, are required to be graduates of the university.

The degrees conferred by the university are those of Doctors in the three faculties of divinity, civil law, and medicine, and also in the science of music; that of Master of Arts; and the degree of Bachelor, in each of the foregoing. Except in the initiatory degree, last named, all examination in regard to proficiency is in reality discontinued, and the higher degrees are conferred as of right on those who have obtained a particular standing, without reference to qualification, or (with trifling exceptions) to residence. The academical year consists of three terms, viz., Michaelmas, Lent, and Easter; and the following are the chief regulations necessary for proceeding to degrees—premising first, that the mode of admission on the boards of a college is either by personal examination of its tutors and officers, or (the more usual plan) through a recommendatory certificate, specifying the age, qualifications, &c., of the candidate, signed by an M.A., who has graduated at the university, and accompanied by a deposit called caution-money. This is usually done before the end of Easter term; and, if deemed satisfactory, the name is at once entered on the boards of the college, and the student usually comes into residence the October following, when the academical year begins.

Bachelor of Arts.—12 terms on the boards of some coll., 10 of which in residence.
Master of Arts.—B.A of 3 yrs. standing.
Bachelor of Divinity.—M.A. of 7 yrs. standing: under the 9th statute of Eliz., those who have been admitted on the boards of a coll. after 24 yrs. old, and have remained so 10 yrs. (the 2 last of which must be in res.), are admissible without having taken any other—these are called 10 *yrs. men.*
Doctor of Divinity.—B.D. of 5, and M.A. of 12 yrs. standing.
Bachelor of Civil Law.—Of 6 yrs. standing complete, 9 terms of which in res., or B.A. of 4 yrs. standing.
Doctor of Civil Law.—B.C.L. of 5 yrs., or M.A. of 7 yrs. standing.
Bachelor in Medicine.—Of 5 yrs. standing, 9 terms of which in res.
Doctor in Medicine.—Similar to that degree in civil law.
Licentiate in Medicine.—M.A. or B.A. of two yrs. standing.
Bachelor of Music.—The name must be entered on the boards of some coll., and an exercise performed.
Doctor of Music.—Usually B.M.

Persons having the rank of privy counsellors, bishops, noblemen, and eldest sons of noblemen, are entitled to have any of those degrees conferred on them without complying with the regulations; and knights and baronets from that of M.A. downward. By a grace passed in 1825, these are to be examined and approved in the same way as others, but they are admissible after keeping 9 terms; but though none can claim a degree in right of nobility, &c., yet honorary ones are often conferred, without examination or residence, on eminent individuals.

The respective orders in the different colleges rank as follows:

1. *The Heads of Coll.*, who are generally of the degree of D.D.
2. *The Fellows*, who are doctors, masters, or bachelors of the different faculties.
3. *Noblemen*, who are graduates, *doctors*, and *Ms.A.*, not on the foundation (the name must be kept on the college boards, the cost of which varies from £2 to £4 a year).
4. *Bs.D.*, who are 10 yrs. men.
5. *Bachelors of Civil Law*, and of *Physic*; these wear the habits, and enjoy all the various privileges of M.A., except that of voting in the senate.
6. *Bachelors of Arts*, who are considered in *statu pupillari*.
7. *Fellow Commoners*, usually younger sons of the nobility or sons of men of fortune, &c., who have the privilege of dining at the same table as the fellows.
8. *The Scholars*, who are on the foundation.
9. *Pensioners*, who pay for their chambers, commons, &c., and comprise the chief part of the students.
10. *The Sizars*, students of limited means, who usually have free commons, and other emoluments.

Since, as we have seen above, all substantial examination for degrees is limited to the initiatory ones of *bachelor* (of which that of B.A. is the first, and only really important step), the necessary education of the different coll. is, of course, directed to that object, and contingent, in its nature and scope, on the qualifications which the university deem fit to exact at their public examinations, and the class-books they order to be adopted for the purpose. The ordinary course of study for B.A. may be comprised under three heads—natural philosophy, theology, and moral philosophy and the *belles lettres*; and for the attainment of these, the students attend the lectures of the college tutors, which are not formal harangues, but rather of a catechetical nature, intermixed with reading and discussion; at each of which a limited number of the students go through a certain portion of some mathematical or classical work with the tutors. Half-yearly or yearly college examinations usually take place, in addition to these lectures, when the names of the students are arranged in the order of their respective merits. The first public examination of a student takes place in the Lent and October terms of the second year from the commencement of his academical residence. After the examination, the candidates are arranged in two classes—those who have passed with credit, and those to whom the examiners have only not refused their certificate of *approval*. A second examination takes place, in Michaelmas term, of those who have been absent from the former by permission, or were not then approved of: this is termed, in university phrase, the "little go." Those anxious to take honours usually engage a private tutor (who is not necessarily of their own coll.) after this, in order to secure more exclusive attention and assistance. The usual fee of a private tutor is £50 a year. After this preparatory step, those who are candidates for honours perform the college exercises under the superintendence of the moderators: these are usually Latin theses, propounded and opposed in a syllogistic form. The senate-house examination, for the degree of B.A., commences on the Monday preceding the first Monday in Lent term, and continues six days. The previous division of the candidates for honours into four classes has recently been discontinued, and the same questions are now proposed throughout the examination, to all whom the moderators judge, from the previous public exercises in the schools, to be qualified for examination as candidates for mathematical honours; and of the six examiners, two confine themselves to mathematical subjects, two to Homer and Virgil, &c., and two to Paley's Evidences and Moral Philosophy, and to Locke's Essay on the Human Understanding, &c. The whole is conducted by writing, and the various subjects and problems may be seen in the annual registers of the university. Those who are not candidates for honours, πολλοί, are classed and examined separately, the subjects being—the Acts of the Apostles in Greek, one Greek and one Latin classic, Paley's Moral Philosophy, and certain questions in mathematical and mechanical science, specified in a printed schedule. The degrees are conferred on such of the questionists as pass, to the satisfaction of the examiners, by a subsequent grace of the senate, when the oaths of allegiance and supremacy are taken, and a declaration of adherence to the doctrines of the Church of England is required to be signed; but previously to this, on the last examination day, the mathematical *tripos* or list of those who succeed in obtaining an honour, is exhibited, formed into three divisions, that of *wranglers*, and of *senior* and *junior optimes*, arranged according to merit, or "*bracketed*," where two individuals are considered on an equality. The senior wranglership is the highest academical honour obtainable in the kingdom. On the fourth Monday after the general admission *ad respondendum quæstioni*, an examination commences of all such as have obtained an honour at the mathematical examination of the previous January, and who voluntarily offer themselves for the purpose in classical learning at this examination (which continues five days), translations are required of passages from the best Greek and Latin authors, and written answers to questions arising immediately out of such passages. The names of those who obtain honours are arranged in three divisions (like those in the mathematical tripos), in a list which forms the classical *tripos* of the year. There are two *tripos* days, one for *wranglers* and

senior optimus, the other for *junior optimus*, when these are publicly announced.

The *annual prizes* of the university form another subject of competition: the classical ones are—the chancellor's gold medals, given to two commencing Bs.A., who, having attained senior optimus at least, show themselves most proficient in classical learning: these prizes were first instituted in 1751. A third, first given by the Duke of Gloucester, and continued by the present chancellor, is for the best English ode, or English poem in heroic verse. Many of these have been published, under the title of "Cambridge Prize Poems:" the competition is limited to resident under graduates. The members representing the university also give four prizes, of 15 guineas each, which are bestowed on two B.A.'s and two under graduates, who compose the best dissertations in Latin prose. Brown's three gold medals, of 5 guineas each, to under graduates, are given for the best Greek ode, the best Latin ode, and the best Greek or Latin epigram. Porson's prize consists of one or more Greek books, given for the best translation of some passage in Shakespeare, B. Jonson, Massinger, or Beaumont and Fletcher, into Greek verse. The mathematical consists of two annual prizes, of £25 each, left by the Rev. R. Smith, and given to two commencing Bs.A. who prove the best proficients in mathematics and natural philosophy. The examination takes place soon after the admission of questionists: the competition is open, and the adjudicators are the vice-chancellor, the master of Trinity, and the Lucasian, Plumian, and Lowndean professors. The second or even lower wranglers occasionally become first prize men; hence it forms, in some sort, a court of appeal from the decisions of the examiners. *Cæteris paribus*, preference is given to candidates of Trin. Coll. In theology, there are the Norrisian and Hale's prizes. The *Seatonian* is a poetical one; the subject is proposed in January, and the poem is to be sent in by Michaelmas; that which obtains the premium is printed from the produce of the estate left for the purpose, the remainder of which is given to the author. (A selection of these poems has been published in 2 vols. 8vo.) The *university scholarships* are also publicly contended for, and are given to the most successful candidates in classical reading and composition: in this respect they rank first in the classical competitions of the university, and are usually extended beyond the ordinary range of text books. The examination is the same for all, but most importance is usually attached to the Pitt scholarship, it being less frequent as well as of greater pecuniary value.

Very different opinions have been, and may be, entertained as to the merit and demerit of the system of instruction pursued at this and the sister university. Mathematics, and the sciences closely connected with and dependent on mathematics, form the distinguishing characteristic of the studies pursued at Cambridge; and the chief examinations, as well as the public lectures, honours, and emoluments, are principally rendered subservient to their advancement. A critical knowledge of the structure of the Greek and Latin tongues is that to which attention is mainly enforced at this university, in respect to classical attainments. Original composition forms no part at either tripos examination, but it is made a leading feature in the competition for scholarships and other prizes.

Of the importance of mathematical studies no doubt can be entertained; but very great, and apparently well-founded doubts may be entertained whether the exclusive attention given to them at Cambridge be the best means of educating accomplished statesmen, lawyers, divines, country gentlemen, or even manufacturers. The truth is, that this and the other university are institutions that belong to a different age; and, though they have been materially modified, a great deal yet remains to be done before they become suitable places for educating the noble and aspiring youth of a great commercial and manufacturing country like Great Britain.

Lodging within the walls of a college is not enforced on under graduates, provided there be no vacant rooms; which may probably account for the greater increase of students matriculated in this than in the sister university, where residence within the walls is enforced. In 1748 there were 1500 members on the boards; in 1838, 5555; in the present year, 5628; of whom 2705 are members of the senate. The collegiate buildings of many of the establishments have been greatly improved and augmented of late years. Those of Trinity are the largest of any single college in either university; those of St. John have also been increased by a large quadrangle on the left bank of the Cam, forming one of the finest collegiate edifices in the kingdom. (*The Statutes of the University*, printed in 1785; *the University Calendars*, published annually; *Classical Exercises in University of Cambr.*, 1st and 2d series; *Whewell's Principles of University Education; Coloured Plates of the Costumes, by R. Harraden;* and *Cantabrigia Illustrata;* are works that may be advantageously referred to as imbodying the best information on most of the various matters connected with this university.)

Cambridge, p. t., semi-capital with Concord of Middlesex co., Mass., 3 m. N.W. Boston, 437 W. Sit. in 43° 22′ 21″ N. lat., and 71° 7′ 38″ W. long. It contains three parts: Old-Cambridge, the seat of the university; Cambridge-Port, about half way between the university and the bridge leading to Boston; and East-Cambridge, formerly Lechmere's point, opposite to the N. part of Boston, the seat of the court house, and of a large crown glass factory. Cambridge is one of the oldest towns in New-England, having been incorported by the name of Newtown in 1630, but took the name of Cambridge in 1638. It contains a court house, jail, state arsenal, three banks, with an aggregate capital of $350,000; five churches, two Unitarian, one Episcopal, one Baptist, and one Universalist; one foreign commercial and one commission house, with a capital of $40,000; twenty-seven retail stores, with a capital of $93,950; eight lumber-yards, with a capital of $85,000; three rope-walks, two printing-offices, one bindery, five periodicals, two academies, 45 students, sixteen schools, 2455 scholars. Pop. 8409.

It is the seat of Cambridge University, the oldest and best endowed institution in the United States. It originated in 1636, by the grant of £400 sterling by the general court. It was founded in 1638, when this sum was increased by the donation of £800 by the Rev. John Harvard, of Charlestown, from which circumstance it was called Harvard College, in honour of the donor; and the name of the town was changed from Newtown to that of Cambridge, from the name of the seat of a principal university in England. The college was sedulously cherished by the early founders of New-England, and afterward furnished most of the early pastors of the churches. Its funds have been increased from time to time, and now amount to over half a million of dollars. It has a president, twenty-nine professors or other instructors, has had 5750 alumni, of whom 1561 have been ministers of the gospel; has 245 students, and 53,000 volumes in its libraries, which is the largest in the United States. The commencement is on the fourth Wednesday in August. The buildings consist of University Hall, an elegant granite edifice, 140 by 50 ft., and 42 ft. high, containing a chapel, six lecture-rooms, dining halls, &c. Harvard Hall, a brick edifice, 108 by 40 ft., containing the library, philosophical apparatus, and mineralogical cabinet; and four other edifices, four stories high, denominated Massachusetts, Hollis, Stoughton, and Holworthy Halls, containing rooms for the accommodation of the students; Holden Chapel, containing the anatomical museum, chemical laboratory, and lecture-rooms; and three college edifices of wood, occupied by the students; Divinity Hall, for the accommodation of theological students; and the Medical College, with a spacious brick edifice, located in Boston, connected with the institution, a president's house, &c. The buildings occupy an enclosed plain of 14 acres. It has a botanical garden of 8 acres, containing an extensive collection of trees, plants, and shrubs, both native and foreign. The Medical Institution was founded in 1782; has six professors, 86 students, and has had 547 graduates. The lectures commence in Boston on the first Wednesday in November, annually. It has a library of over 5000 volumes. A course is also delivered at the university, from the 1st of April to the last of July. The course of instruction is completed in three years. The theological school has a course of three years, and the students are divided into three classes, junior, middle, and senior. Tuition is afforded free of expense, and other assistance is granted when necessary. Graduates of other colleges are admitted. The law school was founded in 1817. For admission, it is necessary to be a graduate of some college, or to be qualified for law students, according to the rules of court. The course occupies three years. It is furnished with able professors.

Cambridge was a place of importance in the early history of the country, and intimately connected with Boston. The first printing-press in America was established here in 1639 by Stephen Day, and the first work printed was the Freeman's Oath. It was long the literary centre, around which the affections of the colonists clustered. Immediately after the battle of Lexington, at the commencement of the Revolutionary war, 20,000 militia were collected here, and July 2d, 1775, Gen. Washington arrived here, and took the command of the American army. Cambridge is a quiet, rural place, well suited to be the seat of the Muses; while its ready access to Boston gives it all the advantages, and some of the dangers too, of a large city.

Cambridge, p. t., Somerset co., Me., 63 m. N. Augusta, 658 W. Bounded S.E. by a branch of Sebasticook river. It contains one store, two grist-mills, one saw-mill, five schools, 198 scholars. Pop. 461.

Cambridge, p. t., Lamoille co., Vt., 48 m. N.W. Montpelier, 542 W. Watered by Lamoille river, which, with its branches, affords water-power. Chartered in 1781; first settled in 1783. It contains two churches, one Congrega-

tional and one Baptist; eight stores, two fulling-mills, one grist-mill, three saw-mills, seventeen schools, 530 scholars. Pop. 1799.

CAMBRIDGE, p. t., Washington co., N.Y., 34 m. N. by E. Albany, 404 W. Watered by Hoosic river and its tributaries. It contains two stores, one grist-mill, three saw-mills, two tanneries, thirteen schools, 297 scholars. Pop. 2005. The village contains one Presbyterian and one Associate Reformed church, 100 dwellings, and about 700 inhab.

CAMBRIDGE, t., Coos co., N.H. Bounded N.E. by Umbagog lake. Watered by Androscoggin river. Chartered in 1773. Its population is only 5.

CAMBRIDGE, p. v., capital of Dorchester co., Md., 61 m. S.E. Annapolis, 101 W. Situated on the S. side of Choptank river, 12 m. from Chesapeake bay. The river is here 2 m. wide. It contains a court-house, jail, an academy, with a fund yielding $500 annually; and two churches, one Methodist and one Episcopal.

CAMBRIDGE, p. t., Lenawee co., Mich., 66 m. S.W. Detroit, 526 W. It contains two commission houses, one saw-mill, four schools, 114 scholars. Pop. 644.

CAMBRIDGE, p. t., capital of Guernsey co., O., 77 m. E. Columbus, 316 W. It contains one academy, 25 students, nine schools, 399 scholars. Pop. 1845. The village, situated on Wills' creek, contains a court-house and other county buildings, 130 dwellings, and about 700 inhabitants. The National road passes through it.

CAMDEN, county, N.C. Situated in the N.E. part of the state, and contains 228 sq. m. Bounded S.W. by Pasquotank river. It contained, in 1840, 4149 neat cattle, 2672 sheep, 12,562 swine; and produced 2739 bushels of wheat, 285,574 of Indian corn, 9480 of oats, 15,455 of potatoes, 6799 pounds of cotton. It had twenty-one stores, eighteen grist-mills, five saw-mills, five distilleries, one academy, 70 students, six schools, 169 scholars. Pop.: whites, 3844; slaves, 1661; free coloured, 158; total, 5663. Capital, Jonesburg.

CAMDEN, county, Ga. Situated in the S.E. part of the state, and contains 700 sq. m. St. Mary's river winds along its S. border. Separated on the E. from the Atlantic by Cumberland island, which extends its whole length off its coast. Drained by Santilla river. It contained, in 1840, 17,093 neat cattle, 1453 sheep, 7202 swine; and produced 68,565 bushels of Indian corn, 53,575 of potatoes, 1,006,440 pounds of rice, 2,032,740 of cotton, 20,450 of sugar. It had fifteen stores, four grist-mills, four saw-mills, five tanneries, one academy, 90 students, eleven schools, 138 scholars. Pop.: whites, 2004; slaves, 4049; free coloured, 22; total, 6075. Capital, Jeffersonton.

CAMDEN, p. t., Waldo co., Me., 42 m. E.S.E. Augusta, 10 m. N. Thomaston, 632 W. Pleasantly situated on the W. side of the Penobscot bay. It has a good harbour and considerable navigation employed in the coasting trade and the fisheries. Ship-building is carried on, and lime is manufactured and exported. The heights, back of the village, present a fine view of Penobscot bay and its islands. It contains forty-one stores, five grist-mills, four saw-mills, two tanneries, one printing-office, one weekly newspaper, one academy, 100 students, seventeen schools, 1169 scholars. Pop. 3005.

CAMDEN, p. t., Oneida co., N.Y., 128 m. N.W. Albany, 397 W. Drained by the W. branch of Fish creek, which flows into Oneida lake. It contains five stores, one furnace, one fulling-mill, one woollen-factory, six grist-mills, thirteen saw-mills, one oil-mill, five tanneries, one academy, 60 students, fourteen schools. 720 scholars. Pop. 2331. The village is situated on the S. side of the W. branch of Fish creek, and contains a town house, three churches, 100 dwellings, and about 700 inhabitants.

CAMDEN, city, p. t., and port of entry, Gloucester co., N. J., 29 m. S.S.W. Trenton, 139 W. Situated on the E. side of Delaware river, opposite to Philadelphia. Incorporated as a city in 1831. It extends 2¼ m. on the river and 1¼ m. back from it. Much of this territory is still employed in raising fruit and vegetables for the Philadelphia market. It consists of three distinct villages, of which the middle is the largest, and each of which is connected with Philadelphia by a ferry. The channel of the river is near the Philadelphia side, and vessels of the largest class come not above the lower village, and those of 150 tons only to the central part of Camden. It contains six churches, two Methodist, one Episcopal, one Baptist, two Friends; an academy, a bank, 400 dwellings, and seventy or eighty buildings occupied in manufactures. It has several public gardens. The Camden and Amboy rail-road from New-York city terminates here. There is also a railway S. to Woodbury. It has thirteen stores, capital $28,400; two lumber-yards, capital $18,000; one turpentine-factory, one grist-mill, five saw-mills, three printing-offices, three weekly newspapers, and one periodical; total capital in manufactures, $224,050; three academies, 240 students, three schools, 150 scholars. Pop. 3371.

CAMDEN, p. t., Hillsdale co., Mich., 120 m. S.E. Detroit 537 W. Pop. 174.

CAMDEN, p. v., capital of Kershaw dist., S.C., 33 m. N.E. Columbia, 473 W. Situated on the E. bank of Wateree river, which is crossed 1½ m. S.W. of the village by a bridge, which cost $80,000. The river is navigable to this place for flat-boats of 70 tons. It contains a court house, jail, an academy, a bank, a masonic hall, a brick market house, a public library, an arsenal, and four churches, some of which are elegant buildings, one Methodist, one Episcopal, one Presbyterian, and one Baptist; forty stores, 900 dwellings, and 1000 inhabitants. One mile from the village are the De Kalb mills, and a cotton-factory with 1900 spindles, which employs 60 hands. A battle was fought here Aug. 16th, 1780, between Gen. Gates and Lord Cornwallis, in which the Americans were defeated; and another April 25d, 1781, between Gen. Greene and Lord Rawdon. Opposite to the Presbyterian church, at the end of De Kalb street, is a fine white marble monument, erected to the memory of the Baron de Kalb, a German by birth, a French officer, who volunteered in the American cause, was made a major-general in the Revolutionary army, and was killed in the above first-named battle.

CAMDEN C.H., p. v., capital of Camden co., N.C., 219 m. E.N.E. Raleigh, 287 W. Situated on the E. side of Pasquotank river. It contains a court house, and several stores and dwellings.

CAMDEN, t., Lorain co., O. It has four schools, 115 scholars. Pop. 504.

CAMELFORD, a bor. and town of England, co. Cornwall, hund. Lesnewth, on the Camel, 205 m. W.S.W. London. Area of par. 3750 acres; pop. of do. (1841) 8062. The town is meanly built, but the streets are wide and well paved. It has a commodious town-hall, built in 1808; a free school, founded in 1679, has an annual revenue of £38 10s.; and there are a few minor charities. Market, Friday; fairs for cattle, Friday after March 10, May 26, June 17 and 18, and Sept. 5. Inhab. mostly engaged in agriculture. Camelford returned 2 mem. to the H. of C. from 1st Edw. VI. down to the passing of the Reform Act, by which it was disfranchised. The franchise vested in a self-elected corporate body, consisting of a mayor and 31 burgesses.

CAMEL'S RUMP, or HUMP, Chittenden co., Vt. It is the second highest peak of the Green mountains, 17 m. W. Montpelier, 20 m. S.E. Burlington. It is on the E. line of Huntington town, 4188 ft. above tide-water. The view from its top is exceedingly extensive, embracing lake Champlain and its valley, and is beautiful and grand. It can be approached with carriages within 3 m. of its top. The rocks which compose the mountain are wholly of mica slate.

CAMERINO, a town of the Papal States, cap. deleg., on a hill, 5 m. S.S.W. Ancona. Pop. 4900. It is pretty well built. Among the public buildings are the cathedral, which contains some pictures of the great masters, as does the church of Omanzia; and the archiepiscopal palace, a fine building surrounded with columns. In the principal square is a bronze statue of Pope Sixtus V. It has twelve monasteries, and seven convents for women; and is the seat of an archbishopric, of a tribunal of primary jurisdiction, and of a university founded in 1727. A good deal of silk is spun and manufactured here; but the business is rather declining.

CAMERON, p. t., Steuben co., N.Y., 7 m. S. Bath, 225 m. W.S.W. Albany, 304 W. Watered by Canisteo river, a branch of Tioga river. It contains two stores, one fulling-mill, one grist-mill, seven saw-mills, twelve schools, 562 scholars. Pop. 1359.

CAMILLUS, p. t., Onondaga co., N.Y., 7 m. W. Syracuse, 139 m. W.N.W. Albany, 347 W. The Erie canal passes through it. It contains one Methodist and one Presbyterian church, twelve stores, two flouring-mills, one grist-mill, seven saw-mills, two tanneries, fifteen schools, 924 scholars. Pop. 3957.

CAMMIN, a town of the Prussian States, prov. Pomerania, cap. circ., on the Dievenow, about 5 m. above where it falls into the Baltic, 38 m. N. Stettin. Pop. 2200. It was formerly the seat of a bishopric, suppressed in 1648. The fine cathedral still remains, and the chapter continued down to 1812. There is here an asylum for noble ladies, and a hospital. Distillation is carried on to a considerable extent, and the fishery is very active.

CAMPAGNA, a town of Naples, prov. Principato Citra, cap. distr., surrounded by high mountains, 18 m. E. Salerno. Pop. 7000. It is the seat of a bishopric; has a superb cathedral, three parish churches, several convents, a college, a hospital, and a *mont de piété*.

CAMPAN, a town of France, dep. Hautes Pyrenées, cap. cant., on the Adour, 16 m. S.S.E. Tarbes. Pop. 4248. The houses are mostly built of marble. This town gives its name to a beautiful valley, fertile, *riante*, and full of life and industry. The cottages are clean and comfortable;

and the neat, well-laid-out gardens, and respectable dress of the peasantry, evince their comfortable condition. (*Inglis's Switzerland, &c.*, p. 260.)

CAMPBELL, county, Va. Situated in the S. part of the state, and contains 576 sq. m. Bounded N. by James river, and S. by Staunton river, by which it has a boat navigation to the tide-waters of Chesapeake bay and of Albemarle sound. It contained, in 1840, 10,810 neat cattle, 13,858 sheep, 20,991 swine; and produced 177,949 bushels of wheat, 481,960 of Indian corn, 237,539 of oats, 23,622 of potatoes, 162 tons of hemp and flax, 3,257,193 pounds of tobacco, 4234 of cotton. It had three foreign commission houses, ninety-four retail stores, one furnace, one cotton-factory with 1500 spindles, eleven flouring-mills, thirty-four grist-mills, thirty-eight saw-mills, nine tanneries, fifteen distilleries, two printing-offices, two weekly newspapers, five academies, 195 students, twenty schools, 389 scholars. Pop.: whites, 10,213; slaves, 10,045; free coloured, 772; total, 21,030. Capital, Campbell C.H.

CAMPBELL C.H., p. v., capital of Campbell co., V., 124 m. W.S.W. Richmond, 203 W. Situated near the centre of the co., and contains the county buildings.

CAMPBELL, county, Ga. Situated towards the N.W. part of the state, and contains 300 sq. m. Watered by Chattahoochee river. It contained, in 1840, 6184 neat cattle, 3103 sheep, 15,779 swine; and produced 37,201 bushels of wheat, 231,475 of Indian corn, 18,194 of oats, 3864 of potatoes, 7436 pounds of tobacco, 895,737 of cotton. It had twelve stores, thirteen grist-mills, eight saw-mills, three tanneries, fourteen distilleries, nineteen schools, 462 scholars. Pop.: whites, 4528; slaves, 842; free coloured, 2; total, 5370. Capital, Campbellton.

CAMPBELL, county, Tenn. Situated in the N.E. part of the state, and contains 672 sq. m. Bounded E. by the S. fork of Cumberland river, S.E. by Clinch river. Watered by Powell's river, a branch of Tennessee river. Cumberland mountains cross its S.E. part. It contained, in 1840, 6863 neat cattle, 4954 sheep, 22,803 swine; and produced 14,240 bushels of wheat, 1951 of rye, 199,758 of Indian corn, 43,270 of oats, 6154 of potatoes, 1784 pounds of cotton, 5715 of sugar. It had ten stores, thirty-seven grist-mills, seven saw-mills, one powder-mill, five tanneries, nineteen distilleries, two schools, 56 scholars. Pop.: whites, 5831; slaves, 264; free coloured, 54; total, 6149. Capital, Jacksborough.

CAMPBELL, county, Ky. Situated in the N. part of the state, and contains 260 sq. m. Bounded N. and E. by Ohio river. Watered by Licking river. It contained, in 1840, 9446 neat cattle, 4071 sheep, 5589 swine; and produced 27,702 bushels of wheat, 1110 of rye, 112,147 of Indian corn, 19,167 of oats, 15,371 of potatoes, 28,010 pounds of tobacco. It had three stores, eight schools, 186 scholars. Pop.: whites, 4921; slaves, 289; free coloured, 4; total, 5214. Capital, Newport.

CAMPBELL, t., Warwick co., Ia. It has four schools, 125 scholars. Pop. 959.

CAMPBELL, t., Steuben co., N.Y., 10 m. S.E. Bath, 209 m. W.S.W. Albany. Watered by Conhocton river. It contains one store, two fulling-mills, one woollen-factory, two grist-mills, twelve saw-mills, four schools, 237 scholars. Pop. 852.

CAMPBELLTON, p. v., capital of Campbell co., Ga., 102 m. N.W. Milledgeville, 699 W. Situated on both sides of Chattahoochee river, and contains the county buildings and twenty-five or thirty dwellings.

CAMPBELTON, a sea-port and royal bor. of Scotland, co. Argyle, being, though not the capital, by far the most important town in the co., on the E. coast of the long, narrow peninsula of Cantire. Pop. in 1841, 6787. It consists of two leading streets crossing each other at right angles, with adjoining streets of an inferior description. It is built on the S.W. side of a large salt-water loch, or inlet of the sea, about 2 m. in length by 1 in breadth, forming an excellent harbour, having from 6 to 13 fathoms water. Two conical insular hills lying in the mouth of the bay, and intercepting the view of the sea, make the harbour look land-locked. Campbelton was at one time a small fishing village under the name of Dalaruan; but having begun to rise into importance, it was made a royal burgh in 1700, when its present name was conferred on it in honour of the noble family of Argyle, on whose property it is built. The parl. boundaries of the burgh are very extensive, embracing a considerable space of ground on both sides the loch not yet built on. It has at present (1839) no fewer than twenty-eight distilleries, which, at an average, pay £100,000 to the excise, and produce about 600,000 gallons of spirits yearly. There are 47 maltsters, but in many instances the same person is both distiller and maltster. The inhab. also engage extensively in the herring fishery, a branch of trade that at one period of the year gives employment to several hundred individuals. Many of the females are engaged in tambouring; while hand-loom weaving is pretty extensively carried on in connexion with the cotton manufacture in Glasgow. Coal is got within 4 m. of the burgh, and is brought thither by means of a canal. There is a good quay projecting into the bay, but accessible only at high-water. The expenditure of a small sum on its extension might render it available for vessels of any burden at all times of the tide. There is a regular steam communication with Glasgow and various parts of the mainland, as also, though less frequently, with Ireland. The climate of Campbelton is regarded as particularly agreeable and salubrious: hence the number of families that resort thither, either as occasional visiters or permanent residents. The burgh has two places of worship connected with the established church, in one of which the service is performed in Gaelic, and three dissenting chapels. It unites with Oban, Inverary, Irvine, and Ayr, in sending a mem. to the H. of C. Registered electors in 1838–39, 263.

CAMP CREEK, t., Pike co., O. It contains one saw-mill, six schools, 181 scholars. Pop. 298.

CAMPEACHY, a sea-port town of Mexico, W. coast of the peninsula of Yucatan, on the Rio Francisco, 95 m. S. by W. Merida, lat. 19° 51′ 15″ N., long. 90° 28′ 15″ W. Pop. fluctuates from about 7000 to about 14,000. It is walled and defended by some fortifications which, however, are of little importance. It has a pier about 50 yards in length; but the water is so shallow that only small boats can come up to it, vessels of considerable burden anchoring at certain distances off shore, according to their draught of water. It is, in common with the whole of this coast, ill supplied with water, that which is obtained from wells being brackish. It derives its entire importance from its being the great seat of the logwood trade; that valuable dye-wood, sometimes called Campeachy wood (*Hæmatoxylon Campeachianum*), being found in greater perfection and abundance in the adjoining district than anywhere else. The imports of logwood into this country in 1836, mostly from Campeachy, amounted to 5637 tons. The other exports are wax, the produce of wild, stingless bees, with some small quantities of cotton, *&c.* Campeachy was founded in 1540, and suffered much at different times from hostile attacks, having been sacked by the English in 1659; by Scott, a pirate, in 1678; and by the buccaneers in 1685. (*Humboldt; Blount's American Pilot, &c.*)

CAMPLI, a town of Naples, prov. Abruzzo Ultra I., cap. cant., 5 m. N. Teramo. Pop. 6892. It has a cathedral, three collegiate churches, an abbey of Celestine monks, several convents, a hospital, and a *mont de piété*.

CAMPOBASSO, a town of Naples, cap. prov. Sannio, on the declivity of a mountain, 53 m. N.E. Naples. Pop. 8000. It is fortified; is the seat of a civil and criminal court; and has a collegiate and four parish churches, several convents, a royal college, a hospital, and an almshouse. The best cutlery made in Naples is produced here; and being traversed by the excellent road forming a communication between the capital and the towns on the Adriatic, it has an extensive commerce. (*Dict. Géog.; Balbi Abrégé*, ed. 1837, p. 414.)

CAMPO FORMIO, a town of Austrian Italy, prov. Friuli, 4 m. S.W. Udina. Pop. 1600. It is famous in diplomatic history for the treaty of peace concluded here on the 17th of October, 1797, between Austria and France.

CAMPO-MAYOR, a fortified and frontier town of Portugal, prov. Alentejo, 12 m. N.N.E. Elvas, and 15 m. N.W. Badajoz. Pop. 4500. It is ill built, with narrow, dirty streets, and old low houses; has a collegiate church, two convents, a hospital, and a workhouse. It was nearly destroyed in 1712 by the explosion of a powder magazine. (*Miñano.*)

CAMPOS, a town of the isl. of Majorca, in an extensive plain, 22 m. S.E. Palma, and 7 m. from the sea. Pop. 4881. It has in its vicinity a hot well that is in considerable reputation; and considerable quantities of salt are made along the coast. The surrounding plain is very fertile. (*Miñano.*)

CAMPTON, p. t., Grafton co., N.H., 47 m. N. by W. Concord, 528 W. Chartered in 1767, first settled in 1765. Watered by Pemigewasset river and its branches. It contains two churches, one Congregational and one Baptist; three stores, two fulling-mills, two grist-mills, seven saw-mills, two tanneries, fourteen schools, 486 scholars. Pop. 1513.

CAMPTON, p. v., Orange t., Essex co., N.Y., 3½ m. S.W. Newark, 52 m. N.E. Trenton, 218 W. It contains one Presbyterian church, and one of stone, three stories high, the first story occupied as an academy, the second as a church free to all denominations, and the third as a masonic hall; three stores, one grist-mill, one saw-mill, and seventy-five or eighty dwellings.

CANAAN, p. t., Somerset co., Me., 13 m. E. Norridgewock, 36 m. N. by E. Augusta, 631 W. Watered by a branch of Kennebec river. Incorporated in 1788. It contains five stores, one grist-mill, one saw-mill, eleven schools, 555 scholars. Pop. 1379.

CANAAN, p. t., Grafton co., N.H., 41 m. N.W. Concord, 16

m E. Dartmouth college, 496 W. Chartered in 1761, first settled in 1766. It contains three churches, two Methodist and one Congregational; three stores, two fulling-mills, two woollen-factories, six grist-mills, nine saw-mills, one academy, 144 students, sixteen schools, 377 scholars. Pop. 1576.

Canaan, p. t., Essex co., Vt., 31 m. N. Guildhall, 106 m. N.E. Montpelier, 603 W. Situated in the extreme N.E. part of the state. Chartered in 1782, first settled in 1785. It has two stores, five schools, 108 scholars. Pop. 378.

Canaan, p. t., Litchfield co., Ct., 42 m. N.W. Hartford, 18 m. N. by W. Litchfield, 343 W. The Housatonic river bounds it on the W., and between this t. and Salisbury, has a fall of 60 ft. nearly perpendicular, presenting, in high water, an imposing spectacle. It is the most considerable fall in the state, and affords extensive water-power. Limestone is abundant, and the lime, which is of an excellent quality, is extensively exported. Watered by Blackberry and Hollenback rivers, which flow into the Housatonic, and afford water-power. Iron is extensively manufactured, of ore brought from the W. part of Salisbury. It contains two Congregational churches, ten stores, eight furnaces, three fulling-mills, two woollen-factories, three grist-mills, ten saw-mills, three tanneries, one academy, 20 students, fourteen schools, 584 scholars. Pop. 2166.

Canaan, p. t., Columbia co., N.Y., 20 m. N.E. Hudson, 24 m. S.E. Albany, 302 W. Watered by branches of Kinderhook creek. The rail-roads from W. Stockbridge to Hudson, and also to Albany, pass through it. It contains four stores, two fulling-mills, three woollen-factories, two cotton-factories with 268 spindles, four grist-mills, eight saw-mills, one academy, 23 students, eight schools, 685 scholars. Pop. 1957.

Canaan, p. t., Wayne co., Pa., 159 m. N.E. Harrisburg, 253 W. Drained by branches of Lackawaxen creek. The Carbondale and Honesdale rail-road passes through it. It has one store, eleven schools, 548 scholars. Pop. 1462.

Canaan, p. t., Wayne co., O., 107 m. N.E. Columbus, 350 W. Pop. 1827.

Canaan, t., Madison co., O. It has two stores, one fulling-mill, one grist-mill, three saw-mills, eight schools, 315 scholars. Pop. 607.

Canaan, t., Marion co., O. It has one saw-mill, five schools, 200 scholars. Pop. 1027.

Canaan, t., Hillsdale co., Mich. Pop. 164.

Canaan, t., Athens co., O., 4 m. E. Athens. Watered by Hockhocking river. It contains salt-works. It has four stores, one grist-mill, one saw-mill, four schools, 76 scholars. Pop. 800.

CANADA, a vast territory of N. America, belonging at present to Great Britain, lying principally in a N.E. and S. W. direction, along the N. side of the St. Laurence, and the N. and E. sides of lakes Ontario, Erie, Huron, and Superior, between 57° 50' and 90° W. long., and 42° and 52° N. lat. The other portion of Canada, or that on the S. side of the St. Laurence, is of comparatively limited dimensions: it stretches along the river from near Montreal to point Gaspé, at its embouchure, having on the S. the territory of the U. States and New-Brunswick. On the N. Canada has Labrador and the inhospitable territories belonging to the N.W. Company, the boundary in this direction being the elevated grounds, or water-sheds, separating the rivers which run S. to the St. Laurence and the great lakes from those which run N. to Davis's straits and Hudson's bay. The length of Canada, from Amherstburg, on Detroit river, the extreme S.W. limit of the prov., to Sablon harbour, on the strait of Belleisle, its extreme N.E. limit, is about 1450 m., its breadth may vary from 200 to 400 m. Its area has been estimated at about 350,000 sq. m.; and its pop. is at present (1839) probably little short of a million. It is wholly within the basin of the St. Lawrence, of which it includes the entire N. and a small part of the S. division.

This great territory is divided into the provs. of Upper and Lower, or, as they might be designated, English and French Canada. The Ottawa or Grand river, which has its sources in about 48° 30' N. lat., and 80° W. long., and flows in an E.S.E. direction till it unites with the St. Laurence, near Montreal, forms, nearly in its whole extent, the line of demarcation between the two provs.; Lower Canada comprising the whole territory lying N.E. of the Ottawa, on both sides the St. Laurence; while Upper Canada comprises all the territory lying S. and W. of that river. The latter is entirely an inland prov.; but, from its having the great lakes and a part of the St. Laurence for its boundary, it has a vast command of internal navigation, and a ready access to the ocean. Subjoined is an account of the divisions of the provs., and their pop. in 1835 and 1831.*

	Districts.	Area in square miles.	Pop. 1836.	Acres cultivated.	Acres occupied but uncultivated.	Assessment of id. per Pound on Property. £	s.	d.
Upper Canada	Johnstown	33,000	29,119	70,646	355,072	1,699	10	0
	Eastern		28,504	82,813	331,134	1,490	13	0
	Ottawa		7,004	16,354	110,988	443	10	0
	Bathurst		22,693	57,197	353,369	810	14	0
	Midland		46,685	187,338	356,214	3,113	14	0
	Newcastle		30,245	94,419	434,526	1,559	17	0
	Home		47,543	179,518	600,753	2,465	12	0
	Gore		40,156	296,428	511,712	2,407	6	0
	Niagara		28,735	209,763	249,212	2,210	16	0
	London		41,241	144,270	718,606	3,083	17	0
	Western		14,496	39,561	281,290	922	0	0
	Unsettled territory	118,000						
		141,000	336,461	1,308,307	4,394,169	20,207	9	0
			(1831)					
Lower Canada	Quebec	125,717	151,985	562,778	1,685,817			
	Montreal	49,769	290,050	1,931,300	2,529,859			
	Three Rivers	15,811	56,570	253,447	629,903			
	Gaspé	7,389	13,312	18,687	136,214			
	Undetermined territory	7,174						
		205,860	511,917	2,066,213	4,981,793			

The N. portion of both Upper and Lower Canada consists of a table-land, little of which has been hitherto explored. In Upper Canada, E. of Huron, it has an average elevation of perhaps from 1200 to 1300 ft. It is covered with forests interspersed with ravines, swamps, and torrents; and abounds with lakes, which, anywhere but in the neighbourhood of the immense lakes of this continent would be deemed of considerable size. The coast of Lower Canada, N.E. of the Saguenay, is less lofty than S.W. of that river, but of a very uninviting description. The interior of this part of the country is described by the Indians and Esquimaux, by whom alone it is traversed, as composed of rocky cliffs and low hills, scattered over barren plains, diversified with thick forests of stunted pines, and chequered with small lakes. There seems reason to suspect that the expectations once entertained of finding here tracts of cultivable land will never be realized; but hopes are still cherished that the district may contain valuable minerals. The greater part of the immense district of Quebec presents a "chaos of mountains, lakes, and torrents, tenanted only by wild beasts, and a few wandering Indians." (*Murray.*) From the mouth of the Saguenay to cape Tourment, near Quebec, the shore of the St. Laurence is bold and desolate; but W. of this point a plain country begins to extend inland, with a variable breadth of from 15 to 40 m., rising into the table-land behind it by successive terraces. The cultivated country N. of Quebec does not extend far, being bounded in by hill ranges. But as these ranges gradually recede from the St. Laurence, and the country, at first diversified by varied eminences, sinks into a level plain, the surface of settled and cultivated land increases; and this is especially the case as we approach and penetrate Upper Canada. The peninsula or great plain of this prov., between lakes Huron, Erie, and Ontario, comprising about 20,000 sq. m., consists,

* Some of the remarks in this article relate to the state of the provinces before the union. They contain important information, and are retained. Since the union of the provinces of Upper and Lower Canada, the organization of the government has been materially changed, and some alterations have been made in the names and arrangement of the districts; but it is thought best not to disturb the above statistics, by introducing them here. They will be found delineated on the map of Canada. Kingston has been made the capital of the united provinces, where the colonial legislature assembles.—Am. Ed.

for the most part, of alluvial soil, on a calcareous substratum. It is of varying fertility; but, on the whole, is believed to be the best grain country of any of the more N. portions of the American continent. A large part of this fine plain is still covered with lofty forests: it has, however, some prairies, or natural meadows; but these are not extensive. At some remote period it had evidently formed part of the bed of a vast inland sea, of which the five great lakes having been the deepest, are now the principal remaining portions. N. of lake Ontario, two terraces intervene between the plain on the shore of the lake and the table-land in the N., decreasing somewhat in fertility as they increase in height, and separated from each other and from the plain by two ranges of hills of moderate elevation. The most S. of these two ranges unites, near long. 80°, with a third, which passes N. and S. from Natawasanga bay, in lake Huron, to the W. extremity of lake Ontario. The combined range, after encircling the head of the latter lake, crosses the bed of the Niagara river, forming the ledge over which are the celebrated falls, and is finally lost in the territory of the United States.

That part of Lower Canada S. of the St. Lawrence, extending between long. 72° 30′ and 74° 30′, and entering into the distr. of Montreal, consists, for the most part, of an extended plain almost completely flat, except that some detached hills diversify the surface, one of which, that of Rouville, is 1100 ft. in height. It is less extensive than the plain on the opposite shore of the river, and contains no large towns, but it is in many districts equally fertile and well watered, and the cities are dependent on it for a large proportion of their supplies. To the S. and E. it ascends by degrees into the mountainous region, forming the boundary between the British and U. States' territories. The aspect of the S. shore of the estuary of the St. Lawrence, between long. 69° 30′ and 72°, though bold and hilly, is not mountainous, as on the opposite shore; and the hill ranges are interspersed with valleys and even plains of some extent, many of which, from the encouragement afforded by the contiguous markets of the cap., have been brought into very tolerable cultivation. E. of Kamouraska, the country is diversified by more abrupt eminences, while pop. and culture become more limited; and in the district of Gaspé the mountains rise into two chains of considerable elevation, enclosing between them a lofty table-land or central valley. The most southerly of these chains bounds on its S. side the valley of the Ristigouche and St. John rivers. The upper part of the basin of the St. John forms a region at least 600 or 700 ft. above the level of the sea, covered with forests, lakes, and rivers, and, according to M'Gregor and other authorities, equal in point of fertility to any part of America: enclosed by mountain ranges on the N., S. and W., and divided into two nearly equal parts by the St. John river, running from W. to E.

Besides the great lakes indenting the W. outline of the country, Canada contains, as has been already said, numerous minor, yet still considerable, bodies of water. In Lower Canada, the lakes and rivers have been estimated to cover 3300 sq. m. of surface; the principal of the former hitherto discovered are lake St. John, with an area of 540 sq. m.; those of Manicouagan, Piretibbe, and others N. of the St. Lawrence, and Mephramagog, &c., S. of that river. In Upper Canada, the chief known are Nipissing lake, Temiscaming, and St. Ann's, in the high table-land; and the Simcoe lake in the upper terrace country of Home district.

Among the rivers falling into the St. Lawrence or into the lakes which form a part of its system, there are some deserving of especial mention here for their utility as regards navigation or their agency in fertilizing the soil. In the peninsula of Upper Canada, the Thames originates in the district of London, by the union of several streams, near lat. 43° and long. 81°, and after a course of about 150 m. chiefly S.W., falls into lake St. Clair, situated between those of Huron and Erie. The Thames is navigable for large vessels to Chatham, 15 m. up, and for boats nearly to its source. It intersects and waters a fine and fertile country. Besides Chatham, small towns, with the pompous names of London and Oxford, are situated upon its banks. Next in magnitude to the Thames is the Ouse. This river rises in the Home district, about lat. 44°, long. 80° 10′, runs generally S.E., and falls into lake Erie near its N.E. extremity. Parallel to this river for about 50 m., runs the Welland or Chippeway river, which, in one part of its course, forms a portion of the canal between the Ouse and lake Ontario, by means of which the falls of Niagara are avoided. The Trent, in the district of Newcastle, connects the small lakes Balsam, Sturgeon, and several others in the upper terrace country, with the Rice lake, and, after a tortuous course, discharges itself into the bay of Quinté in lake Ontario. It is said to be navigable for boats in the whole of its course. The lake Balsam is separated by only a short portage from that of Simcoe, which discharges its waters into Gloucester bay (Huron lake) by the Severn river. A short and valuable line of direct water communication between the lakes Huron and Ontario is apparently impeded only by the intervention of this short portage, and by the rapids of the Severn, which river is, however, no more than 90 m. in length. The other affluents of the St. Lawrence and the great lakes are elsewhere treated of. (*See* LAWRENCE, ST., *&c.*) If we except the St. John, the Ristigouche, which bounds the district of Gaspé S., and falls into Chalour bay, is the only river of any importance in Canada not belonging to the St. Lawrence basin. (*Bouchette, Darby, M'Gregor, Hall, &c.*)

Climate.—The climate of Canada is subject to great extremes of heat and cold; the thermometer ranging between 102° above, and 36° below, the zero of Fahr. In such an extensive region there is, of course, some difference in this respect: as we ascend the St. Lawrence, not only a more S. parallel is reached, but the country is less wild and exposed than that near its entrance; so that, whilst Quebec has been said to have the summer of Paris, and the winter of Petersburg, the great plain of lake Erie has the climate of Philadelphia. Still the Canadian climate, as a whole, must be considered very severe; all the streams are locked up by ice, and the ground is covered everywhere, to an average depth of 5 or 6 ft., by snow, for four or five months of every year. Frosts usually commence in Oct., while the weather, by day, is still mild and serene. But with Nov. begins a succession of snow-storms and tempests, from the N. and E., accompanied by a great increase of cold; and this sort of weather usually continues to the 2d or 3d week of Dec., when the atmosphere again becomes serene, but the cold still more intense, so that the rivers become suddenly frozen over. Towards the latter part of April, or, in late seasons, the beginning of May, the ice begins to break up (often with loud reports like the discharge of cannon); a sudden increase of temperature stimulates vegetation, and makes its growth almost perceptible to the eye; so that spring and summer can scarcely be recognised as distinct seasons. May and June are occasionally wet, to the hindrance of the farmer, whose seed-time this is (to be followed by harvest towards the end of Aug.); but usually, the summers are very fine. Thunder-storms are often of great violence, and the aurora borealis is frequent and vivid: of the prevailing winds, those from the S.W. are usually accompanied by clear and serene weather; those from the N.E. by continued rain in summer, and snow in winter; while a N.W. breeze is usually dry, with severe cold. Fogs (except in the district of Gaspé) are of unusual occurrence. It seems to be the general opinion of the inhab. that the winters are gradually becoming less severe: and this may be attributable to the clearance of the forests and the increased extent of cultivated surface; for, while the state of climate (especially of humidity) influences vegetation, that, in turn, reacts on climate. Humboldt's reasoning and tables (*Mémoires d'Arcueil*, tom. iii.) may be satisfactorily referred to for the conditions that have the greatest and most permanent influence on the Canadian climate.

The length and severity of the Canadian winter is a heavy drawback on the country, and lays the farmer under serious difficulties and privations not experienced in countries where the climate is milder, as in the contiguous territories of Indiana and Illinois. For five or six months almost all agricultural operations are suspended, so that time is not left in the rest of the year for the proper preparation of the ground for the crops and other necessary labours. It is clear too, that horses, cattle, and other farm stock, must require a proportionally large supply of fodder for their keep; and to these causes Mr. Shireff is principally inclined to ascribe the leanness of the animals, the high price of produce, and the cheapness of labour as compared with the U. States. (*Tour in America*, p. 354.) In these respects, however, there is a material difference between the lower and the upper province. In the latter the severity and the length of the winter are considerably diminished. The soil, too, is generally better; and the quality of the wheat improves as we draw nearer to the S. limit of the province.

Most of the causes that contribute to make the climate of the northern part of America more severe, and subject to greater extremes than that of Europe, in the same parallel, bear with especial force on the Canadian regions. The greater portion of these provinces is covered by extensive forests; the trees composing which (especially in the more northern and eastern parts) do not, generally speaking, attain the same lofty size as those of the U. States, nor flourish with the same exuberant vitality: the pine family, and various species of evergreens, are the most numerous and predominant. Among various other kinds of trees, are, the silver and American firs, Weymouth and Canadian pines, white cedar (*Thuya occidentalis*), maple, birch, American ash, bass wood, hickory, two or three species of wild cherry, and numerous species of oak. Like the rest of the American continent, most of the plants and animals differ

specifically from those of the Old World. Many of the smaller kinds of annual and perennial plants are common to Canada and regions lying much further to the S., which may be accounted for by the high summer temperature, while the deep winter snows effectually protect their roots through the severest seasons; but the trees and larger shrubs, which find no such shelter, belong for the most part to more northern and arctic regions. Of the smaller plants, the *Zizania aquatica* may be noticed as peculiar to Canada, and abounding in most of the swamps (a grass not unlike rice, and affording food to birds, and occasionally to the Indian tribes), and the ginseng, and Canadian lily, common to this country and Kamtschatka. From the sap of the maple (*acer saccharinum*), as it rises in the earlier part of spring, sugar is made in considerable quantities; in collecting which, from trees scattered over thousands of acres, while the snow still covers the ground, much hardship is frequently endured: these districts are called sugaries, and are a valuable description of property. The mode of procuring it is by inserting a small cane shoot through an incision made in the bark, the sap being received in a wooden trough placed under it; it is afterwards boiled, and then left to cool into a hard solid mass, of a dark brown colour, which is moulded by the form of the jars which contain it; the value of the article is about half of that produced from the sugar-cane. Most of the oak growing in the woods is unfit for ship-building, and the greater part of the timber used for that purpose is imported from New England. The species called the live oak, which grows in the warmer parts of the colony, is, however, said to be well adapted for ship timber; the various kinds of wood available for no other purpose, serve to supply the pot and pearl-ash manufactories. Among the wild animals ranging through these unreclaimed regions, are the American elk, fallow deer, bear, wolf, fox, wild-cat, raccoon, martin, otter, and various species of *Viverra* and *Mustela*; the beaver, hare, grey and red squirrel; and in the more southern parts, the buffalo and roebuck: the bears usually hybernate, if the season has enabled them to get sufficiently fat for the purpose; if not, they migrate to a more southerly climate. (*Richardson's Fauna Boreali*, p. 16.) Among the birds, may be noticed the wild pigeon, quail, partridge, and different kinds of grouse; of the water birds, the species are very numerous, as might be inferred from the general character of the region, where, in the basin of the St. Lawrence, and the numerous lakes occupying the elevated table-lands around it, half the fresh water on the surface of the globe is collected; a humming bird (the smallest of its genus) is also indigenous, and may be seen in the Quebec gardens, flitting round the flowers, and constantly on the wing. Among the reptiles, the rattlesnake is occasionally met with. Fish, in great variety and abundance, are found in the lakes and rivers; in which respect few streams can rival the St. Lawrence; the sturgeon is common, and the salmon and herring fisheries are considerable; seals are also met with occasionally, in large shoals, in the lower parts of the river. Forests can only exist where the prevailing winds bring with them sufficient moisture, but they may usually be taken as a measure of the fertility of the soil, no less than of the humidity of the climate: in this respect, therefore, taken generally, Canada must be considered a fertile region; the upper province much more so than the lower one. Tobacco, hemp, flax, and the different kinds of grain and of pulse, are successfully cultivated; as are all the commoner fruits and vegetables of England; melons of different species abound, and are probably indigenous; as are also the strawberry and raspberry: these last flourish luxuriantly in the woods; and on the plains behind Quebec are gathered in great quantities, and taken to that market. Pears and apples succeed well, both there and at Montreal; and on the shores of lake Erie, the grape, peach, and nectarine, as well as all the hardier kinds of fruit, arrive at the greatest perfection.

Canada does not appear to be rich in minerals, but iron abounds in some districts; veins of silver-lead have been met with in St. Paul's bay, (50 m. below Quebec), and coals, salt, and sulphur, are also known to exist in the colony. No volcanoes have been discovered, but authentic accounts are preserved of several violent earthquakes: among others, one in 1663, when tremendous convulsions, lasting for six months, extended from Quebec to Tadeausac (130 m. below it), which broke up the ice of the rivers, and caused many great land-slips and dislocations; in 1791, earthquakes were also frequent and violent, in the same region; and the shores, both of the gulf and river St. Lawrence (like those of the great lakes, as previously noticed), present many proofs of former convulsions in the horizontal banks of recent shingle and shells, and in elevated limestone strata, with wave-scooped marks, and lithodomous perforations, that occur on various parts of the shores. (*Lyell's Geology*, vol. ii.)

People.—The majority of the population in Lower Canada are of French origin, and are for the most part descendants of settlers from Normandy, established in the colony previously to 1759. Their number at that period was about 70,000, and in 1831 they had increased (according to the census) to upwards of 400,000; the most rapid augmentation probably of any on record from births alone. Neither the conquest, nor the long period which has since elapsed, has wrought any great change in their character and habits; nor has their increasing numbers induced them to make any considerable encroachments on the wilderness around: on the contrary, they have continued within their original limits, subdividing the land more and more, and submitting to a constantly decreasing ratio of comfort. They are frugal, honest, industrious, and hospitable, but cling with unreasoning tenacity to ancient prejudices and customs; by temperament cheerful, social, engaging, and (from the highest to the lowest) distinguished for courtesy and real politeness, they retain all the essential characteristics of the French provinces under the ancient regime, and present the spectacle of an old, uneducated, stationary society, in a new and progressive world. A few seignorial families possess large, but not very valuable, properties: the class wholly dependent on wages is a very small one; and the great majority consists of a hard-working yeomanry (usually called *habitans*), among whom there is almost a universal equality of condition and property, and of ignorance too; for scarcely one of them can read or write. From the public colleges and seminaries established in the cities and other central points by the early possessors of the country, chiefly by the Jesuits (where the education resembles that of our public grammar schools, and is entirely in the hands of the Catholic clergy), between 200 and 300 annually finish their education, and are dispersed through the community: nearly the whole of these are of the class of *habitans*, and return to reside among them, mostly as notaries or surgeons; and thus, living on terms of complete social equality, though with greatly superior knowledge, in communities which possess nothing in the shape of municipal institutions, they possess almost despotic influence over popular opinion and conduct in all public matters. The *habitans* under the old feudal tenures have cleared two or three belts of land along the St. Lawrence, and cultivate them on the worst system of small farming; their farms and residences being all so connected, that the country of the seignories appears like a continuous village. They spin and weave their own wool and flax, and make their own soap, candles, and sugar. What energy and enterprise there exists in the community (beyond the portion required by this sort of routine) is exerted in the fur trade and in hunting, which, it appears, they still monopolize through the whole valley of the Mississippi. (*Lord Durham's Report*, p. 11–13.) The Anglo-Saxon portion of the population of Lower Canada consists almost wholly of persons who have emigrated from the United Kingdom, or the descendants of such, subsequent to 1759. A considerable addition was made to their number by U. S. loyalists in 1787; at a subsequent period many families from Vermont have settled in the townships adjoining that state, and since the formation of the American Land Company, many have emigrated through their exertions. A majority of the labouring class in this portion of the population are Irish Catholics; the rest are English or Scotch Protestants, by whom the resources of the country, so far as they have been called forth, have been mainly developed. It is also by these that the internal and foreign commerce has been created, which is wholly in their hands, as well as a large portion of the retail trade of the province: besides this, they possess the best cultivated farms in the province, and are owners of fully half the more valuable seignories. (*Lord Durham's Report*, p. 14.) The inhabitants of the upper province consist principally of the descendants of U. S. loyalists, previously to 1787, and of subsequent settlers, or their descendants, from the United Kingdom and the States: an extensive emigration from the former, subsequent to 1828, nearly doubled the previous population of the province. Of the immigrants from the U. Kingdom, many were half-pay army or navy officers, and of the working classes a considerable proportion were Irish. The Catholic population of the upper province is estimated at one fifth part of the whole: in the back part of the Niagara district some Dutch settlers are established; and a few French families along the Detroit. The population at present is estimated at 400,000, scattered for the most part along an extensive frontier, with very imperfect means of inter-communication; the more thickly-settled districts being, of course, in the occupation of the older section of residents, who are for the most part owners also of the wild lands in those districts. The number of immigrants from the U. Kingdom, which landed at the port of Quebec in the nine years ending 1838, amounted to 263,239: of these, 165,000 proceeded to the upper province; but of the whole number, from 50 to 60 per cent., *re-emigrated*, after a short residence, to the U. States. The greatest

number which emigrated in any one year was in 1832, when 51,746 arrived at Quebec; the smallest number was in 1838, when 4992 only reached that port. Within the period spoken of there were also 50,000 estimated to have reached the provinces by way of New York and the Erie canal; a like proportion of whom also re-emigrated. (*Lord Durham's Report*, p. 76, 77, *Append. C.*) The arrangements made for conveying and locating these immigrants (mostly of the poor labouring classes, and two thirds of the number Irish) were most imperfect and unsatisfactory; causing an enormous amount of suffering to them, and a very great inconvenience and alarm to the residents of Quebec. The crowded state of the vessels, and deficiency of food, induced disorders of an infectious nature, so that a quarantine station had to be established at Grosse Isle (a desert spot about 10 m. below Quebec, and a fever hospital on point Levi), to obviate the spread of infection through the city; and funds had to be raised and distributed, by a voluntary society, to relieve the wants of such as were unable to obtain or unfit for employment.

The disturbances of which Canada has been recently the theatre, and which, it is not very likely, will soon subside, will most probably prevent, for a lengthened period, any considerable influx of immigrants. And, certainly, if we look to the well-being of the immigrants, which is the principal consideration, this is not much to be regretted. There can be no doubt that the valley of the Mississippi offers incomparably greater advantages to industrious immigrants, whether with or without capital, than can be enjoyed in any part of Canada. It has a better climate, a better and a cheaper soil, and is free from the greater number of those social grievances that disturb and imbitter society in Canada. The wonder, in fact, is, not that so many of the immigrants to Canada have left it for the U. States, but that any considerable portion of them should have remained behind.

The native Indian tribes still occupy portions of this colony on lakes Superior and Huron, and along the whole extent towards the N. boundaries; but their numbers are rapidly diminishing, and they are fast degenerating from their original spirit and character, so that the utter extinction of the race seems inevitable, as civilization advances on the wilderness, to which, only, they appear to be adapted. Various attempts have been made, from 1776 downward, to settle and instruct them in agriculture and the arts, but with little success. There are five of these settlements in the lower province; the number of Indians at which is estimated at 3437, the most numerous being the Iroquois and Algonquins. (*Parl. Report*, 1837; *Report of Gen. Darling*, 1828.) It is stated in these reports that some years back the Indians were able to supply our settlements (then suffering from famine) with some corn; but they have been driven back by subsequent settlers; and the introduction of the fur trade has also tended to indispose them from settling: those located on the reserves of the colony are a degenerate race, and live much like the gypsies among us. Those of the Six Nations (who were the firm allies of the British in the first American war) are estimated at 2149; the Mohawks of the bay of Quinté 337; the other tribes at 6428: they occupy tracts along the rivers St. Clair, Aux Sables, Detroit, Thames, Ouse, and Credit; lakes Simcoe, Rice, Mud, and Balsam, and Point Peter: the great Manitouwanning (containing about 1,000,000 acres) is also appropriated to Indians, who choose to settle. The lands are held under the crown in joint tenancy to them and their posterity, and are not allowed to be leased or sold without its consent. Besides the above, there are other tribes round the shores of lake Michigan and the S. side of lake Superior (about 2000 in all), who consider themselves as owing allegiance to the British crown, and attend to receive presents annually: there are also many tribes on the N. sides of lakes Huron and Superior, who consider that vast tract their own, and occupy it as hunting-grounds. Large sums have been expended by religious societies in futile efforts to improve them; and the Indian department of government has occasionally cost £150,000 in a single year: the object of the last, however, has rather been to make the services of the Indians available in war, than with a view to their permanent improvement;* the Hudson's Bay and Canada companies have, also, not scrupled to employ them in the same way; and the report above referred to states, that without a change of system in both respects "the fate of the Indians is sealed." But the truth is, that, however it may be changed, their fate is "sealed." Experience has sufficiently proved that the red men are incapable of any real civilization; and nothing can prevent their extermination other than the abiding by a determination not to enter their territories, or to interfere in any degree with their grounds, habits, or pursuits. But would such a determination be either politic or proper? We answer, certainly it would not. America has been settled, civilized, and improved only through perpetual encroachments on the natives; and to say that these should cease, would be to say that vast tracts of fine country should be doomed to continued barbarism.

Distribution and Tenure of Lands in the Lower Province, Government, &c.—About 1-38th part of the area of the prov. is estimated to be under some sort of cultivation. The extent of land surveyed in each district, down to 10th July, 1838, was—in the Montreal district, 2,286,750 acres; Three Rivers, 2,098,908 do.; Quebec, 1,383,666 do.; Gaspé, 400,639 do.; making a total of 6,169,963 statute acres. (*Lord Durham's Rep., Append. B.*, p. 176.) This is divided into townships averaging about 70,000 sq. acres, and is exclusive of an allowance of 5 per cent. for highways and of a block of land set off for the British American Land Company, in the co. Sherbrook, distr. of Three Rivers, containing 585,089 acres. The land comprised in the seignorial districts amounts to about 8,300,000 acres; of this last, the whole has been granted by the crown, subject to an obligation to concede to actual settlers, and 4,300,000 acres have been thus conceded. Of the township land 3,500,000 acres have been disposed of "for other than public purposes." The grants made by the French government previously to the conquest were on one uniform system. *Seigniories* (or manors containing from 9 to 36 sq. leagues) were created in favour of certain leading individuals, who were bound to grant or "*concede*" a specified portion to any applicant; the profit to the seignior being derived from payment of a small rent, from services which the *censitaire* (or tenant) was bound to perform; from 1-12th of the corn ground (by compulsion) at the seignorial mill; and from a fine on the transference of the property (other than by inheritance).

This wretched sort of tenure, copied in great part from the feudal system existing in France previously to the Revolution, was unfortunately maintained after the British acquired possession of the country. The consequence has been that the French pop. has been confined to a comparatively limited extent of territory, and has never amalgamated with the British; for, by enabling every individual to obtain a portion of land, which, as the pop. increased, became gradually less, without any immediate outlay, young men were tempted to remain at home; and being subject to feudal regulations and services, the occupiers were bound, as it were, to a routine system. Hence the French Canadians exhibit a singular want of activity and enterprise; and the portion of the prov. which they occupy has a dense and a poor pop., strongly attached, as already seen, to ancient habits and modes of existence.

Since the prov. came under the British government, the plans under which land has been granted and sold have differed very widely at different periods; but have very rarely, indeed, been established on sound principles. The township lands have been granted in many modes, differing both in their character and object; at first, they were granted to settlers in free and common soccage, with a reservation to resume all, or any part, if required for military purposes, but subject to no other conditions; the quantity so granted to each individual being limited to 100 acres for himself, and 50 acres additional for each member of his family; the governor having authority to increase this amount by 1000 acres. These favourable terms were meant to attract settlers from the colonies which now form the U. States. In 1775 this arrangement was superseded, and the *Quebec Act* of the preceding year having restored the French code and language, corresponding instructions were given, that future grants should again be made in fief and seigniory, and three seigniories were thus created. In 1791 the regulations of 1763 were revived, though with certain conditions annexed to them, which in practice were avoided; and this mode continued till 1826: but the constitutional act of 1791 also enacted that a reserve for the support of a Protestant clergy should be made, in respect of every grant, equal in value, as near as could be estimated, to 1-7th part of the land granted. The crown reserves, to a like extent, originated in the view of supplying, first by sales and ultimately by rents, an independent source of revenue, and obviating the necessity of taxes, and consequently of such disputes as had led to the independence of the U. States. These reserves, however, have proved most serious obstacles to the welfare of the colony, which the mis-construction or violation of the act, has aggravated, by increasing their extent beyond what appears to have been contemplated. (*Lord Durham's Report, Append. B.*, p. 6, 7.) From 1806 downward no new townships were granted; and the grants, on to 1814, were in lots of 200 acres, to actual settlers, and few in number. From the last date, grants were made on "location tickets," requiring the erection of a house, and the clearing and cultivating four acres before

* It is not a wonder that this has not tended to civilize and christianize them. The efforts of the U. States among the Indians have a different object, and have been attended with happier results.—*Amer. Ed.*

the title was perfected. In 1826 the new mode of selling land by auction, at a *minimum* upset price was adopted, the purchase-money being payable by four annual instalments, without interest. In 1831, the purchase-money was to be repaid by half-yearly instalments; and in 1837, to obviate the bad effects of giving credit on such sales, the purchase-money was made payable at the time of sale: but in practice this has not been effected. Besides the grants made under these different regulations, other exceptional ones have been made—mostly in reward of public services; such as those to the militia of the revolutionary war, and of that of 1812—many valid claims in these respects still remaining to be settled: there has also been an exceptional sale of nearly 800,000 acres to the British N. American Land Company. The crown reserves must be considered as virtually abandoned when the auction sales were introduced; and an act of the imperial legislature has authorized the sale of 1-4th part of the clergy reserves, at a rate not exceeding 100,000 acres annually. In these various ways, about 3,500,000 acres have been disposed of. (For some remarks on the policy of these grants, see *post*.) Of late years a revenue has been derived from timber property in both provinces: originally the right of cutting timber was a monopoly in the hands of contractors, for supplying that article for the navy, who usually sold licenses to merchants and lumber-men, by whom all the legal trade was in consequence engrossed. In 1824 licenses to cut were first offered by government by auction: the value of an acre of timber, at the price charged for these, is often very much greater than that required for land, and the first instalment has been paid frequently for land solely in the view of cutting down the timber. The Ottawa is the chief seat of the trade, which is, in a great measure, forced and factitious; and which, while it is of no real advantage to Canada, entails a heavy burden on Great Britain. In fact, but for the unjust and oppressive regulation by which a duty of 55*s*. a load is laid on Baltic timber, while timber from British America is only charged with a duty of 10*s*., very little, indeed, of the latter would be imported. The amount received on the sales of crown land in the lower province, from 1828 to 1837 inclusive, was £33,853; on clergy reserves, £50,425; timber duties, £58,085. In the upper province, for the same period, crown lands £33,853; clergy reserves, £114,618; timber duties, £58,085. The timber is chiefly red and white pine and oak.

Each district has its own judges, whose jurisdiction (except Gaspé) is independent of the others, and only subject to the court of appeal. A sheriff is also appointed for each district, and grand voyer, or general inspector of the roads. These appear to be the only characteristics; but as respects judicial affairs Gaspé is dependent on Quebec; and the roads of St. Francis are surveyed by the grand voyers of Montreal and Three Rivers. The subdivisions of these districts are counties, townships, parishes, and extra-parochial places: that of Montreal has 19, Quebec 13, Three Rivers 5, St. Francis 3, and Gaspé 2 counties, respectively; they are chiefly political subdivisions, marked out for the purpose of returning members to the provincial parliament. The parishes and townships are merely divisions for such local purposes as the repairs of roads, inspection of fences, water-courses, &c.: each is subdivided into sections (not exceeding 10) the parishes vary much in extent, and those which are Catholic also serve for limits, in the ecclesiastical jurisdiction of that church: the townships usually enclose a square of ten miles. There are in all 175 seigniories, 33 fiefs, and 160 townships. The cities of Quebec and Montreal were incorporated under temporary acts, which have been allowed to expire without renewal; these were the only municipal corporations in the province. In the Catholic parishes, churchwardens are appointed, and in some localities, "a council of notables," to manage the secular affairs of the church, and what are called the funds of "the *fabrique*," under old French ordinances, so doubtful and contradictory, as to cause frequent litigation. The income of their clergy is derived from the 26th bushel of all grain grown by the parishioners; this, however, is contingent on the proprietor being a Catholic. When an estate passes into Protestant hands, this right is lost: and hence the natural aversion of the priests to any Protestant settlements being made within the seigniories; nor is there any provision for the Catholic clergy in the event of any part of the French population settling beyond the seigniories, which, no doubt, has had some effect in confining it within their limits. There are no provisions or regulations for the poor; and this, as well as all other local matters, were under the immediate direction and control of the colonial legislature, whose time appears to have been chiefly occupied by affairs, such as usually come under the cognizance of parish vestries and corporations in England. The ecclesiastical government of the Church of England vests in the bishop of Quebec (whose jurisdiction extends over both provinces), an archdeacon of Quebec, and under them rectors for each parish, and ministers for each mission when formed: there are forty-four clergymen, and fifty-three churches and chapels, finished and in progress. The bishop states that from fifteen to twenty additional clergymen are required for the present wants of the colony. (*Lord Durham's Report, Append. C.*, p. 58.) There is also a Catholic bishop of Quebec, paid by the government out of certain public revenues, and under him a body of secular clergy, for the seignories, and some female monastic establishments. The Protestant dissenters have places of worship, and ministers in various parts of the province. The ministers of what are called "missions," are paid through the medium of the Society for Propagating the Gospel, to whom an annual parliamentary grant is made for the purpose. The ministers of the Church of Scotland are in part paid by the general government, and in part by their congregations; the other sects support their own clergymen. As respects charitable institutions, and the relief of the poor, certain sums are granted annually by the legislative assembly, under certain acts "for securing and supporting the indigent, the insane, and foundlings;" and for "the aid of such religious communities as receive and administer relief to sick and infirm persons, and foundlings;" other benevolent societies, unconnected with religion, are occasionally assisted in the same way; these are mostly managed by nuns, or by benevolent Protestant ladies. The general hospital of the Gray nuns, the Ladies' Benevolent Society, the orphan asylum, and the house of industry, at Montreal; the convent of Ursuline nuns at Three Rivers; the Hôtel Dieu, and two other asylums, at Quebec; are the chief of these: £4699 6*s*. 8*d*., currency, were granted for this purpose in 1828: this has exclusive reference to the *resident* poor. For emigrants, an hospital was established by a provincial act of 1823; a fever hospital was also subsequently erected at Point Levi, and a fund created to give medical assistance to sick emigrants, and assist indigent ones to reach their destination; a poll-tax of 5*s*. currency on those coming out under government sanction; and 10*s*. on all others was also levied on ship-masters, and the amount divided equally between the Quebec Emigrant Hospital and Society, and the Montreal General Hospital and Emigrant Society; besides which, occasional grants have continued to be made for these purposes, by the legislature, from time to time. For the relief of mariners, a duty of a penny a ton is levied on every vessel arriving from any port out of the limits of the province: the portion received at Quebec goes to support the marine hospital there, which was built by a public grant; that received at Montreal goes to the general hospital of that city: various acts have also passed to establish depôts for the relief of ship-wrecked mariners. There are four such at Anticosti, one near cape Chat, and another at Magdalene river. Another class of persons have become regular objects of legislative relief; viz., the small farmers of particular localities, in consequence of the failure of their crops; in some cases, to supply immediate want; in others, to enable them to procure seed corn and seed potatoes; this is usually done by way of loan—the repayment being quite hopeless: the pernicious tendency of this, and the gross partiality and abuses it has occasioned, are stated, in a very forcible way, in Lord Durham's Report (p. 35, and Appendix B., p. 22, 23). As respects the vagrant poor, much complaint is made by townships bordering on the seignories, of the burden caused by an influx from these; while no township poor are found levying contributions in the seignories. In the Quebec district a like complaint is made, by parishes on the south bank, of similar visitations from those on the north side; but they do not appear to have hitherto produced any remedial measures.

According to the system of elementary schools established by the provincial legislature, each county was divided into districts (usually smaller than the parishes or townships): the number has varied under different acts, but latterly there were said to be about 1000 schools, with 40,000 scholars; and the funds granted for their support amounted to £25,000 annually; the patronage and irresponsible management of this grant (amounting to half the whole ordinary civil expenditure of the province) were vested in the county members. The teachers appointed were for the most part so utterly ignorant as to be unable to write, and the extent of their exertions amounted to teaching the children the catechism by rote. When the act sanctioning this gross political job came to be renewed, the legislative council properly refused their sanction. (*Lord Durham's Report*, p. 35.) There is an act still in force (41 Geo. 3, c. 17), "by which a majority of the inhabitants" of any parish or township, by petition to the government, may subject the whole of it to the expense of erecting schoolhouses, and accommodation for teachers, but none have availed themselves of it.

The superior colleges and schools, that exist under the management of the Catholic clergy, have been previously

noticed: at present there exists no means of college education for Protestants within the province, and consequently the desire of obtaining general and professional instruction annually draws a great many young men to the U. States: in respect to the commoner kinds of education, the British pop. are scarcely better off than the French.

The *roads and bridges* of the province are under the control of a "grand voyer" and deputy for each district, a surveyor of roads for each parish or township, and an overseer of highways for each section of either of the latter. The grand voyer opens new roads, and sees established ones kept in repair throughout the district; and decides, by a *procès verbal*, the share each farm ought to contribute of whatever work is done by "*joint labour*." There appears to be no appeal from his authority: the other officers are his representatives, each within his respective bounds. Two kinds of public highways are recognised—FRONT and BYE roads: the former are those which run between two ranges of "concessions," or through the front range of the river; the different portions of these are maintained by the farms which they limit: those of the townships are usually of a square form, while the seigniorial farms have ten breadths to one length; and hence the latter have the smallest extent of road to maintain. The bye-roads are repaired by "joint labour," and so, in fact, is a considerable portion of the other, such as hills, marshes, bridges, or any parts of more than average difficulty, as well as through all unconceded and all uncultivated lands, the contributors being "all those to whom the road is useful," that is, those who must pass over it to get to church or market. No local rates are levied for these purposes, but charges, usually defrayed in England by parish or county rates, frequently come out of the provincial treasury for such purposes, and large sums have from time to time been granted by the legislature, and disbursed by commissioners appointed by the governor. Mr. Bouchette, the surveyor-general (*Top. Dict.*), states the sums voted for repair of roads and canals, from 1814 to 1830, to be £384,172, of which, however, £25,000 was granted for the Welland canal in the upper prov. This heavy expenditure does not appear to have produced corresponding results; for the roads in general are very bad, and the lines of communication very incomplete: in this respect, the blocks of land called "crown," and "clergy reserves," have proved the greatest nuisances, for they are dispersed over every part of a township, one between every two settlements. The present law, whereby the roads are regulated, was passed in 1796, and the system sanctioned by it appears to be generally reprobated by the settlers; and turnpikes have been suggested as very desirable for the colony, and also the establishment of a highway rate.

Government of the Lower Province.—Previously to its suspension, the constitution of this prov. rested on the authority of an act of the imperial parliament, passed in 1791 (31 Geo. 3, c. 31). By this act (which proposed to extend the forms and advantages of the British constitution to the colony) a legislative council and a house of assembly were created; each of these had the power of framing laws, which, to be valid, required the assent of both houses, and of the provincial government, by which they were transmitted to England, for the sanction of the crown: the council was to consist of not less than 15, nor more than 23 members, to be nominated by the crown during life. The House of Assembly was composed of 52 members, and now of 83 members; those of the counties elected by proprietors of land of the ann. val. of 40*s*., those of the towns by the owners of tenements of the ann. val. of £5, or by renters of tenements of £10 a year, having been residents in the colony, and paid not less than one year's rent: the members were elected for four years, but the governor had the power of dissolving the house within that period. It was ordained that they should meet annually at least: their functions and powers resembled and were nearly as extensive as those of the British Commons. The executive government remained, as before, in a governor appointed by the crown, who is assisted by an executive council of 15 members; and for carrying on the provincial government, the crown appears to have at first almost wholly relied on its territorial resources, and on duties imposed by imperial acts that had been passed prior to the introduction of this representative system into the colony. At length the government was obliged to accept the assembly's offer of raising an additional revenue by fresh taxes; this gave the latter some control in the levying and appropriation of part of the public income, and step by step they obtained the entire control, every portion of the reserved revenue being given up to them in 1832 (with the exception of the casual and territorial funds), by the 1st and 2d Wm. 4, c. 23. But it still remained without the least control or influence over the conduct or appointment of the public functionaries, by which the affairs of the province were administered; hence, the contest was continued after its financial demands had been conceded; and the civil list appears to have been refused, in consequence of the determination of the assembly not to give up its only means of subjecting the executive council to any sort of responsibility; for the legislative council was confessedly, in practice, merely an instrument in the hands of the executive council to restrain the popular branch of the legislature, to which it was generally opposed; hence, from first to last, "the assembly were in a state of continuous warfare with the executive, for the purpose of obtaining the powers inherent to a representative body, by the very nature of a representative government." (*Lord Durham's Report*, p. 28–31.) The great business of the colonial legislature appears to have consisted in what is usually called parish business in England; this was the necessary consequence of there being no local bodies, with authority to manage local affairs, or levy local rates; hence the general practice of making parliamentary grants for local works; and the situation of such a colony makes these of such primary importance, that the number of roads and bridges constructed is the test by which the merits of a colonial legislature are usually estimated. In this respect, however, the views of the assembly of Lower Canada appear to have been very narrow and exclusive, and to have afforded just cause of complaint to the upper province, by causing the suspension of their vigorous efforts to connect their territories with the great highway of the St. Lawrence. Nor is the character of their other legislative measures such as to entitle the assembly to any great share of admiration or respect. During the 45 years of its existence, it effected little or no reform in the acknowledged evils of the civil code; and its attempts in this respect had exclusive reference, not to the law itself, but merely to its administration; and resulting, as they did, in statutes passed only for limited periods (which were sometimes renewed and sometimes allowed to expire), they for the most part caused additional uncertainty and confusion. (*Lord Durham's Report, Append. B.*, p. 9–12.)

The principal officers of the government are appointed by the crown, and hold their appointments during pleasure. The chief of these are—the assistant civil secretary, provincial secretary and registrar, receiver-general, inspector-general of accounts, &c.; there are also 6 collectors of customs; 3 judges at Quebec, and 3 at Montreal; with numerous other functionaries. There is also an unpaid magistracy, appointed by the crown, who are required to possess immovable property, beyond all liabilities, of at least £300 currency; and commissioners who sit in the small cause courts, which are held weekly in the cities, and on the first and third Saturday of each month in the rural districts, with power of adjournment. As regards the superior courts of justice, the judges presiding in each district have supreme jurisdiction. The delay, expense, and uncertainty in the administration of the law in civil suits, is much and justly complained of. Trial by jury was introduced, with the rest of the criminal and civil law of England, in 1763; the juries were, at first, exclusively taken from the cities, and subsequently (by a government order) were selected by the sheriffs, from these, and from the adjacent country, for 15 leagues around. An act was subsequently passed, extending these limits to the whole district; this gave the French an entire preponderance, and as it was a temporary act, the legislative council refused to renew it, and consequently it expired in 1836; since which, there has been in reality no jury law whatever, and the composition of juries has been wholly in the hands of government, who have directed the sheriffs to act in conformity to the previous order. All this, in the excited state of the public mind, prevents any chance of impartial verdicts where *race* interferes, and destroys all confidence in the administration of criminal justice. The French code of civil law was re-established in the province in 1774, by an imperial act, usually called the *Quebec Act;* from this, commercial cases have been subsequently excepted, but there is great difference of opinion as to what constitutes a commercial case.

The external trade of Lower Canada (as well as a considerable portion of that of the upper province) is carried on through the medium of the ports of Quebec, Montreal, St. John's, Coteau du Lac, and Stanfield. From the United Kingdom, Canada imports coals, metals, cordage, E. India produce, and various kinds of British manufactures; from the British W. India colonies, sugar, molasses, rum, coffee, and hard woods; from the U. States, beef, pork, biscuit, rice, and tobacco. Owing to the unjust and oppressive preference given to Canadian timber in the markets of Great Britain, it forms by far the principal article of export from the colony. The next article is corn, especially wheat, which, however, is supposed to be mainly derived from the U. States; and then follow ashes, furs, fish, &c. In 1834, the total value of the exports from Canada amounted to £1,018,922. The imports chiefly consist of cottons, woollens, silks, linens, glass, hardware, coal, &c. Their total value in 1834 was £1,063,645. The

total revenue derived from taxes in 1836 amounted to £102,627.

Canada was ceded by France to England in 1763: it had previously been governed by French military authority; from thence, to 1774, it was under the rule of an English governor and council, with *English law*, administered in the English language only. From 1774 to 1791 it was governed by an English governor and a legislative council, appointed by the crown, with *English* criminal, and *French* civil law; and from 1791 downward, by the constitution, previously explained; the colony being then divided into two provinces, each with an independent legislature. Down to 1774, the line of policy pursued was that which, had it been vigorously and systematically followed up, would certainly have redounded most, in the end, to the advantage of the colony; inasmuch as it would have gradually subverted the institutions and language of France, and established in their stead the institutions and language of England. But the Quebec Act of 1774 introduced a new and more liberal, but at the same time a short-sighted and most mistaken, policy. If Canada was to be preserved as an English colony, it is clear it should, in as far as possible, have been made English in its laws, its language, and in the feelings and prejudices of the people; and no institution should have been tolerated that might have prevented the gradual and complete amalgamation of the French with the English settlers. The Quebec Act unfortunately proceeded on totally different principles. In order to conciliate the colonists, it substituted the old system of civil law, or that called the *Coutume de Paris*, for the civil law of England, and it directed the use of the French language to be resumed in the law courts. It is probably true that these concessions, by gratifying the Canadians, had some effect in hindering them from joining the American colonists of English origin in their great and successful revolt; and consequently contributed to preserve the prov. for the British crown. Without stopping to inquire whether this has been of any advantage to Great Britain, we incline to think that the difference of language, and the peculiar circumstances under which the French Canadians were placed, would have effectually prevented them, though the Quebec Act had never been heard of, from making common cause with the colonists of New England and the other American colonies. But, whatever opinion may be come to as to this, there can be no doubt that the establishment of French laws and language in the prov. has tended to insulate the French pop., to maintain them as a distinct race, and to restrain, and in a great degree prevent, all intercourse between them and the colonists from England: in point of fact, the French in Canada are now almost as much a distinct people as in 1760. The *Nation Canadienne* has no sympathy, and but little communication, with Englishmen: on the contrary, a broad line of demarcation and a deep-rooted antipathy subsists between them; and we are afraid that there is but little hope of tranquillity being restored in the prov. otherwise than by the complete triumph and ascendancy of one or other of the races.

The institution of a representative assembly, in 1791, was intended by Mr. Pitt as a boon to the Canadians, and it was supposed would attach them still more strongly to British interests. Most probably it could not have been much longer refused; but it might have been foreseen from the outset, that a representative assembly, fairly chosen by the colonists, could not long act in harmony with a legislative council nominated by the crown, and having a veto on its measures. The two bodies were in complete contradiction to each other; and yet it is plain that unless a veto on the proceedings of the assembly were placed in the hands of the legislative council, or directly in those of the executive government, the colony would have been independent in fact. The truth is, that it is not possible to establish a really responsible representative government in a colony; such government can exist only in an independent state. It is also obvious that while the proceedings of a representative assembly possessing the confidence of the inhabitants of a colony, may be controlled and thwarted by the agents of the mother country, there must be endless dissensions and disputes, unless, indeed, the latter concede all that is demanded, and content themselves with the name of rulers, while all real authority is engrossed by others.

It would be to no purpose, even if our space permitted, to attempt to trace the history of the disputes that have prevailed in the colony during the last twenty years. They had all, or mostly all, their origin in the same cause—the desire of the assembly to acquire additional powers, and of the executive to withhold them, or to concede such only as it would have been unsafe to deny. In the course of this struggle the assembly succeeded in redressing some abuses, and in acquiring some valuable privileges. But in such cases the conceding of any privilege, how important soever, is productive only of a temporary respite from fresh demands. The pretensions of the leaders of the assembly rose at length to such a height, that to concede them would virtually have been to concede the independence of the colony; and as neither the government nor people of Britain were prepared for such a step, the outbreak that took place on the part of the Canadians, and the subsequent suppression of the constitution, and the occupation of the country by British troops, seems to be only the necessary results of the peculiar circumstances under which the colony has been placed.

Distribution of Ground in Upper Canada, Government, &c.—The surveyed portion of Upper Canada comprises 17,653,544 acres, in 11 districts, and between 300 and 400 townships. The pop. in 1835 was 336,500; the number of men embodied in the militia 39,499, forming 63 regiments. Wheat and tobacco are the chief exports. Of the surveyed lands, 450,000 acres are reserved for roads; 2,395,687 acres are clergy reserves; 13,660,838 have been granted and appropriated, and there remain for future grants 1,147,019 acres. About 1-48th part of the area is considered to be under cultivation. The modes of granting have been the same as those described in the lower province. The crown and clergy reserves have also been made on the same principle as those of Lower Canada; in two cases the government has delegated the disposal of its waste lands to others; the district of Talbot (48,500 acres) to Col. Talbot; and the crown reserves (1,384,413 acres) and a block of land in the Huron district (of 1,100,000 acres) to the "Canada Company;" about 1-30th part of the granted land is under cultivation.

The profuse manner in which these grants have been made, many very extensive tracts having been given to parties who had no intention of settling upon them, coupled with the great extent of the clergy and state reserves, has had a most injurious influence over the colony, and has materially retarded its progress. The lands thus given away to individuals not settling upon them, and reserved, by interposing uncultivated desert tracts between the actual settlers, render it, in all cases, much more difficult and expensive, and sometimes all but impossible, to form roads, and other means of communication; so that the cultivators are frequently cut off from a market for their produce; and being settled only in particular districts, they are less able to combine for municipal and such like purposes, and for the establishment of schools and churches, and the undertaking of public works that require co-operation.

Lord Durham ascribes the backward state of Canada, as compared with the adjoining districts of the United States, mainly to the influence of the circumstances now glanced at. But though their disastrous operation be established beyond all doubt, they are by no means the only, nor even the principal, cause of the backward state of the colony. Quite as little providence was manifested in the granting of lands in the greater number of the American states when they were colonies of England, and yet their progress was one of unexampled prosperity.

Were this the proper place for such investigations, it might be very easily shown that that plan for the disposal of public lands by auction at a fixed upset price, which Lord Durham is so anxious to recommend, would be very little better than the system he has so justly censured. "When," says Mr. Shireff, "the extent of unoccupied surface, the extent of soil which is occupied and remaining uncleared, and the tens of millions of acres which have never been surveyed, are considered, the price of Canadian land is extravagantly high, and far above its intrinsic value to actual settlers. Land, like other things, is cheap or dear by comparison; government land in the U. States being sold at 6*s.* 3*d.* an acre. Halifax currency, ought to make the British government blush for its policy in Canada. The price of land surrendered by the six nations, and covered with forest, is fixed at 15*s.* an acre, which is more than double the price of government land in the western United States, superior in quality, situated in a finer climate, clothed with luxuriant grass, and without an obstacle to immediate cultivation. It is population alone which imparts value to land, and a more effectual method could not be devised for preventing a farther influx of inhabitants to Upper Canada, and drawing away many of those already settled, than government adhering to the present prices of land." (*Tour through N. America*, p. 365.)

This is the statement of an excellent judge of agricultural matters, and is obviously quite conclusive. But whatever the upset price may be, the plan of selling land in any colony, and especially in one in the situation of Canada, seems highly objectionable. The preferable plan would be to make grants of lands to all settlers on a uniform system, in some proportion to their available capital, with a limitation of the maximum quantity to be assigned to any individual; and making it a condition of all grants, that they should be forfeited in a given time, unless certain spe-

cified improvements were effected upon them within that time.

A small tax, not exceeding 1*d.* in the pound, is levied both on cultivated and waste lands; the former being valued at 20*s.* the acre, the latter at 4*s.* The whole amount of taxation of a farm of 100 acres, in the upper province, is about 18*s.* This tax began to be levied by the provincial government in 1820. If eight years are in arrear, the sheriff is authorized to sell; but this has been done only in a few instances, when the owners allowed it as the cheapest and easiest way of making a title to the rest of their land. The number of churches built, or in progress, connected with the Church of England is about 90; the number of clergymen 73; the number of followers are estimated at 150,000, by the Bishop of Montreal, within whose diocess the province is included, and under him are the archdeacons of York and of Kingston. (*Lord Durham's Report*, Appen. C., p. 57.) The Presbyterians of the Scotch Church, the Catholics, and the Wesleyans, are the other chief sects: the latter are said to outnumber any of the rest. The ministers of the Church of Scotland are supported partly by stipends from the government, partly by their respective congregations; the Catholics have a bishop, who resides at Toronto, and who also receives an annual grant from the government to aid in the maintenance of himself and priesthood; the ministers of the other sects are wholly supported by their congregations. By the Constitutional Act of 1791, reserves of land were set apart in this, as in the lower province, for the maintenance of "the Protestant clergy;" the economical evils resulting from this mode of raising religious funds have been previously noticed, but another important question has arisen, which has reference solely to their application: the chief point at issue being, whether the words "*Protestant clergy*" are to be understood in an exclusive or general sense. The adherents of the Church of England have claimed, from the first, the sole enjoyment of the funds, though (even if all who belong to no other sect be supposed to be within their pale) they are in a considerable minority, and likely so to continue; the adherents of the Church of Scotland claim to be put entirely on a level with the Church of England, and have demanded an equal division of the funds between the two; the other Protestant sects affirm that the term includes them also, and have formally claimed that an equal provision shall be made for them. But besides these sectarian claimants, there is another party, comprising the Catholics, and no inconsiderable portion of the members of the other sects, who affirm the justice of a broader principle, and contend that the funds shall either be applied to the purposes of all religious creeds whatever, or that, leaving each sect to provide for its own establishment, the law shall be set aside, as inexpedient, and the funds appropriated to the general purposes of government, or to the support of some general system of education. In 1835, the governor (Sir J. Colborne) established 57 rectories, which are supposed to convey the same privileges and authority as English ones, even to the right of levying tithes. Previously to this, though the clergy of the Church of England were an endowed body, and in the receipt of a much larger share of public money than the other sects, they possessed no exclusive privileges or authority. Hence the measure was regarded by the other sects as placing them in a position of legal inferiority, and caused so much indignation, that some are disposed to rank this as the chief predisposing cause of the recent insurrection; nor has a subsequent opinion in favour of the legality of the measure given by the English law officers of the crown, in 1837, tended to recommend it. (*Lord Durham's Report*, p. 69–65.)

The educational establishments of the colony are very insufficient and defective: a college has been established at Toronto; but the mode in which it has been established, and the regulations adopted in it, are among the grievances publicly set forth by the colony; the most valuable portion of the lands originally set apart for the support of schools throughout the country having been diverted to its endowment. There have been, occasionally, grants by the legislature for the purposes of education; but the schools are few, and of an inferior kind, even in the best-settled districts, and in the remoter ones there are none. It must also be understood that a very considerable portion of this province is, as yet, without roads, mills, post-offices, or churches; hence the intercommunication of the different settlers is of a very limited and uncertain description; nor has any adequate system of local assessment been established to improve or create internal means of communication. Funds have been occasionally voted, as in the lower province, by the provincial legislature, for the purpose; but, as they were at the disposal of the house of assembly, which chiefly represents the interests of the older and more settled districts, they were not usually applied where they were most needed. At present the state of the provincial finances precludes any such aid being granted, in consequence of the debt incurred by attempting to carry into effect a resolution, many years since adopted, of removing or obviating all the natural impediments in the course of the St. Laurence, and effecting a continuous ship navigation from its mouth to the head of Lake Huron. With this object in view, the house of assembly took a large portion of the shares of the Welland canal (which had been commenced by a few spirited individuals), and it subsequently undertook the Cornwall canal, to avoid Long Sault Rapids; but the house neglected to ensure the continuation of their plan in the lower province, which was indispensable to its completion; and as the legislature of the lower province declined to cooperate with them, the works have been suspended, after encumbering the province with a public debt of £1,000,000 sterling. As the external trade of the province is conducted through the medium of Lower Canada (not so much because it is a matter of necessity as in consequence of revenue laws), this, also, has a prominent place in the list of grievances. In the mean time, the United States, having created a St. Laurence of their own, from the shore of Lake Erie, through the state of New York, by the Erie Canal, the colony has become anxious to participate in the benefit derivable from it, by making New York a port of entry, and being allowed to land goods there, under as low a bounty as if they were imported by the St. Laurence. New York is, in fact, the natural and proper channel of communication with Upper Canada, the voyage by the St. Laurence being incomparably more tedious and dangerous than that by New York, while, owing to the accumulation of ice, it is impracticable long after the Erie Canal is open.

The Constitutional Act of 1791 (which separated the provinces) gave a similar form of government to both, so that it is unnecessary to repeat here what has been previously stated in respect to its working in Lower Canada. A lieutenant-governor, appointed by the crown, is at the head of the executive, and is also usually the commander of the forces. The civil and criminal code of England, and the forms of procedure in her courts, are adopted in those of the colony; which has, also, an unpaid magistracy, and sheriffs for each district, as in the lower province. The expenses of the civil administration are defrayed by duties on articles imported from the United States, by a portion of the customs' duties collected in Lower Canada, and by a small land tax; the military expenditure, the funds for the partial support of ministers of the churches of England, Scotland, and Rome, and for presents to the Indian tribes, being defrayed by the general government, or, in other words by the people of Britain. The colonial revenue which is about £60,000, hardly suffices to pay the interest of the debt incurred in the formation of the canals, in consequence of which, the few and imperfect local works in different parts of the province have been left to be provided for by local assessments.

The recent political disorders that have occurred in this province may be dismissed very briefly. There is here no war of *races*, as in Lower Canada; and financial disputes, so long the subject of contention there, have been more smoothly arranged in the upper province, though it has a deficient, and the other a surplus, revenue; there is however great disorganization, much bitterness of party feeling, and many real grievances requiring redress. There exists no chief centre in the province, where the general sentiments of the different parties may be gathered, and a prevailing tone given to their purposes and actions: but, on the contrary, many local centres, differing in opinion and in supposed interests from each other, and having little intercommunication. The removal of those restrictions which make the subjects of the United Kingdom, who emigrate thither, be considered aliens, as much as if they had chosen to settle in the United States, and for a more prolonged period, is loudly and justly complained of. But these, after all, are subordinate matters, and here, as in the lower province, the real struggle is, whether the colony shall be self-governed, or really independent. Other grievances may be redressed, and the connexion of the colony with the mother-country preserved: but the demand for a really responsible executive is, as already seen, substantially equivalent to a demand for separation.

The government has been, for a considerable period, in the hands of a party known throughout the province by the designation of "The Family Compact," who are in possession of the higher public offices, and distribute the minor patronage, and whose interest is still paramount in the executive and legislative councils. By grant or purchase, this party is also in possession of the greater portion of the waste lands of the province, and their influence predominates in the chartered banks. To the monopoly of political power possessed by this party an opposition gradually arose, and gathered more and more strength, till it obtained a majority in the House of Assembly, which, on a dissolution, was lost again, and on a subsequent one recovered. This alternating state of things continued through four or five

general elections, neither party preserving the mastery for two successive ones. The mode in which the clergy reserves should be disposed of was the most important question raised by the reformers in this struggle; and, though various methods of appropriating these were advocated by various sections of the party, all united in appealing to the people against the exclusive claims of the church of England, while these claims were uniformly and strenuously supported by their opponents. This struggle was at its height, when a third party, consisting of emigrants from the United Kingdom, within a short period doubled the population of the colony. Of these both the old parties became equally jealous; those who enjoyed the power and privileges of office, and those who were struggling for ascendancy, betraying equal anxiety to exclude the new settlers from political power; nor did they, for a considerable period, appear in the field as a distinct political party, though subsequent events have made it probable that the distinction of old and of new settlers will become an absorbing element in the political divisions of the colony. The objects of the original reformers were uniformly defeated by the influence of their opponents in the legislative council; so that, finding the practical inutility of a majority in the House of Assembly only, they ultimately directed their attention, not to the reorganization of that council, like the Lower Canadians, but to the securing of a responsible executive administration. Both these parties have shown an equal degree of jealousy in respect to the interference of the general government; while the party subsequently introduced wish that its influence in the colony were increased. It has not been ascertained what proportion of the colonists were prepared to join Mackenzie's treasonable enterprise, in the event of a successful commencement; though it appears improbable that his views were sympathised with to any serious extent, notwithstanding the great political dissatisfaction of the period, caused by the result of the elections, which secured the old party a majority in the House of Assembly, and enabled them to carry some obnoxious measures. But it is probable that this dissatisfaction was the proximate cause of that ill-planned and worse conducted affair, which, however, was sufficient to show that, without some signal change, the tranquillity and preservation of the colony must depend rather on the extent of the military force and the vigour of the government, than on the attachment of the colonists to the mother country.

The measures that have been proposed for obviating the diversified and complex evils that have accumulated in these colonies, are, in the first place, their reunion, under one legislature; by which all disputes relative to the division and amount of revenue would cease, and the completion of the great works, undertaken to make the St. Laurence available to the upper province, would be promoted: but the primary object, avowedly proposed to be effected by the measure, is the annihilation of the majority possessed by the French party in the lower province; and this is contended for on the ground of imperative necessity, and in preference either to more despotic, or more indirect means of governing the colony. In a legislative assembly composed of the representatives of *both* provinces, it is expected that the French party would be outnumbered; and thus, order and progressive improvement being secured, the ultimate amalgamation of the two races is predicated, as in the state of Louisiana. There are, however, many, and some very weighty objections to this plan; and it is by no means certain that it would effect the object in view. To remedy the other grievances, a modification of the spirit, rather than of the form of the previous constitution, is relied on; and it is proposed to be supported by a good system of municipal institutions. Among other secondary measures, the removal of all such civil disabilities as new settlers are now liable to is proposed, and the repeal of the law which forbids American citizens holding land in the colony.

But supposing these measures were adopted, and that they had the anticipated effect of amalgamating the English and French colonists, and redressing other grievances, still the question remains, would they be sufficient to tranquillize the colony, and to attach it to British interests? All experience says that they would not. Nothing, we may depend upon it, will satisfy the Canadians, or any people in their situation, short of substantial or total independence; and the latter would be in all respects more for our advantage than the former. Were the duties on Canada timber reduced to the same level as those on Baltic timber, we question whether Canada would be found to possess a single article that could be advantageously exported to this country, or that we might not buy cheaper and better elsewhere. It no doubt has afforded an extensive outlet for emigrants, and has been in so far useful; but in all other respects its occupation has always been, and will most probably continue to be, productive of little except loss. And, even with respect to emigration, it is by no means clear that the field would be at all narrowed by Canada becoming independent, or connected with the United States. The presumption seems, indeed, to be very much the other way; and notwithstanding the efforts that have been made to attract emigrants to Canada, they seldom have been so numerous as those to the U. States, and would have been incomparably fewer, had they been aware of the real situation of the two countries. The people of Britain would, therefore, do well to reflect dispassionately on the state of the Canada question. We believe most men of sense admit that, sooner or later, Canada will be independent, or be incorporated with the U. States. But if so, what should be our policy in the mean time? Having put down rebellion for the present, the question is, are we resolved to maintain an army of 10,000 or 15,000 men in Canada? to expend, directly and indirectly, some three or four millions a year in preserving a mere nominal ascendancy in a colony, by the independence of which we should certainly lose nothing? If such be our determination, it may be doubted whether we have profited much by the dear-bought experience afforded by the American war. We deny that Canada contributes, in any way whatever, either to the strength or security of Great Britain. On the contrary, the connexion with it is an evident source of weakness; and, while it multiplies the chances of our being involved in disputes with other powers, it supplies no means of carrying them on, and distracts and lessens those in our possession. National pride may prevent our relinquishing this costly and worthless dominion, but good sense, and the most obvious views of expediency, would suggest the policy of voluntarily anticipating what must, in the end, necessarily happen; and of providing for the independence of Canada, under a system of friendly and mutually beneficial relations with this country.

History.—Canada is said to have been first discovered by Sebastian Cabot, in 1497; if so, it was comprised with the rest of the extensive line of coast he explored, under the general name of Newfoundland, subsequently limited to the island so called. The French first attempted to make those discoveries available, and are said to have framed a map of the gulf so early as 1508. In 1535, the country was taken possession of in the name of the king of France, and in 1535 Cartier explored the river, naming it St. Laurence, from having entered it on that saint's day. Quebec, however, the first settlement was not founded till 1608. For a considerable period subsequent to this, the colonists appear to have been engaged in a series of sanguinary conflicts with the native Indian tribes, and to have been often on the brink of being extirpated: the strife, however, ultimately terminated in a friendly compact, which converted the Indians into available auxiliaries against the English. Quebec was taken by the British forces under Gen. Wolf, in 1759, and the whole territory formally ceded by the Treaty of Paris, in 1763. The seigniorial rights, the various holdings and tenures under them, and the endowments of the Catholic church were left undisturbed; and all the estates, including all the unappropriated lands in the prov., held at the period by the French king, became vested in the British crown. In the years 1812–13–14, the lakes, and especially the shores of Niagara, were the scene of a succession of severe contests; the war was wholly a frontier one, and the militia on either side being engaged in it, near relatives were often found contending in opposite ranks, so that common was aggravated to civil warfare; and Indians also were employed, and increased its horrors. The grievances and complaints of Lower Canada first obtained the attention of parliament in 1828, when a select committee of the H. of C. reported on them. The legislative assembly's claims were—the right of appropriating all the crown revenues as they pleased, and also all those accruing from parliamentary and provincial statutes, and the settlement and alienation of all the wild lands of the province; but the most important point, without which the rest would be conceded in vain, according to their statement, was, that the legislative council should be elected by the people, and thus assimilated to the senate of the United States. Another H. of C.'s report led to the nomination of Lord Gosford (who was also appointed Governor), and two other commissioners, and five reports and appendixes, published in 1837, are the only result of their labours. In the divisions which took place in the House of Assembly, the British party divided from 8 to 11 in a house of 88 mem. The grievances of the upper province were set forth in the report of a committee of their H. of Assembly, who adopted it, and laid it before the king. The extent and abuse of the crown patronage; the virtual irresponsibility of the executive; the mode of conducting the business of the provincial post-office; the management of the Toronto college; the provision made for the ecclesiastical estab., and for the maintenance of certain sects only (the House, say they, "recognise no particular denomination as established in Upper Canada, with exclusive claims, powers, or privi-

leges"); the partiality shown in the choice of magistrates; the absence of control over the crown revenues; and the failure on the part of the local to carry into effect the recommendations of the general government, are the most prominent of the grievances set forth. Subsequent to this, Sir F. Head replaced Sir J. Colborne as gov., in 1836; and during his government the outbreak under Mackenzie took place. (Besides the references in the text, see *Darby's Geog. of U. S.; The London Geog. Society's Trans.; Hall's Travels; Stuart's Three Years' Residence in America; Gourlay's Upper Canada, &c.*)

CANADICE, p. t., Ontario co., N. Y., 18 m. S.W. Canandaigua, 218 m. W. Albany, 334 W. Honeoye lake, 5 m. long and 1 broad, lies chiefly in its E. part; Canadice lake, 3 m. long and half a mile wide, occupies its centre, and Hemlock lake, 6 m. long and 1 wide, occupies a portion of its S.W. part. It has three saw-mills, eleven schools, 611 scholars. Pop. 1341.

CANAJOHARIE, p. t., Montgomery co., N. Y., 50 m. W.N.W. Albany, 395 W. Bounded N.E. by Mohawk river. Drained by Bowman's and Otsquake creeks, which flows into the Mohawk. It contains eleven stores, two furnaces, two fulling-mills, four grist-mills, twelve saw-mills, two tanneries, two distilleries, two academies, 265 students, twenty-eight schools, 1655 scholars. Pop. 5146. The village is situated on the S. side of Mohawk river. Incorporated in 1829. It contains four churches, one Methodist, one Presbyterian, one Dutch Reformed, and one Lutheran, an academy, ten stores, two grist-mills, two saw-mills, one furnace, two distilleries, one brewery, included in the statistics of the town. The Erie canal passes through its centre, and the Catskill and Canajoharie rail-road will terminate here. It contains 175 dwellings and about 1300 inhabitants.

CANANDAIGUA, p. t., Ontario co., N. Y., 195 m. W. by N. Albany, 341 W. It contains a considerable portion of Canandaigua lake, and is drained by the streams which flow into it, and by its outlet. It contains twenty-six stores, two fulling-mills, three grist-mills, one saw-mill, one tannery, two printing-offices, one bindery, one weekly newspaper, four academies, 500 students, twenty schools, 1318 scholars. Pop. 5602. The village, one of the most pleasant in western New-York, is beautifully situated on a plain at the N. end of Canandaigua lake at its outlet, and the ground gently descends towards the lake, presenting a fine view of it from the village: 15 m. W. by N. Geneva, 12 m. S. of the Erie canal, at Palmyra. The village, which is beautifully built, lies chiefly on two parallel streets, running N. and S., and crossed at right angles by a number of others. At the centre is a fine public square, on which stands the court-house, and other public buildings. It contains a court-house, jail, and county-offices of brick; a town-hall, five churches, one Methodist, one Presbyterian, one Episcopal, one Baptist, and one African; two banking-houses and a bank for savings; an academy of a high order, with a large endowment; a distinguished female seminary, twenty-five stores, one steam flouring-mill, one saw-mill, 350 dwellings, and 2790 inhabitants. It is surrounded by a rich agricultural country and is flourishing. The above statistics of the village are included in those of the township.

CANANDAIGUA LAKE, Ontario and Yates co's., N. Y. This beautiful sheet of water is 14 m. long, and from 1 to 1½ m. wide, is surrounded by a highly cultivated country, and presents, on its shores, much delightful scenery. Its waters are deep, transparent, and abound with fish of various kinds. Its outlet flows N.E. into Flint creek, which enters Clyde river, one of the constituents of Seneca river, the common outlet of Cayuga, Seneca, Crooked, Canandaigua, and some smaller lakes, by which their waters are finally discharged through Oswego river into lake Ontario.

CANANORE (*Cesura*), a marit. town of Hindostan, prov. Malabar, at the bottom of a small bay, 45 m. N.W. Calicut, and 66 m. S.S.E. Mangalore; lat. 11° 42′ N., long. 75° 27′ E. It trades with Bengal, Arabia, Sumatra, and Surat, from which it imports horses, piece goods, almonds, sugar, opium, silk, benzoin, and camphor: its exports are chiefly pepper, cardamoms, sandal wood, coir, and shark-fins. It is the cap. of the talook of Cherical, a lofty and uneven tract, extending for 2 m. inland from the fort, and some years since containing together with the town about 11,000 houses. Its territory is now subordinate to the British, but has long been governed by a succession of female sovereigns, whose authority has extended over most of the Laccadive islands.

Cananore is the head military station of the British dominions in Malabar prov. (*Hamilton's E. I. Gaz.*, i., 340; *Madras Almanack.*)

CANARA, a marit. prov. of Hindostan, presid. Madras, comprising the ancient countries of Tulava and Haiga, with small portions of Malabar and the Hindoo Kaukana. It lies chiefly between lat. 12° and 15° N., and long. 74° and 76° E.; having N. Goa and Dharwar (Bejapoor), E. the latter province and Mysore, S. Coorg and Malabar, and W. the ocean; length, N. to S., 230 m.; average breadth about 26 m.; area 7477 sq. m. Pop. (1837) 759,776. It is mostly bounded by the W. Ghauts, but includes a portion of the country above them, called Carnata, of which the name of this distr. is a corruption, most improperly applied. Surface generally rugged and uneven. It has no considerable river, but a number of minor ones, of which Mangalore is the chief. The coast in the S. is occupied by a chain of salt lakes. Soil and climate very similar to those of Malabar. Granite and laterite are among the prevailing rocks, and near the sea shore there is much sandy soil, on which cocoa-palms are grown in great number. The periodical rains are extremely heavy, and set in from the middle of May till the end of Sept., during which ships leave the coast, and a stop is put to all traffic. The country abounds in forests; those in the N. producing teak, and other large timber, *sissoo*, *bassia latifolia*, prickly bamboo, the varnish-tree of Birmah, *nux vomica*, *mimosa catechu*, cassia, sandal-wood, wild pepper, a species of nutmeg, *&c.*; those in the S. containing teak, mango, caryota palm, and much jungle, greatly infested with tigers. Canara is the granary of rice for Arabia, Goa, Bombay, and Malabar; and both the climate and soil, especially in the valleys, are highly adapted for its culture. Sometimes 50 bushels a year are obtained from an acre; and in the S. the land frequently yields two or three crops during the same period. Besides rice, sugar-canes, pepper, betel-nut and leaf, cucurbitaceous plants, *&c.*, are grown. Husbandry is better here than in Malabar; the plough is a neater implement, and manure of both leaves and dung is made use of; some cultivators employ twenty-five ploughs, although full half of them use no more than one. Rice is thrashed by beating handfuls in the straw against a bamboo grating. There are no barns, and the grain is kept in straw bags hung up in the houses: carts are not used, the roads are bad, and goods have to be conveyed on the heads of the peasantry. There are neither horses, asses, nor goats. Black cattle, in 1836–7, estimated at 573,412 head, sheep at 544,326 head; hogs are kept, and eaten only by the lowest ranks. All the lands in the S. are private property, but generally much encumbered with mortgages: in the N. mortgages are much less frequent, and the cultivated lands only are the property of individuals: government claims all the hill, forest, and waste land. In S. Canara inheritance in land, goods, honorary dignities, and whatever else is capable of being conveyed, descends in the female line; and instead of a man's own children, those of his sister, or maternal aunt (as is the case in all the country in the S. part of the Malabar coast) become his heirs, while he has a corresponding right over them, to the extent of selling them for slaves. In Karnata Proper, above the Ghauts, these laws are reversed, and a man's children inherit his property. The lands mostly belong to individuals, who let them, and even frequently mortgage them to cultivators; the land assessment is moderate, being about 30 per cent. on the produce; but the cultivators generally are as much depressed as elsewhere, since they have about 20 per cent. to pay to their landlords, and out of the remaining 50 per cent. to provide live and dead stock, and subsist the slaves. Land, when sold, usually fetches from 8 to 12 years' purchase-money on the clear rent. Slavery is very common, and almost all the supposed aborigines are slaves. Their total number was, a few years ago, estimated at 82,000; but their proprietors are said to treat them well. Many different tribes inhabit Canara. The Jains (*see* HINDOSTAN) are more numerous here than in any other part of India, and many ancient Jain temples exist in tolerable perfection. Nairs inhabit the inland parts, where, together with Bunts and Sudras, they own most of the land. There are about 50,000 R. Cath. in Canara, mostly descendants of the Portuguese, Dutch, French, and Danish colonists. Canara is not celebrated for manufactures; the chief are those of sugar from the palms, and salt on the coast. The exports, consist principally of rice, betel-nut, black pepper, ginger, cocoa-nuts, and oil and raw silk; the imports are cloths, cotton, thread, blankets, tobacco, black cattle, and sandal-wood, for export to Bombay. The total public revenue, in 1836–7, was 2,758,460 rup., of which, 1,671,215 were derived from land, 274,438 from salt, 240,551 from land customs, *&c.* All the chief towns, viz., Mangalore, Barcelore, and Callismpore, are in the S.

Tulava was governed by its own princes till A.D. 782; from that year till 836 it was subject to the rajahs of Bijnagur; and afterward to the princes of Ikeri. It escaped the Mohammedan conquests till 1765–6, when Hyder invaded and conquered it, after which it suffered all the horrors of anarchy, till the death of Tippoo in 1799, when it passed into the hands of the British, and under them has become a tranquil and orderly district. (*Hamilton's W. & E. I. Gaz.*, i., 330–340; *Madras Almanack, &c.*)

CANARY ISLANDS (believed to be the *Fortunate Insulæ* of the ancients), a group in the N. Atlantic ocean, belonging to Spain, between 27° 40′ and 29° 24′ N. lat., and

13° 32′ and 18° 20′ W. long., 135 m. N.W. cape Bojador, in Africa, and 650 m. S.W. Cadiz. This group consists of seven principal islands, as follows:

Name.	Area. sq. Eng. m.	Pop. (1742.)	Pop. (1836.)
Teneriffe	877·7	60,218	85,011
Canary	758·8	38,864	68,040
Palma	718·5	17,580	33,089
Lanzarote	323·5	7,210	17,494
Fuerteventura	305·1	7,382	13,856
Gomera	169·7	6,251	11,742
Hierro	82·2	3,687	4,444
Total	3,256	136,192	233,649

Besides these, several small islands, viz., Graciosa, Clara, Allegranza, &c., called the Little Canaries, are situated to the N.W. of Lanzarote, and connected with that island by a bank, on which there is, for the most part, 40 fathoms water, Lanzarote is the most easterly, Allegranza the most northerly, and Hierro, or Ferro, the most southerly and westerly of the group. This last-mentioned island has acquired considerable celebrity, from its having been selected by the early geographers as the point where they placed the first meridian, or from which they began to reckon the longitude. In some countries this method of reckoning is still kept up; but the English and French adopt for their first meridians those passing through the Observatories of Greenwich and Paris. The most W. part of Hierro, or Ferro, La Dabessa, is 18° 9′ 45″ W. of the meridian of Greenwich, and 20° 30′ W. of that of Paris. The islands are all of volcanic origin, very mountainous, their coasts precipitous, and the channels between them very deep. The greatest height of some of them above the level of the sea is as follows:

Teneriffe (Peak)	11,400 ft.	Lanzarote (Montana Blanca)	2,000 ft.
Canary (El Cumbre)	6,648	Allegranza	930
Fuerteventura (India)	2,880		

Teneriffe and its peak, a half extinct volcano, which may be seen at a distance of more than 150 m., will be found elsewhere described (Teneriffe). In all the islands there are plentiful traces of extinct volcanoes; but in that of Lanzarote one burst forth in 1825, which still continues active. The basaltic cliffs in that island rise almost perpendicularly to the height of 1500 ft.: Allegranza appears wholly composed of a mass of lava and cinders. The Canaries have no rivers, properly so called, but they are watered by numerous brooks, which rise in the higher mountain regions, and during rains suddenly swell to torrents. There are few safe roadsteads, and no close harbours: the Great Canary island has, perhaps, more safe anchorages than any of the others, and the bay of Las Palmas at its N.E. extremity offers a spacious haven for ships, secure from all winds except those from the S.E., which seldom blow with any violence. The climate, though hot, is generally healthy; the heat being attempered by the elevation of the land, and the prevalence of N. and W. breezes. The temperature is in most parts very equable; the average in Dec. and Jan. has been found to be 67°, in Aug. 76° Fah. The range of temperature is seldom more than four or five degrees in the twenty-four hours. The S. and S.E. winds occasionally cause pestilential maladies in the E. Canaries, and bringing intolerable heats, and clouds of locusts, scorch up and desolate the country. The fertility of the lands is in proportion to their humidity. In some parts they produce abundance of wheat, maize, and other kinds of corn, dates, figs, guavas, lemons, olives, and numerous other fruits, of both the torrid and temperature zones; the sugar-cane, tobacco, cotton, orchill, and many perfumes and medicinal plants. They contain, also, woods of pine trees, laurel, arbutus, &c., and excellent pasturage. The average annual quantities of the principal articles of produce in the entire group, are said to be,

Wine	53,200 pipes	Rye	41,000 bushels
Wheat	360,500 bushels	Pulse	50,000 —
Millet	212,400 —	Potatoes	782,000 cwt.
Barley	354,000 —	Barilla	330,000 —

Canary is, perhaps, the best watered and most fertile island; and it and Teneriffe are the two best cultivated. Teneriffe is the principal seat of the vine culture; the Vidueno and Malvasia wines are exclusively the produce of that island: the vine is, however, largely grown in the others, and the wines produced exported to Europe under the name of Teneriffe. The best wine in the E. Canaries is that of Lanzarote, where the grapes grow on a soil of decomposed scoriæ. Much brandy is distilled and exported. Among the other chief products are silk, honey, wax, and cochineal. Game is very plentiful; and they are said to be without either ferocious or venomous animals. Cattle and poultry have been introduced from Europe. The canary-bird (*Fringilla Canaria*, Linn.) is still found in these islands; but in its wild state its colour is gray or linnet-brown; the plumage of those we are accustomed to see, has derived its hue from repeated crossings. The fishery, which is principally carried on along the opposite African coast, occupies a great number of hands: and it is said that Spain might, in case of emergency, procure 2000 able young seamen from the islands without distressing the fishery. Sugar, with coarse woollens, silks, and linens, are among the manufactures.

The quantities of the principal articles imported and exported in 1833 were as follows:

Imports.		Exports.	
Sugar	6,832 arrobas	Silk	4,424 lbs.
Coffee	908 —	Almonds	189 —
Brandy	20,058 —	Brandy	17,125 —
Coin	30,640 doll.	Coin	121,309 doll.
Paper	3,890 reams	Pulse	3,089 faneg.
Soap	2,199 quintals	Fish	5,125 arroba
Oil	18,369 arrobas	Barilla	180,481 —
Tallow Candles	107 —	Grain	9,384 faneg.
Wine	8 pipes	Wine	5,834 pipes
Leather for soles	46,000 lbs.	Orchilla	460 arroba
Wax	800 —	Moss	815 —

1975 lbs. of cochineal were also exported in the same year, and flax, woollens, cottons, glass, earthenware, drugs, iron, staves, salt fish, hams, cheese and butter, are imported. The total value of the imports and exports were:

	Imports.	Exports.
Foreign countries	11,578,238 reals vellon	5,870,186 r. v.
America	1,069,696	422,256
Spain	2,614,216	3,078,586
Total	15,257,216	9,371,030

Santa Cruz in Teneriffe, and Las Palmas in Canary, are the principal commercial ports. The present inhabitants are probably almost wholly of Spanish origin. The islands are governed by the Spanish law, the administration of which is directed by an *audiencia* in Great Canary. The governor of the Canaries, who is president of the *audiencia*, resides at Santa Cruz. The three easterly islands form one bishopric, and the four westerly another. There are 41 monasteries, and 15 convents, with 423 regular clergy; and the people are said to be equally ignorant and bigoted. They are not, however, deficient either in industry or enterprise. On the contrary, many of them emigrate to America, the Philippine islands, &c., where they are distinguished by their adventurous spirit. But, at home, such of them as are not engaged in the fishery, are sunk in comparative apathy, produced by vicious laws and institutions. The lands are parcelled out in immense estates, held under strict entail, and the plan followed in letting them to the actual occupiers being as bad as possible, industry is at the lowest ebb, and few or rather no improvements are ever attempted, or even so much as thought of. The military force is composed of 25,000 men. (For descriptions of Santa Cruz, Lagunas, and Orotava, *see* Teneriffe.) Las Palmas, in the Great Canary, near its N.E. extremity, lat. 28° 8′ N., long. 20° 23′ 30″ W., has a handsome sea-port town with 18,000 inhab., a cathedral, hospital, college, a mole, many public fountains, and a well-supplied market. In good weather ships anchor within half a mile of the town, but the roadstead is but indifferent. The other chief towns are, Arecife, or Port Naos, in Lanzarote, a well-built town, with 2500 inhab.; Cabras, 1000 inhab., in Fuerteventura; La Hila, in Gomera; and Santa Cruz, in Palma.

When these islands first became known to Europeans of modern times, they were inhabited by a race of people called Guanches, of a tall, athletic, and vigorous frame (though this has probably been exaggerated), and who made a determined resistance to the invaders. Though unacquainted with the use of iron, they appear to have arrived at a considerable degree of civilization; they cultivated music and poetry with success, had a kind of hieroglyphic writing, believed in a supreme being, in a future state of rewards and punishments, and embalmed their dead. Many of their mummies have been found in modern times in caves in various parts of the islands. They are placed erect upon their feet, and are in so remarkable a state of dessication, that some of them do not weigh above from 6 to 8 lbs. Their government was oligarchical. Humboldt and Dr. Prichard think that the Guanches were either intimately connected with, or descended from the Berbers of N. Africa. Many of the Guanches were reduced to a state of slavery by the Spanish and other European traders, by whom the islands were first visited; and those who escaped the scourge of slavery, war, and famine, were mostly carried off by a pestilence in 1494. The Canaries were first discovered by accident about 1330 by the crew of a French ship driven thither in a storm. After several unsuccessful Spanish expeditions, John de Bethencourt, a French gentleman, sailed with a fleet from Rochelle in 1400, and took possession first of Lanzarote, and subsequently of Fuerteventura, Gomera, and Hierro. Bethencourt's heir subsequently disposed of these to a Spanish nobleman, and they afterward became the property of the Spanish crown: the conquest of the other islands was effected by Spain before

the termination of the 15th century. (*Humboldt's Personal Narrative*, vol. i.; *Tables of Revenue, &c.*, 1835; *Journ. Geog. Soc.*, 1836; *Prichard's Researches*, ii., 34.)

CANASTOTA, p. v., Lenox t., Madison co., N. Y., 119 m. W.N.W. Albany, 364 W. Situated on the Erie canal. The Syracuse and Utica rail-road passes near the village. Incorporated in 1835. It contains two churches, one Methodist and one Dutch Reformed; eight stores and forwarding houses, 120 dwellings and about 800 inhabitants.

CANCALE, a sea-port town of France, dép. Ille-et-Vilaine, cap. cant., 9 m. E. St. Malo; lat. 48° 40′ 40″ N., long. 1° 51′ 30″ W. Pop. 5151. It is situated on the W. side of St. Michael's bay. At a short distance from the town there are some large rocks, within which there is good anchorage in 5 or 6 fathoms. Excellent oysters are found in the bay, and make a considerable article of traffic. The English made, in 1758, an unsuccessful descent on the coast here. (*Dict. Geog.*)

CANDAHAR, a fortified city of Caubul, cap. (1838) of an indep. territory held by a Banrikzye chief, brother of the sirdar of Caubul, in a plain near the Urgundaub river; 200 m. S.W. Caubul, 260 m. S.E. Herat; lat. 32° 20′ N., long. 66° 15′ E. Pop. 50,000 the greater proportion of whom are Afghans. It is said to be of an oblong form, enclosed by a bastioned mud wall, on the ramparts of which three men walk abreast, and a ditch, 9 ft. deep, recently constructed, surrounds the whole. Candahar is regularly built, most of the streets meeting at right angles: its houses are generally of brick, and often with no other cement than mud. Four long and broad bazars meet in the centre of the city, in a small circular space about 45 yards in diameter, and covered with a dome, where proclamations are made, and the bodies of criminals exposed. The principal bazars are each about 50 yards broad; their sides are lined with well-supplied shops one story high; and there is a gate at the end of each opening into the surrounding country, except the N. bazar, having the palace at its end, a structure in no respect remarkable externally, but containing many courts and buildings, and a private garden. There are many caravanseras and mosques: the principal building of the latter kind is the tomb of Ahmed Shah, an elegant, but not a large, structure, with a handsome cupola, formerly an inviolable sanctuary. A great variety of trades are carried on, and the streets are filled with a noisy and bustling crowd from morning till night; but, unlike most other Afghan cities, there are here no water sellers, the city being well supplied by canals from the Urgundaub, whence subterranean or open water-courses are carried to the different streets; and there are, also, numerous wells. Three of the principal bazars were at one time planted with trees, and had, it is said, a narrow canal running down the middle of each; but many of the trees have withered, and if the canals ever existed, they are no longer visible. The vicinity of Candahar is fertile, and abounds with gardens and orchards, producing the finest fruits and vegetables, especially pomegranates; with corn, tobacco, madder, assafœtida, and artificial grasses. The climate is mild and healthy. Were the city the seat of a just government, it would be the centre of a rich circle of cultivation; but the chiefs who, by oppressions of all sorts, have contrived to raise about £50,000 annual revenue from the land, have also, by their exactions, banished much of the trade and opulence of the city. Persian traditions, and the conjectures of European geographers, agree in assigning the foundation of Candahar to Alexander the Great. The present city was built by Ahmed Shah in 1753 or 1754, who made it the capital of his dominions, an honour which his successor Timour transferred to Caubul. (*Elphinstone's Caubul*, ii., 129–134; *Conolly's overland Journey*, ii., 91–93.)

CANDEISH, a soubah or prov. of the Deccan, Hindostan, between lat. 20° and 22° N., and long. 73° and 77° E.; having N. Malwah, E. Gundwana, S. Berar and Aurungabad, and W. Gujrat: length, E. to W., about 210 m.; average breadth, 80 m. It contains parts of three mountain ranges, viz., the Santpoora mountains in its N.; the Chandore, or Adjuntah range, S.; and the Sydaree mountains, or W. Ghauts, in its S.W. parts: its principal plain is between these ranges, and opens E. into the plains of Berar, and W. is continuous with those of Surat, from which it is separated by a thick and extensive jungle. The Tuptee river flows through this plain. The Nerbudda forms the N. boundary. Candeish, though interspersed with low, barren hills, has a large extent of very fertile territory, watered by copious streams and limpid rivulets from the table-lands, which greatly enhance its natural beauties. For thirty years, however, before the British became possessed of it (1819), it had been the scene of continual anarchy, and much of the best land, especially N. the Tuptee, had become overspread with an uninhabited forest, abounding with the ruins of former villages, and swarming with tigers. This prov. is comprised within the several territories of the Guicowar, Sindia, the Nizam, and the British government; the land in those parts belonging to the latter is granted on the most easy terms to the cultivators, but some length of time must elapse before the country recovers its former prosperity. The existing villages are mostly built of mud, and protected by a mud wall and fort, without ditch or outwork. The hill ranges, and the whole country along the courses of the Nerbudda and Tuptee rivers are inhabited by Bheels, who have been here less disturbed than in any other part of India. They are of small stature, dark complexion, prone to rapine and thieving, go armed with a bow and arrow, and in many respects resemble the hill-people of Bhaugulpore. They eat beef and pork, drink spirits, and bury their dead; yet they pretend to be Hindoos of the Brahmin and Rajpoot castes. They have contributed greatly to the devastation of the province.

Candeish formerly contained a large number of Mahratta fortresses: its principal towns are Boorhanpoor, Asseerghur, Hindia, Nundoorpoor, and Gaulna. Numerous Arab colonists settled here, and early in the 15th century Candeish was an independent kingdom, governed by sovereigns claiming descent from the caliph Omar, who had their capital at Asseerghur: towards the end of that century it was completely subdued and annexed to the Mogul empire. The decline of Candeish may be dated from 1802, when Jeswunt Row-Holcar ravaged it; next year it was depopulated by famine, and subsequently ruined by the exactions of the peishwa's officers, and the predatory incursions of the Bheels, Pindarries, and insurgent bands of the Arabs, who had established themselves in the strongholds. On the British conquest, in 1818, when Holcar's possessions in Candeish fell under our dominion, these refractory tribes were either brought into subjection or pacified; or else, as the Arabs, obliged to emigrate from India, after having been paid what they were legitimately entitled to by the British government. (*Hamilton's E. I. Gaz.*, i., 343–345; *Reports, &c., on Affairs of the E. I. Company.*)

CANDEISH, an inl. zillah or distr. of Hindostan, prov. Candeish, presid. Bombay; between lat. 20° and 21° 42′, and long. 73° 37′ and 76° 22′ E.; having N. the collectorate of Surat and Sindia's dom.; E. the latter, and those of the Nizam; S. the Nizam's dom. and the collect. of Ahmednuggur; and W. a portion of the Guicowar's territory: shape somewhat rhomboidal; length, E. to W., about 180 m.; greatest breadth 115 m.; area 12,527 sq. m. Pop. 478,500. This distr. is capable of great improvement, being, for the most part, overgrown with jungle; very complete embankments on the various streams, and many dilapidated, though substantially-built dams and aqueducts for irrigation are met with, which might be again rendered available at a small expense. In 1820, when Col. (now Gen.) Briggs entered upon the civil management of this distr., there were eighty distinct bands of freebooters ravaging it; and out of 2700 villages, 1100 had been altogether desolated during the preceding thirty years of anarchy. The Bheels were at that time in the habit of levying a kind of *black mail* upon the villagers, consisting of a portion of the produce of the land; but, by conciliatory treatment, in less than ten years most of them had returned to their former occupations as village watchmen and guardians, and only one gang of forty individuals remained to infest the country when Colonel Briggs left it. The agricultural classes are peaceable and inoffensive, but timid and destitute of energy. There are no large or wealthy landholders, excepting the proprietors of certain jaghires granted for military services by the British government. The village constitution exists, but the ryotwarry system has been introduced into this distr., to which, in the opinion of gentlemen who have held civil offices in it for a considerable time, it is, from various causes, extremely ill adapted. Grain, cotton, and indigo, are the chief articles of culture; but there is a vast quantity of waste land, and the cultivation and revenue have both diminished of late years, owing to the difficulty of disposing of the produce, from the general fall of prices, want of roads, &c.

Civil justice is administered by the *punchayet*, or native arbitration; and in criminal cases, while Colonel Briggs superintended the distr., trial by jury was established, which is said to have worked exceedingly well. Schools are common in Candeish distr.; every Brahmin, and all who have anything to do with mercantile business, are instructed in reading, writing, and accounts: in 1825 there were 189 schools in all, attended by 2022 scholars, or 1 in 18 for the whole male population. The Mohammedans are said to be the most ignorant of the population. (*Hamilton's E. I. Gaz.*, i., 345, 346; *Brigg's Evidence*, in *Reports, &c.*; *Hodge's Evidence*, in ditto.)

CANDIA, or MEGALO-KASTRON, a fortified marit city, cap. of Crete, on the N. shore of that island, near its centre, 34 m. W. Spinalonga, and 64 m. E.S.E. Canea; lat 35° 21′ N., long. 24° 8′ 15″ E. Pop. 12,000, 9000 of whom are Mohammedans. This city, and hence Crete itself, derived its name of Candia from the word *khandak*, signifying an intrenchment in the language of the Saracens, by whom

it was built. Its present fortifications are of Venetian construction; they are massive, bastioned, and furnished with outworks; the scarp wall, a beautiful specimen of art, is in most places 50 ft. in perpendicular height; the sea wall is not above 20 ft. in height, irregular, and but badly flanked. The port is formed by two moles, which, bending towards each other, project about 250 yards into the sea, and are defended at their extreme points by forts. It is at present so choked up by sand and the ruins of the old Venetian docks and arsenal, that a vessel drawing more than 8 ft. water cannot enter. The city has four gates, three on the land side and one towards the sea. Principal streets wide, roughly paved, but clean, well furnished with fountains, and adorned with clumps of trees. Houses generally well built, but have seldom more than one story above the ground floor. The bazars, which are good, have quite a Turkish appearance. In the E. part of the city the houses are mostly interspersed with gardens. Candia is the residence of the pacha, and seat of the provincial council, and of a Greek archbishop. Chief buildings, governor's palace, the Greek cathedral and other churches, many mosques, a synagogue, the remains of two Roman Catholic churches, a light-house on the W. mole, and some good baths. The arched vaults built for the Venetian galleys still exist, and several other relics of Venetian sway are found. The country immediately round Candia is not particularly fertile. Its prov. comprises all the E. part of the island, and produces chiefly wheat, barley, raisins, and a little cotton. (*Scott's Trav. in Egypt and Candia*, i.; *Pashley; Consular Report, &c.*)

CANDIA. *See* CRETE.

CANDIA, p. t., Rockingham co., N.H., 18 m. S.E. Concord, 470 W. Chartered in 1763, first settled in 1755. The site is elevated, and commands a view of the White hills on the N., and extends S.E. to the ocean. It contains one Congregational and two Freewill Baptist churches, five stores, one fulling-mill, thirteen schools, 498 scholars. Pop. 1430.

CANDOR, p. t., Tioga co., N.Y., 8 m. N. Oswego, 171 m. S.W. Albany, 285 W. Drained by Cottotong and West Oswego creeks. The village contains three churches, one Methodist, one Episcopal, and one Presbyterian; three stores, two grist-mills, three saw-mills, one clothier's works, forty-five dwellings, and about 300 inhabitants. The town contains four stores, two fulling-mills, one woollen-factory, two grist-mills, fifty-four saw-mills, and 1141 scholars in schools. Pop. 3370.

CANDY, an inl. town of Ceylon, at the head of an extensive valley in lat. 7° 17′ N., and long. 80° 36′ E., about 1400 ft. above the level of the sea, 89 m. E.N.E. Colombo, and 95 m. S.W. Trincomalee. Pop. about 3000. It is surrounded by woody hills and mountains, varying from 200 to 2000 ft. in height, and stands on the border of an artificial lake; but its situation, though beautiful and romantic, is insecure. At a distance of 3 m. it is nearly surrounded by the Mahavilly Ganga, here navigable only for small boats. Excepting those inhabited by the chiefs, which are tiled, the native houses are built entirely of clay, and thatched. Temples very numerous, and considered almost indispensable appendages to the houses of the opulent; in the greater number lights are constantly kept burning; and in one of them the celebrated tooth, said to have belonged to Boodh, is still preserved! Since the capture of Candy, residences for the governor and commandant, and a jail, have been built by the British, and several missionary and other schools established. There is no church, but the district court-house and missionary school-room are made use of for divine service. Candy was anciently the cap. of an independent kingdom of the same name, which comprised the central mountainous country of Ceylon. It was taken by the British in 1815. (*Heber's Nar.*, iii., 172; *Hamilton's E. I. Gaz.*)

CANEA or KHANIA (an. *Cydonia*), a seaport and the principal commercial town of Crete, cap. prov. of same name, on the N. shore of the island, 25 m. from its W. extremity, 64 m. W.N.W. Candia, and about 140 m. S. the island of Syra. Pop. 8000, about 5000 of whom are Mohammedans, and 1000 foreigners, chiefly Hellenes and Ionians, who engross most of the import trade. The town, inclusive of the port, forms an irregular square, enclosed by walls, with bastions and a ditch on the land side. The present fortifications were constructed by the Venetians, but are inferior, both in magnitude and disposition, to those of Candia. The port is formed by a mole about 1200 ft. in length, prolonged from the N.E. extremity of the town to the N.W., where it is terminated by a light-house opposite to a fortress defending the harbour's mouth. The port has recently undergone great improvements: it is the best in Crete, and capable of containing many vessels of 300 tons burden. Streets wide and well paved, but not clean; houses lofty, old, and rickety, but shops good. At the N. part of the town is a kind of citadel, formerly containing the arsenal, docks, &c. The Venetian galley vaults are still in good preservation. There is a small but excellent lazaretto, and several soap manufactories. (For the exports, &c., *see* CRETE.) Canea is the residence of the provincial governor and of several European consuls, and the seat of the provincial council, and of a Greek bishopric. Strabo and Scylax describe the site and port of Cydonia so as to leave no doubt that Khania stands upon the identical spot. No vestiges of the ancient city are now to be seen, though some existed at the end of the 17th century. The plain around Canea is celebrated for its beauty; its province comprises all the W. portion of the island. (*Scott's Egypt and Candia*, ii., 306–312; *Pashley's Trav. in Crete*, i., 1–17; *Consular Report, &c.*)

CANEADEA, p. t., Alleghany co., N.Y., 10 m. N. Angelica, 271 m. W. by S. Albany, 347 W. Watered by Genesee river and its branches. It contains six stores, one grist-mill, ten saw-mills, seven schools, 279 scholars. Pop. 1633. The village is situated on Angelica creek, a branch of Genesee river, and contains one store, one fulling-mill, one saw-mill, and about fifteen dwellings.

CANFIELD, p. t., Trumbull co., O., 14 m. S. by E. Warren, 164 m. N.E. by E. Columbus, 293 W. It has ten schools, 460 scholars. Pop. 1279.

CANICATTI, a town of Sicily, prov. Girgenti, cap. cant., 16 m. S.W. Caltanisetta. Pop., with cant., 17,384. It is well built. The greater part of the population consists of agriculturists.

CANISTEE, p. t., Steuben co., N.Y., 14 m. S.W. Bath, 243 m. W.S.W. Albany, 711 W. Watered by Canistee river and its tributaries, flowing into Tioga river. It contains two stores, one fulling-mill, two grist-mills, nine saw-mills, eight schools, 316 scholars. Pop. 941.

CANNÆ, an inconsiderable place in Naples, prov. Terra-di-Bari, near the Ofanto (the anc. *Aufidus*), 8 m. W.S.W. Barletta. It is adjacent to the site of the ancient city of Cannæ, so famous for the decisive victory gained in its vicinity by Hannibal over the Romans, in the year 217 B.C. Never were the talents of a great general more conspicuously displayed than on this occasion. The army of Hannibal was very inferior in numbers, and perhaps, also, in the quality of the troops, to that of his enemies; but the ability of the commander made up for every other deficiency, and, with a loss of only 4000 of his own men, he put 50,000 Romans to the sword, and took 10,000 prisoners! (The English reader will find a good account of this great battle in Ferguson's *Roman History*, cap. 5; the classical reader will resort to Polybius and Livy.)

The scene of action is marked out to posterity by the name of *Campo di Sangue*, "field of blood;" and spears, heads of lances, and other pieces of armour, still continue to be turned up by the plough.

The city of Cannæ was destroyed the year before the battle; but it was afterward rebuilt, and was a bishop's see in the infancy of Christianity. It seems to have been abandoned in the middle ages for the cities along the coast. (*Swinburne's Two Sicilies*, i., 168, 4to ed.)

CANNES, a sea-port town of France, on the Mediterranean, dep. Var, cap. cant., 25 m. E. Draguignan; lat. 43° 3′ 31″ N., long. 7° 1′ E. Pop. 3997. It is situated on the declivity of a hill projecting into the sea; has a fine quay, an old Gothic castle, and an old church. Its port is neither deep nor commodious, and can only be used by fishing boats and small coasting vessels. Napoleon landed in the vicinity of Cannes on the 1st of March, 1815, on his memorable return from Elba. (*Hugo*, art. *Var.*)

CANNON, county, Tenn., situated in the central part of the state, and contains 100 sq. m. Drained by Stone's creek, and branches of the Caney Fork of Cumberland river. It contained, in 1840, 7168 neat cattle, 9746 sheep, 28,989 swine, and produced 38,665 bushels of wheat, 1249 of rye, 419,[illegible] of Indian corn, 56,800 of oats, 9115 of potatoes, 32,[illegible] pounds of tobacco, 29,201 of cotton, 8545 of sugar. It had four stores, one flouring-mill, nineteen grist-mills, nine saw-mills, seven tanneries, eighteen distilleries, one academy, 25 students, nineteen schools, 495 scholars. Pop.: white, 6558; slaves, 618; free coloured, 17; total, 7193. Capital, Woodbury.

CANNONSBURG, p. b., Chartiers t., Washington co., Pa., 216 m. W. Harrisburg, 18 m. S.W. Pittsburg, 243 W. Situated on Chartier's creek, which flows into Ohio river a little below Pittsburg. Incorporated in 1802. It contains a Presbyterian church, seventeen stores, seventy dwellings, and 876 inhabitants. It is the seat of Jefferson college, founded in 1802, has a president and six professors or other instructers, 693 alumni, of whom 227 have been ministers of the gospel, 164 students, and 4500 vols. in its libraries. The commencement is on the last Thursday in September. The collegiate course is completed in three years. It has a medical department, located in Philadelphia. There is a theological school connected with the institution, under the care of the vice-president.

CANOSA (an. *Canusium*), a town of Naples, prov. Terra-di-Bari, cap. cant., near the Ofanto, 15 m. S.W. Barletta.

Pop. circa 4000. The old city, said to have been founded by Diomed, or in a period antecedent to the records of Roman history, was in ancient times one of the most considerable cities in this part of Italy for extent, population, and magnificence in building. Its walls are said to have embraced a circuit of 16 m.; and various ruins still remain to attest its former grandeur. Among these are the remains of an aqueduct and of a vast amphitheatre, with tombs (of which a very singular one was discovered in 1813), columns, triumphal arches, &c. Great numbers of fictile vases of the best period have been found here, surpassing in size and beauty those found in the tombs of any other ancient city, not excepting even Nola. The modern town occupies the site of the ancient citadel, and is said by Swinburne to be a "most pitiful remnant of so great a city." The ancient cathedral, built in the 6th century, still remains. Its altars and pavements are rich in marbles; and the *verde antico* columns that support its roof are the finest that Swinburne, no mean judge, had ever seen. There is here, also, the mausoleum of Bohemund, so celebrated in the *Gerusalemme Liberata*.

Canusium was the place to which the wreck of the Roman army fled after the battle of Cannæ. It seems to have been at the acmé of its prosperity under Trajan. It was reduced to its present deplorable situation by a series of disasters inflicted on it by the Goths, Saracens, and Normans. (*Cramer's Ancient Italy*, ii., 292; *Swinburne's Two Sicilies*, i., 400, 4to ed.; *Craven's Calabria*, p. 90.)

CANOURGE (LA), a town of France, dep. Lozere, cap. cant., in an agreeable and fertile valley on the Urugne, 9 m. S.S.W. Marvejols. Pop. 1969. It carries on some branches of the cotton and woollen manufactures, the products of the latter being formerly in extensive demand, and has some trade in cattle and grain. Excavations made in the vicinity in 1829 have been the means of discovering a number of vases and other remains of Roman pottery, which appear to have been manufactured on the spot. (*Hugo*, art. *Lozère*.)

CANTAL, an inland dep. of France, formed of parts of the ancient districts of Haute Auvergne and Velay, between 44° 37′ and 45° 26′ N. lat., and 2° 5′ and 3° 14′ E. long., bounded by the following depts.; viz., N. Puy-de-Dôme, E. Haute Loire, S.E. Lozère, S. Aveyron, and W. Lot and Corrèze. Area, 589,959 hectares. Pop. 262,117. This is one of the least productive, poorest districts of France. Surface much encumbered with mountains. The highest summit, that of the Plomb-de-Cantal, in the centre of the dep., and whence it takes its name, is elevated 1856 mètres (6040 ft.) above the level of the sea. We everywhere find indications of the action of subterraneous fires and volcanoes: and though steep, the mountains furnish, in summer, excellent pasture. Valleys not very extensive. Between Murat and St. Fleur there is a level plateau, which may be said to be the granary of the department. Climate severe, the snow generally lying on the summits of the mountains for seven or eight months together. Several rivers, flowing in different directions, have their sources here; among which may be specified the Cere, Alagnon, Rue, Arceuil, &c.: the Dordogne runs along its N.W. frontier. Agriculture in the most backward state; the occupiers being generally poor, and wedded to old practices. The produce of wheat and oats is insufficient for the consumption; but the inhabitants live principally on buckwheat, rye, potatoes, and chestnuts. The last, indeed, is the staple article of food in an extensive district, thence called *Châtaigneray*. Hemp and fine flax are also raised, with various descriptions of fruits, and a little very bad wine. The principal wealth of the dep. consists in its mountain pastures and meadows; partly occupied, in summer, in dairy farming, and partly in the fattening of cattle and sheep. Large quantities of cheese and butter are annually produced. The ordinary yield of a cow is estimated at 75 kilogs. of cheese, and 15 ditto of butter. The best cheeses are made in the environs of Salers; they weigh from 70 to 80 lbs.: great numbers of pigs are fed on the refuse of the dairies. Large herds of cattle are also fattened on the mountains; and it is said that the value of an ox is increased, in the course of a summer, from 150 to 220 fr. The native breed of sheep is small, and have fine fleeces. Large flocks are brought from the more S. departments, to be fattened during the summer, the fattening and pasturage grounds being often let to the proprietors of herds and flocks from the neighbouring departments. Horses small and hardy, and used for the light cavalry. Numbers of mules, asses, and goats are also raised; the skins of the latter are sent to Milhaud to be made into parchment. Honey is an important product. Manufacturing industry is at a very low ebb in this department. There are a few fabrics of coarse woollens and linens; and these, with coarse lace, copper and braziers' work, wooden articles, paper, tanneries, &c., include almost all that is worth notice. Numbers of the people annually emigrate, in search of employment, to Paris, and other parts of France, Spain, &c. Hugo gives a most unfavourable account of the state of the bulk of the population, who are said to be ignorant, lazy, rude, and brutal in their manners, and depressed by poverty. The inhabitants of the mountains and plateaux suffer severely from the scarcity of fuel, and cold in winter. To obviate the influence of the latter, they lie in bed as long as possible; and have their cottages so planned that the family occupies the middle space between the cattle and the barn! Cantal is divided into four arrond., and returns four members to the Chamber of Deputies. Number of electors between 1100 and 1200. Public revenue in 1831, 4,512,327 fr. Chief towns, Aurillac, St. Fleurs, Murat. (*Hugo*, art. *Cantal*, *Dict. Geog.*; *Malte-Brun*, viii., Eng. transl.)

CANTELEU, a town of France, dep. Seine Inférieure, on the summit of hills which command the right bank of the Seine, at the entrance of the forest of Roumaris, 4 m. W. Rouen. Pop. 3591. It commands a fine view of Rouen and the hills by which it is surrounded, the course of the Seine as far as Elbeuf, the valley of Déville, and vast meadows.

CANTERBURY, a city, co., and bor., and the metropolitan see of England, co. Kent, in a fertile, well-cultivated valley, intersected by various branches of the Stour near the base of the N. Downs, 53 m. S.E. by E. London, lat. 51° 18′ N., long. 1° 53′ E. Pop. in 1821, 12,745; in 1841, 14,986. The town was originally enclosed by turreted walls (the remains of which still exist), and had four main streets branching from the centre, each terminating by a gateway, of which the W. only remains. The modern town consists of these and of four suburbs, continued in the direction of each, that on the E. side being much the largest. The High street, along which the main line of road from London to Dover passes, is of considerable width, with well-built houses on either side, and a handsome guildhall near the centre. The whole is well paved, lighted by gas, and supplied with water; the Stour, which flows through it, divides and makes an island of its W. part. There are eleven parish churches, but except that of All Saints (a plain modern structure in the High street) they are generally small and insignificant in external appearance. Within these few years they have generally undergone extensive repairs; the interiors have been renovated, and they contain several handsome monuments and tablets. The cathedral is a noble pile, and forms a conspicuous object from whatever part of the city it may be viewed. The approach to it from the street was formerly disfigured by a row of low, mean buildings. These have been removed, and a very fine view of nearly the whole S. front is now obtained. It stands on the site of the cathedral anciently founded by St. Augustine, in connexion with the monastery of Christ Church, established by Ethelbert, king of Kent, on his conversion to Christianity, by St. Augustine, in 597. The oldest part of the present structure dates from 1184: the nave, cloister, and chapter-house are two centuries later, during the best period of the pointed ecclesiastical style; the interior is very fine, and the styles of different ages skilfully adapted to each other; the choir is the most spacious in the kingdom, and the great stained window accounted one of the finest. The structure is of the usual cruciform shape, with a semicircular E. end, and is 513 ft. in length inside, the central tower being 235 ft. in height; under the whole is an old crypt or under croft. The ancient celebrity of this cathedral is partly attributable to its being associated with the first establishment of Christianity in England, but more especially to the murder of its famous archbishop, Thomas-à-Becket, at the foot of one of its altars, in 1171. Becket having been canonized, his bones were, in 1220, removed, with great pomp and expense, from the under croft, where they had been previously deposited, to the Trinity Chapel, built for the purpose. The anniversary of the day on which they were removed, was celebrated as a great festival down to the Reformation; and devotees, not only from every part of England, but of Europe, made pilgrimages to the shrine of the saint, to the enrichment both of the establishment and of the city generally.* A supposed pilgrimage of this sort, such as was then usual, was made the medium of a lively description of the characters and customs of his day by the earliest of our great poets; and has been rendered familiar to most of our readers by the excellent engraving of Stothard's "Canterbury Pilgrimage," in which the characters described by Chaucer are admirably represented. Erasmus, who saw the fane in undiminished splendour a short time previously to its anni-

* The estimation in which the principal altars at Canterbury were held by the public, may be inferred from the fact that in one year the contributions were:

At Christ's altar	L. 0 0 0
The Virgin Mary's	4 1 8
Thomas-a-Becket	254 6 5

(*Lyttleton's Hen. II.*, vol. vi., p. 369; see vol. iv., p. 363-369, of the same excellent work, for a full account of the circumstances connected with the death of Becket, and a character of that turbulent priest.)

hilation, gives a vivid account of its wealth and magnificence. In 1536, however, all high festivals occurring between July and September (which included the chief festival at Canterbury) were forbidden, on the ground of their taking people from the necessary labours of harvest. But this was merely a prelude to more energetic measures; and in the following year, Becket was thrust out of his place in the catalogue of saints, declared to have been a rebel, his bones being, at the same time, burned and scattered, and the treasury of his shrine appropriated to secular purposes. Subsequently to this vigorous and salutary exercise of the prerogative, the present collegiate establishment was ordained, consisting of a dean, twelve canons, six preachers, six minor canons, and other subordinates; three of the prebendaries being in the gift of the archbishop, the rest in that of the crown. In 1643, considerable injury was done to the cathedral in consequence of a parliamentary order to purify it, and subsequently the nave was converted into temporary barracks for Cromwell's troops. On the Restoration, the choir was refitted for divine service; and now, for many years past, considerable funds have been annually devoted by the chapter to the restoration and improvement of this magnificent old structure, which contains many interesting monumental remains; among others, that of the Black Prince. The diocess of Canterbury consists of the co. of Kent (with the exception of the city and deanery of Rochester, and of eight other parishes, which last are in the London diocess), and the parishes of Croydon and Addington, and district of Lambeth Palace, in the co. of Surrey.

The province comprises twenty other diocesses, and about 100 scattered parishes, called "peculiars:" its archbishop is primate and metropolitan of all England, and takes precedence of all great officers of state, and of all peers of the realm except those of the royal blood; he has also the privilege of conferring degrees in divinity, law, and physic. The revenues of the see amounted, at an average of the three years ending with 1831, to £19,182 a year. The succession is traced with tolerable regularity from St. Augustine, A.D. 597. Cardinal Pole was the 70th and the last archbishop under the Catholic system; and Dr. Howley, the present metropolitan, is the 91st. The site of the ancient palace, near the cathedral precincts, is occupied by modern buildings, leased to private individuals; the present archiepiscopal residence being at Lambeth. There are several dissenting chapels in the town, and a Jewish synagogue. A grammar school, founded by Henry VIII., is in the patronage of the dean and chapter; there are two masters, and fifty king's scholars. The other public structures are a sessions-house, theatre, assembly-rooms, philosophic institution (with library, museum, and lecture-room), and the subscription wells, whose mineral waters were discovered in the latter part of the 17th century, and were for some time in great repute, but have since been comparatively neglected; one spring is a pure chalybeate, the other impregnated with sulphur. The city generally has, of late years, undergone considerable improvement; the Donjon-field, and a large artificial mound in it, is laid out in public walks, and forms a pleasant promenade. There is little or no trade carried on except what is required for the supply of the town and its immediate vicinity. The silk trade, originally established by Flemish and French refugees (to whom Elizabeth granted the under croft of the cathedral for public worship), and that of silk and cotton, subsequently introduced, have ceased: but there is a considerable traffic in hops and agricultural produce, large quantities of which are sent from it to London; the business caused by its being one of the chief thoroughfares to the Continent is also tolerably extensive. The Stour is navigable from Sandwich as far as Fordwich, for lighters; and by its means, much of the heavier merchandise, such as coals, timber, &c., formerly reached the city; but a railway for goods and passengers between it and Whitstable, opened in 1830, has drawn the entire traffic to that line of communication. There are four market-places for the sale of meat, and poultry, fish, cattle, corn, and hops: there is a daily supply of provisions, but the chief markets are held, one on Saturday, and another, for fat stock, every alternate Tuesday: there is also an annual statute fair, which begins October 10, and lasts ten or twelve days, but little business of importance is transacted at it. Canterbury has long been noted for brawn, which forms an article of some importance in the trade of the place, and is sent to various parts of the kingdom. The hop-grounds of the vicinity afford employment to a large proportion of the labouring population of both sexes.

This city, which is a county of itself, contains within the walls fourteen parishes, besides ancient monastic precincts. Before the passing of the Municipal Act the city magistrates had no jurisdiction over these precincts, but they are all now under the authority of the civic powers, with the exception of the ville of Christchurch, in which the city and county magistrates have concurrent jurisdiction. The city boundaries having been by the same parliamentary enactment greatly extended, several parishes without the walls are now jointly under the city and county authority.

Canterbury has sent two mem. to the H. of C. from the 23 Edward I.: the right of voting being, previously to the Reform Act, in the resident and non-resident freemen; the freedom of the town being acquired by birth, marriage, apprenticeship, purchase, and gift. The present parl. bor. includes, besides the above par., parts of those of three others, and the bor. of Longport; and had, in 1831, a pop. of 16,112. No. of £10 houses not exactly known, but probably exceeding 1000. Registered electors, in 1837–38, 1835. The municipal limits comprise only the city and immediate suburbs, excluding several hundred acres of the agricultural part of the parl. bor. It is divided into three wards, and is governed by a recorder, mayor, six aldermen, and eighteen councillors.

This city is of great antiquity, as is proved by the notice of it in the itinerary of Antoninus, and by many Roman remains. A staple of wool was granted by Edward III.; but its chief importance previously to the Reformation was derived from its numerous religious establishments, and the influx of pilgrims of all ranks and conditions. It was also the most frequented thoroughfare to the Continent, and is noticed as such in the charter granted by Henry IV., where it is called "a city near the sea, and, as it were, a port and entrance by which foreigners come to the kingdom." During the last war, a large body of military were usually stationed here, for whose reception there are three sets of cavalry and infantry barracks. The outer walls of a castle of the Norman period still exist. (*Illustr. Views of Metrop. Church of Canterbury, and Hist. Descr.*, 4to, 1836; *Canterbury Guide, &c.*)

Canterbury, p. t., Merrimac co., N. H., 8 m. N. Concord, 416 W. Bounded W. by Merrimac river. Several small streams, issuing from ponds, flow into the Merrimac, and afford water power. Chartered in 1727. Three bridges over the Merrimac connect it with Boscawen. There is a Shakers' village in the S.E. part, which occupies over 1200 acres of land. They are distinguished for the neatness of their cultivation, their fine gardens, and their useful manufactures. The town contains four churches, one Congregational, two Free-will Baptist, and one Christian; three stores, one fulling-mill, one woollen-factory, one grist-mill, six saw-mills, three tanneries, two distilleries, twelve schools, 575 scholars. Pop. 1643.

Canterbury, p. t., Windham co., Ct., 12 m. N. Norwich, 41 m. E. Hartford, 368 W. Bounded E. by Quinnebaug river, over which is a bridge, connecting it with Plainfield. First settled in 1690. It contains three churches, two Congregational and one Baptist, five stores, one fulling-mill, two woollen-factories, one cotton-factory with 1000 spindles, six grist-mills, ten saw-mills, sixteen oil-mills, two tanneries, twelve schools, 538 scholars. Pop. 1791. Half a mile W. of Quinnebaug river, on elevated ground, is a pleasant village, built chiefly on two streets which cross each other at right angles, having at the centre a handsome public green, on the E. side of which stands a neat Congregational church.

Canterbury, p. v., Cornwall t., Orange co., N. Y., 69 m. S. Albany, 289 W. Situated 1 m. W. of Cornwall Landing, on Hudson river. It contains four churches, one Methodist, one Presbyterian, and two Friends, three stores, one woollen-factory, one cotton-factory, two tanneries, eighty dwellings, and about 500 inhabitants.

CANTON (called by the Chinese *Sang-Ching*, the provincial city), a marit. city of China, on its S. coast, cap. prov. Quang-tong, and residence of the provincial authorities; the principal emporium of the East, and the only port in China at which any Europeans are established. It stands on the N. bank of the *Chee-kiang*, or Pearl river, and the E. bank of its affluent, the Pe-kiang, 60 m. N.N.W. the Chinese sea, and 1200 m. S. by W. Pekin. Lat. 23° 7′ N., long. 113° 14′ 30″ E. It is nearly square, about 6 m. in circ., built generally upon level ground, except on its N. side, and is divided into two unequal parts, the outer, or Chinese, and the inner, or Mantchou (Tartar) city, which are surrounded by one wall, and separated by another. The walls are partly of sandstone and partly of brick, about 20 or 25 ft. thick, and from 25 to 40 ft. high. A line of battlements, with embrasures at intervals of a few feet, raised on the top of the walls all round, are in some places mounted with cannon. The city is farther defended by three forts on the land side, and two on Pearl river; but as a place of strength Canton is insignificant. The outer walls are pierced with twelve gates, and four others lead through the inner wall from the old to the new city; all of these are daily opened at dawn, and shut at an early hour of the evening, and strictly guarded, to prevent the exit or entrance of any one, except upon special occasions. The suburbs are, perhaps, as extensive and populous as the city itself. They fill up the space between the walls and the water's edge on both rivers; those on the W. side are much the largest. The city and suburbs are laid out in a precisely similar manner.

Streets numerous, and generally short and crooked, though sometimes of considerable length. They vary in width from about 2 to 16 ft., but are commonly from 6 to 8 ft. wide, paved with little round stones, and flagged, close to the houses, with larger ones, chiefly of granite. Each is closed by strong gates, secured and guarded at night; and streets of business are each devoted to one distinct branch of trade. Several canals, used for the conveyance of passengers and goods, intersect the city and suburbs. Two of the largest run along the outside of the E. and W. walls, and communicate by a third, which passes through the new city. Several smaller ones branch off from these on either side: they are crossed in many places by stone bridges. Houses built chiefly of brick; but mud, stone, and wood, are also used in their construction, and many of the habitations in the old city are said to be composed entirely of the former material. Near the river they are raised on wooden piles, and elsewhere are generally erected on solid foundations. Scarcely any are more than one story in height; the roofs of many are flat, and being surrounded with a breastwork, they form terraces, frequented by the family in the cool of the evening. The floors are usually composed of indurated mud, marble, or other flagstones, or tiles joined by cement. Windows small, the place of glass being supplied by paper, mica, thin shell, &c. Very little iron is used. The better sort of residences are built within a court, surrounded by a wall, 12 or 14 ft. high, and the interior of those of the opulent Chinese are in general very richly furnished. The houses of the middle orders, in which about 1-3d part of the population reside, have no court, nor any superabundant room; those of the lower orders, which are very numerous along the banks of the canals, in the N. part of the old city, and in the extreme parts of the suburbs, are wretched mud hovels, in which six, eight, ten, or sometimes even double that number of individuals, are crowded into one low, dark, and dirty apartment. The foreign factories, or *hongs*, as the Chinese call them, are situated in the S.W. suburb, where they extend from E. to W. for about 1½ furlong. They occupy a muddy flat, which has been gained from the Choo-kiang river, which they face, being separated from it by a quay about 100 yds. wide. This space, which is considered as belonging to the European merchants, is railed in, and forms a promenade, called Respondentia Walk. Near it is another small open space, about 50 or 60 yds. sq., walled in, and laid out as a garden, with gravel walks, flower-beds, &c. These narrow limits bound all the territory assigned to foreigners within the Celestial empire: even the quay and enclosure were not obtained without considerable difficulty, and the European merchants cannot erect a few steps on the water's edge without express permission from the authorities. There are thirteen hongs, or factories, including the British, Dutch, American, French, Austrian, Swedish, Danish, Parsee, &c. They are among the handsomest buildings in the city, and usually consist of three, four, or more brick or granite buildings surrounding a kind of close or court: two tolerable European hotels occupy portions of two of them. The English hong far surpasses the rest for elegance and extent; this, the Dutch, and the American hongs, are the only ones which have their national flags flying; the British flag, which had been hauled down at the expiration of the E. I. Company's charter, was again raised in April, 1837. (*Fanqui in China*, i., 240.) Contiguous to the hongs are three noted thoroughfares, Old and New China streets, and Hog Lane. The first two are among the best streets in the suburbs, rather wider than the generality of the public ways, pretty regularly paved, and lined with shops, in which a considerable amount of business is sometimes transacted. The filthy street, or alley, appropriately named Hog Lane, has an infamous notoriety as being the place where foreign seamen are intoxicated, robbed, and maltreated, and where, owing in a great measure to their imprudence, most of the disturbances have arisen which have led to serious disputes between the Chinese government and the foreign traders. Except in those devoted to the European trade, most of the shops open to the streets, and the most valuable kinds of wares are exposed, apparently without any protection from theft: but the sharp eye kept by the dealers, the gates at the end of the streets, which may be shut in an instant, and a most vigilant police, commonly prevent any frauds. Burglaries are rare, but loss by fire is frequent; to avert which, in the winter months, an additional body of watchmen occupy watch-towers erected on bamboo poles high above the roofs of the houses, and an alarm, given by bells or other means, quickly spreads through the city. The Chinese have very generally adopted the use of our engines, which they occasionally manufacture sufficiently well to answer the purpose; but Mr. Davis says, that the foolish notion of fatalism which prevails among the people makes them singularly careless as regards fire. In 1822 a fire broke out, which destroyed the British factory and above 10,000 other houses. The loss of the E. I. Company on this occasion was estimated at £500,000 sterling; 3-5ths in woollens. Canton is subject to inundations, which carry away many mud hovels, and frequently fill the lower apartments in the hongs to the height of several feet. The city is tolerably well supplied with water by several reservoirs, many wells, the canals, &c. and some fine springs on its N. side, both within and without the walls.

A large part of the pop. of Canton resides on the water. For 4 or 5 m. opposite the city, and both above and below it, the river is crowded with vessels and rafts of all descriptions and sizes. Every one is registered, and the whole number in the neighbourhood of the city is reported to amount to 84,000! (*Chinese Rep.*) Many of these, called egg-boats, which are no more than 12 or 15ft. long, about 6 ft. broad, and covered with a low bamboo shed, not only accommodate whole families, but contain coops in which large broods of ducks and chickens are reared. Others are immense rafts of timber, on which many individuals live. Some of the floating-houses are, however, handsome residences; their hull is large and broad, and the building in the centre is surrounded by a spacious wooden terrace, and supports another on its roof, both of which are ornamented with flowers, evergreens, &c. The narrow channel left between the stationary shipping and the shore is so incessantly thronged with barges, and craft of all kinds as to render landing or embarkation usually a difficult undertaking. Upwards of 120 different temples are enumerated in and adjacent to the city, and this does not include the whole number. The principal is the Buddhist temple on the island of Honan, in the river opposite Canton. Its buildings are numerous, and chiefly of brick: it covers, with its courts and gardens, six or eight acres, which are surrounded by a lofty wall. The stillness which reigns within this barrier forms a striking contrast to the turmoil which prevails without. The pathway to the great central temple leads through two wide court-yards laid out with gravel walks, and planted with rows of trees; in the gateway separating these courts are two fierce-looking colossal figures, seated on huge pedestals of granite. The principal hall is about 80 feet sq.; its walls are hung with crimson tapestry, tablets, &c., and its roof is ornamented with grotesque paintings and figures in relief; in the centre of the hall are three enormous, heavy, gilded figures, representing the "Past, Present, and Future," before which incense is continually burning. In various other halls there are shrines of inferior deities, and the remainder of the building is occupied chiefly by the dwellings and offices of the priests, of whom there are nearly 200. There are two other considerable Buddhist temples in the N.W. part of the old city, one of which, founded about A.D. 250, has about 200 inmates, and 3500 acres of landed property. In the old city there is also a Mohammedan mosque, with a dome and minaret 160 ft. in height: there are about 3000 Mohammedans in Canton. Without the walls, on the N. side, there is a lofty pagoda five stories high. There are several charitable institutions, but they are mostly of recent foundation. Vagabonds and beggars are very numerous in Canton, but not more so than in many large cities of Europe. A foundling hospital established in 1698, with accommodations for 200 or 300 children, and supported with about £840 a year; a retreat for the aged, infirm, blind, &c., supported by imposts on foreign ships bringing rice to the port, and a hospital for lepers, all on the E. side, without the city walls, are among the chief native charities. A general hospital in the S.W. suburb, established by an American missionary society in 1835, has been productive of much benefit. But the best maintenance for the poor consists in the manner in which both law and custom enforce the claims of kindred. In the old city are the residences of the lieut.-governor, Tartar-general, treasurer of the provincial revenue, literary chancellor, criminal judge, &c.; and in the new city, those of the prov. governor, and the grand *hoppo* or commissioner of the customs on foreign trade. These residences, and others of the hong-merchants, and some wealthy citizens, are little inferior, except as respects size, to the imperial palaces. In the old city is the grand hall for the examination of candidates for literary honours. There are fourteen high schools, and about thirty colleges in Canton; three of the latter have each 200 students. It is estimated that about half the inhabitants are able to read.

We have no information on which it would be safe to place any reliance as to the pop. of Canton. It is estimated in the *Chinese Repository* (vol. ii. 307,) at 1,236,000; but the data on which this estimate is made are far too loose to entitle it to any weight. Mr. Davis does not think it possible that 1,000,000 could be stuffed within its precincts; and it is probable that the pop. does not exceed half the number mentioned in the *Repository*.

The manufactures of Canton are numerous and important. It is said in the *Chinese Repository* that there are about 17,000 persons employed in the weaving of silk, and that 50,000 are engaged in the manufacture of all kinds of

cloth. There are said to be 4300 shoemakers; besides great numbers of persons who work in wood, brass, iron, stone, &c. The book trade is considerable. The persons engaged in these trades are all formed into distinct communities, and have each their own laws for the regulation of their business. But a large portion of the manufactures required for the consumption and trade of Canton are carried on at Fuh-shan, a large city a few miles W. from Canton. It may surprise our readers to learn that combinations to support the prices of goods and the wages of labour are very general, and are vigorously maintained.

Trade.—All the legitimate trade of China with European nations (Russia excepted) is conducted at Canton. The Russians are the only nation not permitted to have a resident or factory here; the commerce between the two empires, which is very extensive, centres at Kiachta, on the border of the empire, in Mongolia. The policy which has determined this regulation, as well as that which has fixed the only foreign mercantile port at almost the greatest possible distance from the capital, is probably dictated not only by a jealous fear of strangers passing the boundaries of the empire, but also from a desire, on the part of the government, to obtain the greatest amount of transit duties. The European trade, now so immense, originated in a commercial treaty between Emmanuel, King of Portugal, and the Emperor of China, in 1517. In 1634, some British ships first touched at Canton. In 1680, the direct trade of the E. I. Company with China commenced. In consequence of the extraordinary increase in the demand for tea, which, from being a luxury seldom seen, so late as the reign of Queen Anne, even in the houses of the nobility, has become a necessary of life, used by the poorest classes: the British trade with Canton has progressively and rapidly increased since 1700; and the great mass of the foreign commerce (which, inclusive of that of the junks, is estimated at 80,000,000 dollars yearly) is carried on by the English and Americans. Until the expiration of their charter, in 1834, the British trade was entirely in the hands of the E. I. Company; and during the last three or four years of their monopoly, that body imported tea (which has always been the principal export from China) into England to the amount of 31,500,000 lbs. annually. After the expiration of their charter, the quantity imported was still greater. In 1834, no less than 150 British vessels, with a united tonnage of 89,470 tons, resorted to Whampoa, near Canton, and brought away 43,641,900 lbs. of tea. The import of that article subsequently diminished; but it is still greater than at any period during the Company's monopoly. In the season from October 1, 1836 to April 10, 1837, the British traders took away 33,211,332 lbs. of tea, in proportion of 1 part green to 3¼ black. The total value of tea exported that year was 20,255,065 doll. Next to tea, raw silk and silk piece-goods are the principal articles of export; their aggregate value having amounted in 1837 to above 10,000,000 dollars; then follow treasure, sugar, and a host of inferior articles.

The trade between British India and China has been greater in amount and importance than that between China and England. The principal export from India was formerly raw cotton, chiefly from Bombay; but opium has long exceeded that article in importance, having latterly been clandestinely imported into China to so vast an amount, that its value has rather exceeded that of the tea exported. Very recently, however, the Chinese Government have, in appearance at least, set vigorously to work to suppress the trade in opium, and to exclude it from the empire. But those best acquainted with China believe that the taste for the drug is too firmly rooted among the population to admit of the government succeeding. The probability, however, seems to be, that the events that have occurred, particularly the confiscation of the opium belonging to British merchants, will lead to very material changes in the trade, and perhaps, too, in our relations with China.

A fleet of fifty or sixty vessels, of 300 or 400 tons burden, are annually despatched to Canton from the United States, and the whole of the American trade is valued at about 10,000,000 dollars. About the same number of pounds of tea are annually imported into America. The Dutch usually send sixteen or seventeen vessels during the season; but many come from Batavia; and the import direct of tea from Canton into Holland, is not more than 3,000,000 lbs. a year. About three or four French ships annually have appeared of late years at Whampoa: the trade of Spain, Sweden, Denmark, and Austria with Canton is very small. For farther and full details as to the commerce of Canton, see *Commercial Dictionary*.

The Choo-kiang opposite Canton is deep enough for vessels of 800 or 1000 tons burden; but foreign ships only come up the river as far as Whampoa, about 15 m. below the city, loading and unloading by means of native boats. The Hong merchants are the only individuals legally recognised as traders with foreigners by the government, and no foreign ship is allowed to come up the river until a Hong merchant has become security for the payment of her import and export duties, the good behaviour of all her crew, &c., while within the limits of the empire. There were, until lately, eleven Hong merchants, who formed a joint-stock partnership to indemnify each other for losses to which they were continually subject, from bad faith on the part of those they dealt with, the turbulent behaviour of foreigners, the exactions of the mandarins, &c. There are now twelve separate firms, the coalition between them having been abolished. These merchants enjoy great consideration, and frequently accumulate large fortunes: but their situation in other respects is not very enviable; they live in a state of constant anxiety lest their securities should misconduct themselves; are the marked victims of men in power; and, having once undertaken their office, are never suffered to retire. But other native traders, called *outside merchants*, are allowed to deal with foreigners; their number being unlimited, the greatest competition exists among them. It is said that they also are closely watched by the mandarins, and are sometimes squeezed out of sums of money on various pretexts. The state officers of this city, receiving little or no salary from the government, but frequently purchasing their appointments, derive their profits chiefly by extortion; and Canton has the character of being not only the most licentious, but the most corruptly-governed city of the empire. We incline, however, to think that in these respects it is not so bad as is represented; and that foreigners, from impatience of the restraints under which they are placed, exaggerate the rapacity and capriciousness of the Chinese, in order to prejudice their governments against them, and to induce them to adopt coercive measures.

Canton is peculiarly the emporium of Chinese manufactures, and the shops are crowded with articles of the neatest and most minute workmanship. The markets devoted to eatables are less attractive to European tastes: puppies, cats, owls, horse-flesh, worms, slugs, and even snakes, and other reptiles, are exhibited as tempting delicacies. All are sold by weight, and a cat and a pheasant frequently fetch the same price. The arts of *puffing* are not forgotten in Canton; in the suburbs, staring labels and boards are common enough over the shop doors inviting the custom of the passengers by means of laudatory mottos, &c., written in English and other languages; and many of the Chinese shopkeepers have acquired sufficient English, and the free and easy style so well adapted to captivate the British seamen, and make them part with their money. The streets are generally clean, but abound with cripples and miserable objects, beggars, and vagabonds of all descriptions. No wheeled carriages are ever seen in them; the only vehicles used are sedan chairs slung on poles, which some of the government functionaries and more opulent natives are privileged to use. They are not allowed to Europeans, who are also destitute of any place of public amusement, prohibited entering the walled city, and interdicted all female society.

As soon as the season for business has terminated, an edict from the emperor comes to Canton, ordering the removal of the foreign merchants to Macoa, where they remain for several months. During the summer, excursions are made by both Chinese and Europeans to Fahtée, a village about two miles higher up the river, above Canton, where there are some gardens laid out in the English style. The scenery in this direction is delightful. "Beyond the city, and when clear of the buildings, and the crowds of boats which throng the passage, the river winds about in a beautifuy serpentine manner. The country opens gradually, and displays both hill and dale covered with luxuriant vegetation. On every remarkable eminence pagodas are erected, and *ghos*-houses adorn the banks in every direction. In the midst of the stream, often dividing it into two or three separate channels, are romantic islands, either under the hand of the agriculturist, or covered with trees to the water's edge." (*Fanqui in China*, iii., 203.) Canton, although extremely hot in summer, is much colder in winter than might be expected from its lat., and fires are often agreeable.

According to native historians, Canton was founded by one of the last sovereigns of the Chow dynasty, who reigned about 2000 years ago. About the year 700 it became a regular mart for foreign trade, and the residence of an imperial commissioner of customs. The former city was utterly destroyed in 1650 by the Tartar dynasty, now on the throne, after a siege of eleven months, during and subsequent to which vast numbers of persons are said to have perished. (*Chinese Repository, Cant.; Davis, The Chinese, &c.; Hamilton's E. I. Gaz.; Downing's Fanqui in China; Official Tables, &c.*)

CANTON, p. t., Oxford co., Me., 30 m. W.N.W. Augusta, 602 W. Watered by Androscoggin river. Incorporated in

1821. It has three stores, eight schools, 370 scholars. Pop. 919.

CANTON, p. t., Norfolk co., Mass., 16 m. S. by W. Boston, 426 W. Bounded N.W. by Neponset river, which, with its branches, affords water-power. The Boston and Providence rail-road passes through it, and has here a bridge or viaduct 600 feet long, 63 feet above its foundation, supported on a number of arches, which cost $80,000. It is a substantial structure of granite. It has four churches, one Congregational, one Unitarian, one Methodist, and one Baptist; nine stores, three furnaces, five forges, two woollen-factories, four cotton-factories with 1868 spindles, two grist-mills, one saw-mill, one academy, 16 students, seven schools, 506 scholars. Pop. 1995.

CANTON, p. t., Hartford co., Ct., 13 m. N.W. by W. Hartford, 339 W. First settled in 1740, incorporated in 1806, taken from Simsbury and New Hartford. Watered by Farmington river. It contains the flourishing manufacturing village of Collinsville. It has three churches, two Congregational and one Baptist; three stores, one fulling-mill, three saw-mills, one powder-mill, eight schools, 310 scholars. Pop. 1736.

CANTON, p. t., capital of St. Lawrence co., N.Y., 223 m. N.N.W. Albany, 495 W. Watered by Grass river and its branches, which afford water-power. A natural canal, five miles long, connects Grass with Oswegatchie river. It contains eight stores, one furnace, three fulling-mills, four grist-mills, three saw-mills, three tanneries, one academy, 223 students, 22 schools, 854 scholars. Pop. 3465. The village, situated on the E. side of Grass river, contains a court-house, jail, county clerk's office, three churches, one Presbyterian, one Methodist, one Union; an academy, six stores, one furnace, one grist-mill, two saw-mills, one clothier's works, a marble factory, 125 dwellings, and about 800 inhabitants. A bridge here crosses Grass river.

CANTON, p. t., Bradford co., Pa., 136 m. N. Harrisburg, 246 W. Watered by Towanda creek and its tributaries. It contains two stores, two fulling-mills, three grist-mills, six saw-mills, eight schools, 407 scholars. Pop. 1254.

CANTON, t., Washington co., Pa. Drained by Chartier's creek and its tributaries. Washington borough lies partly in this town'p. It contains one store, one fulling-mill, one woollen-factory, one flouring-mill, one grist-mill, two saw-mills, five schools, 230 scholars. Pop. 1132.

CANTON, p. t., capital of Stark co., O., 124 m. N.E. Columbus, 313 W. It has 1284 scholars in schools. Pop. 3209. First settled in 1806. The village is situated between two branches of Nishimillen creek, which unite 1½ mile below the village, and are crossed by four bridges, two of which are two hundred feet long, each. It contains a court-house, jail, three brick county offices, a market house, an academy, a bank, a library company, a mechanics' society, four churches, one Presbyterian, one Methodist, one German Lutheran, and one Roman Catholic; eighteen or twenty stores, two printing-offices, 300 dwellings, many of them of brick, and neat, and about 1800 inhabitants. Three of the churches are built of brick.

CANTON, p. v., capital of Cherokee co., Ga., 125 m. N.N.W. Milledgeville, 670 W. Situated on the N. side of Etowah river. It contains a court-house, and a number of stores and dwellings.

CANTON, p. v., Trigg co., Ky., 235 m. S.W. by W. Frankfort, 762 W. Situated on the E. side of Cumberland river, forty miles from its mouth. It has great facilities for navigation, and is the centre of an extensive trade. Pop. about 200.

CANTON, p. v., capital of Madison co., Miss., 23 m. N. by E. Jackson, 998 W. Situated on a branch of Big Black river. It is connected with Jackson by a rail-road, and thence with Vicksburg. It contains a court-house and a number of stores and dwellings.

CANTON, t., Wayne co., Mich. Drained by head waters of branches of Rouge river. It contains a saw-mill, and 243 scholars in schools. Pop. 1081.

CANTONMENT GIBSON, p. v., and military station, Indian Ter., 221 m. W.N.W. Little Rock, 1286 W. Situated on the E. side of Neosho river, 5 m. above its entrance into Red r. It contains a United States fort and garrison, for the protection of the western frontier.

CAPACCIO or CAPACCIO NUOVO, a town of Naples, prov. Principato Citra, cap. cant., 25 m. S.E. Salerno, and 4 m. from the sea. Pop. 2500. It has two fine parish churches and a convent. The cathedral is at Capaccio Vecchio, a small place in the vicinity, destroyed in the 12th century by the emperor Frederic II. The inhabitants having fled to S. Pietro, gave it the name of Capaccio Nuovo.

CAPE ANN, Mass. Situated on the N. side of Massachusetts bay. The North light is in 42° 38′ 18″ N. lat., and 70° 34′ 44″ W. long. The South light is in 42° 38′ 10″ N. lat., and 70° 34′ 44″ W. long.

CAPE BRETON, a large and most irregularly shaped island of British America, separated from the N. extremity of Nova Scotia, of which prov. it is a part, by a narrow, navigable channel. It forms the S.E. boundary of the gulf of St. Lawrence, and lies between 45° 27′ and 47° 4′ N. lat., and 59° 45′ and 61° 38′ W. long. Area estimated at near 4000 sq. m. Pop. (in 1839) probably about 35,000. Militia (in 1834) 6651. The coast is, for the most part, rocky and elevated; and it is everywhere indented by deep gulfs and arms of the sea, by one of which, the Bras d'Or, it is very nearly separated into two great divisions. This inland sea has deep water throughout, and affords the greatest facilities to navigation. The island has many fine harbours; that of Sydney, the cap., on the E. coast, being one of the best in the prov. Louisbourg, so famous in the history of America in the reign of George II., lies on the S.E. coast of the island. It was a strongly fortified settlement established by the French in 1720, and reckoned the key of their possessions in this part of the world; but having been taken by the English in 1745, was first dismantled, and afterward entirely abandoned.

The *climate* of Cape Breton is subject to considerable extremes. The mean summer heat is said to be 80° Fahr., while in winter 20° below zero is not a very uncommon degree of cold. The temperature, however, is subject to more variation, and is less uniformly severe than the continent in the same parallel. The frost usually sets in about Dec., and between that and the end of April there are sometimes intervals of a week or two of mild weather. The spring is short, and vegetation very rapid: May is the sowing season, and the harvest is gathered in Aug. and Sept: on the E. coast, the summers are usually dry; on the W. they are usually more moist.

This island terminates a low mountain range, which traverses the whole province of Nova Scotia (from S.W. to N.E.), and consists of granite, trap, and slate, in alternating strata; the slate being in narrow, and the trap in broad belts: beyond these, are grauwacke, sandstone, limestone, gypsum, and several other formations, which for the most part rest on an amygdaloid base. In this more recent portion are extensive beds of coal, said to resemble that of Newcastle, and well adapted for steam and other general purposes; it also yields an abundance of excellent gas. Cape Breton is supposed to contain a sufficiency of this to supply the world for centuries. The mines at present in work are near Sidney: they were leased by the crown (in 1827) for 60 years to the General Mining Association, on payment of £3000 sterling a year for 20,000 chaldrons, and 2*s.* currency for every chaldron beyond that quantity; which terms embrace the other mines of the prov., wrought by the same company, who have several steam-engines, and employ regularly about 500 men. Since the commencement of their operations, the demand has steadily increased, and is supposed likely to proceed in an increasing ratio, from the circumstance of the only available mines of the U. States, at present, being those of anthracite, in Pennsylvania, to which, for general purposes, the Cape Breton coal is much superior: the produce, in 1837, was 70,000 tons; above half of which went to the States, the remainder to Nova Scotia and Newfoundland: the price at Sydney was 14*s.* 6*d.* per ton, currency. These mines were first opened about 50 years since, and have continued from that period to be wrought; but, previously to 1827, on a very imperfect system, and to a very limited extent. Iron and copper have also been met with, but neither has yet been attended to. Lime (gypsum) well adapted for agricultural purposes is abundant, and at places perfectly accessible to shipping: there are also brine springs of great strength, which it is supposed may be in time made available, by means of the refuse coal, in the manufacture of salt for the fisheries: excellent freestone for building purposes is also met with.

The vegetable products resemble those of the neighbouring continent, the woods being composed of hemlock, black and white spruces, the white and red pines, oak, beech, birch, maple, &c.: the timber trade has been gradually diminishing. The greater part of the shipments at present are from the W. basin, opening from the little Bras d'Or; on the Atlantic side, the spruce firs are mostly of stunted growth, but supply fuel to the different fishing settlements: these, however, are conducted with little energy, and to a much more limited extent than the great capabilities of the stations would seem to admit of. The fish most commonly taken are cod, halibut, haddock, mackerel, shad, smelts, and alewives; sturgeon and salmon are also caught in the streams, and these and the lakes abound with trout and perch. The inhabitants engaged in the fisheries are chiefly French Acadians, and Scotch, from the Western Islands. Those engaged in the timber trade and agriculture are chiefly Scotch and Irish emigrants, and a few are the descendants of U. S. loyalists. Those engaged in the coal-mines are mostly skilled labourers from Scotland. There are also about 300 Indians, for whom some tracts are reserved, on which they cultivate maize and potatoes: they are an inoffensive tribe, and support themselves chiefly by

fishing; wandering along the shore in summer, and returning to a fixed winter station. The returns relative to farming produce, cattle, &c., show the same figures for several successive years, so that probably little reliance can be placed on them. The quantity of land in cultivation, in 1831, was said to be 85,000 acres (*Bouchette*): the common kinds of grain, maize, and potatoes, are cultivated; but the island does not, at present, produce sufficient for its own consumption. The exports consist of timber to the U. Kingdom, fish to the W. Indies, and coals to the U. States, and corn. The imports consist of British manufactured goods; corn, meal, &c., from the U. States; and colonial products. Total value of the imports, in 1834, £10,501: of the exports, £22,188. Between 300 and 400 vessels, varying from 20 to 200 tons, are registered in the island, and some ship-building is carried on, which is included in the provincial returns.

Sydney, which is the chief settlement, contains 80 or 90 houses, all with gardens attached, and regularly disposed, so that its appearance is very neat and respectable; the courts of justice for the island, and the residences of the gov. officers are in this little town, which was founded in 1823: its pop. is between 500 and 600. The rest are all small fishing settlements, on different parts of the seacoast, or round the borders of the Bras d'Or. Cape Breton is a co. of the province of Nova Scotia, and returns two members to the H. of Assembly in Halifax. It is comprised within the diocess of the bishop of Nova Scotia; but the great majority of the inhab. are Catholics. Legal provision is made for the poor, and there are also other local assessments to defray county charges. The French formed the first settlement on it in 1712; a detachment of British troops from New England took possession of it in 1745, and from that period it has remained under British government. (*Bouchette's Brit. Dom.; Lord Durham's Report and Append.; Geog. Trans.; M'Gregor's Brit. America, &c.*)

CAPE CHARLES, Va. Situated on the N. side of the entrance into Chesapeake bay, 12 m. N. of cape Henlopen, opposite. It is in 75° 58′ N. lat., and 37° 12′ W. long.

CAPE CLEAR, a bold promontory, rising 400 ft. above the level of the sea, on the S. side of Clare island, near the W. extremity of St. George's Channel, and about 7 m. S.E. from Baltimore, co. Cork, Ireland. Adjoining the cape is a light-house of the first class, with revolving lights, having the lantern elevated 455 ft. above the level of the sea. The light-house is in lat. 51° 28′ 3″ N. long., 9° 29′ 20″ W. This is the point from which ships leaving St. George's Channel for the W. usually take their departure, and those arriving prefer making it their landfall.

CAPE COD, the S.E. point of Massachusetts bay. The whole peninsula comprises Barnstable county, which see. It projects from the S. shore of Massachusetts, is 65 miles long, and from 1 to 20 broad, and has been compared, in shape, to a man's arm, curved inward at the elbow and the wrist. The light-house at the extremity of the cape, is in 42° 2′ 22″ N. lat., and 70° 4′ 9″ W. long.

CAPE DE VERD ISLANDS (Port *Ilhas Verdes*), a group in the N. Atlantic ocean, belonging to Portugal, between lat. 14° 20′ and 17° 20′ N., and long. 22° 20′ and 25° 30′ W., about 320 m. W. cape de Verd, on the W. coast of Africa, which, as well as the islands, derives its name from the greenish tinge given to the adjoining sea by the abundance of seaweed. The group consists of ten or twelve islands, besides islets and rocks, having a united area of about 1700 sq. m., and a pop. (1831) of 88,460; 30,000 of whom are said to have been swept off by a famine in 1833. (*Cannabich.*) They are, in general, mountainous, rocky, and very ill supplied with water; are all evidently of volcanic origin; and in Fogo, the most elevated of the group, an active volcano still exists. The heat is extreme from November to July, and for the rest of the year storms and fogs are prevalent, and the climate is exceedingly unhealthy. Droughts are of frequent occurrence; and sometimes, as was the case previously in 1833, no rain falls for three or four years together. The soil, where not composed of volcanic matters, is chiefly calcareous or sandy, dry, stony, and in many parts barren. Vegetation is consequently partial; but in various places it is very vigorous, and rice, maize, bananas, oranges, melons, pomegranates, and other fruits, both of Europe and the tropics, grow abundantly. The first two products constitute the chief food of the inhabitants; but agriculture is neglected, and the wheat that is consumed is brought from America. This, however, is not so much a consequence of the poverty of the soil, or the indolence of the inhabitants, as of the rapacity and short sightedness of the government which fleeces the cultivators of everything that can, under any pretext, be laid hold of. Oranges, lemons, melons, &c., come to great perfection, and the guavas, figs, sweet potatoes, and gourds are excellent. Vines and sugar-canes are cultivated to some extent; but the making of wine is prohibited. Indigo and cotton are indigenous. One of the principal products is orchilla weed, which here attains to great perfection; it is monopolized by the government, and is supposed to yield about £50,000 a year. Some parts are well wooded, chiefly with the tamarind-tree, Adansonia, palms, &c. Goats, asses, and poultry are the most numerous domestic animals; monkeys, wild cats, wood pigeons, and other birds, and turtles are plentiful. There is no dangerous animal; but clouds of locusts often do much damage to the crops. Chief manufactures those of leather and salt. Notwithstanding the severe droughts, the actual produce of these islands in cotton, indigo, fruits, salt, goat-skins, and turtle-oil, might give them a considerable value under a more intelligent government. The other chief articles of export are cotton, indigo, some cattle, ox hides, cotton cloths and rum. St. Jago, the principal island and most southerly of the group, contains the towns of Ribiera Grande, formerly the cap.; but, during the dry season, the governor-general now usually resides at Port Playa, which has a good harbour, and is occasionally touched at by vessels bound for India. Porto Grande, in the island of St. Vincent, is, however, decidedly the best harbour in the group. Ships in it are completely sheltered from wind and sea. In St. Nicolo, the island second in importance, very good cotton stuffs, stockings, &c., are made. The pop. are a mixed race of Portuguese and negroes; but all have an exceedingly dark colour.

These islands were first discovered in modern times, in 1450, by Antonio de Noli, a Genoese navigator in the service of Prince Henry of Portugal, by which nation they were soon after taken possession of, and colonized. (*Malte Brun*, iv., 467–469; *Purdy's N. Atlantic Ocean, &c.*)

CAPE ELIZABETH, t., Me. It consists chiefly of a peninsula, 6 m. S. of Portland. The S. point is cape Elizabeth, in 43° 33′ N. lat., and 70° 11′ W. long. In the E. part of the t., at the entrance of Portland harbour, is another cape, on which is a light-house. The township has nine schools, 670 scholars. Pop. 1666.

CAPE FEAR, N. C. Situated near the mouth of Cape Fear river, on the S. end of Smith's island, in 33° 48′ N. lat., and 78° 9′ W. long. It has a dangerous shoal, called from its form, the Frying-pan.

Cape Fear, river, N. C. It is formed by the union of Haw and Deep rivers, and after an entire course from its remote sources of about 350 miles, it enters the Atlantic through a broad estuary by two channels, one on each side of Smith's island. Immediately above Wilmington, 35 m. from the ocean, it receives the N. E. branch or Clarendon river. It affords the best navigation of any river in the state. Sea vessels navigate to Wilmington, and steamboats proceed 90 m. from its mouth to Fayetteville, and small boats above the forks.

CAPE FLORIDA, situated on the E. coast of Florida, on Key Biscayno, in 25° 44′ N. lat., and 80° 34′ W. long. The island is 7 m. long and 2 broad, and the light-house is on the W. end. It was burned by the Indians in the Seminole war.

CAPE GIRARDEAU, county, Mo. Situated in the S.E. part the state, and contains 864 sq. m. Drained by head branches of White Water river. Bounded E. by Mississippi river. First settled by French and Germans in 1794. It contained in 1840, 12,857 neat cattle, 10,300 sheep, 38,598 swine; and produced 41,235 bushels of wheat, 461,635 of Indian corn, 111,383 of oats, 24,577 of potatoes, 229,191 pounds of tobacco, 9934 of cotton, 37,318 of sugar. It had twenty-six stores, seven flouring-mills, sixteen grist-mills, sixteen saw-mills, twelve tanneries, thirty-five distilleries, one printing-office, one weekly newspaper, seven schools, 175 scholars. Pop.: whites, 8020; slaves, 1325; free coloured, 14; total, 9359. Capital, Jackson.

Cape Girardeau, p. v., Cape Girardeau, Mo., 207 m. S.E. Jefferson city, 850 W. Situated on the W. bank of Mississippi river, 45 m. above the mouth of the Ohio. It has an excellent landing, and contains ten or twelve stores, a steam saw-mill, one printing-office, one weekly newspaper, two academies, 40 students, one school, 30 scholars. Pop. 1728. It was formerly the capital of the county.

CAPE HENLOPEN, Del. Situated on the S. side of Delaware bay, 18 m. S.W. of cape May, in 36° 47′ N. lat., and 75° 6′ W. long.

CAPE HAYTIEN, a sea-port town of Hayti, originally called by the Spaniards, Guarico, and afterwards by the French, Cape François, or Le Cap, on the N. shore of the island, 90 m. N. Port-au-Prince, lat. 19° 46′ 20″ N., long. 72° 14′ W. Pop., probably from 12,000 to 16,000. This town, formerly the cap. of the island, was, previously to the revolution, "remarkably beautiful, and must have been, during its glory, the most agreeable residence in the W. Archipelago." Streets broad and well paved; houses chiefly of stone, with handsome squares, large markets, and a copious supply of water. "But now little more is to be seen than the traces of its former grandeur: even in the Place d'Armes, the handsomest square in it, some of the finest houses are

unroofed, and plantain trees are growing in the middle of the ruins. The church, which was handsome, is in ruins, as are the theatre, government-house, Jesuit's college," &c. (*Mackenzie.*) It is built on the verge of a very extensive, well-watered, and fruitful plain; but being screened on the N. and W. by a mountain (Morne Cap), it is exposed to all the violence of the sun's rays, and is, in consequence, not very healthy. The harbour and road, to the E. and S. of the town, are protected on the N. by a projecting tongue of land. The entrance is rather difficult; but the anchorage is good, and the quays handsome. The defences towards the sea are respectable. The arsenal was constructed in the reign of Louis XV. Under the French, cape Haytien was, as well as Port-au-Prince, occasionally the seat of government; and it continued to enjoy this distinction under Toussaint and Christophe. Its trade, though greatly fallen off, is still very considerable. It is principally carried on with the U. States. (*Mackenzie's Notes on Hayti*, i., 152, &c.)

CAPE HORN, a famous promontory of S. America, commonly regarded as the S. extremity of that continent. In point of fact, however, Cape Horn does not belong to the continent, but to a small island of the same name, the most S. of the Tierra del Fuego group, separated from the continent by the straits of Magellan, or Magalhaens. Cape Horn is the most S. point of the island; and is high, black, precipitous, destitute of all vegetation, and having a most desolate appearance. According to Weddell, it is in lat. 55° 59′ 21″ S., and long. 67° 14′ W.; Malespina places it in lat. 55° 58′ 30″ S., and 67° 21′ 15′ W. The dangers attending the doubling of cape Horn have, in consequence of the improvements in navigation, been very greatly diminished. The coast may be approached with comparatively little danger; the water being deep, and free from either rocks or shoals. Different opinions are entertained as to the proper season for passing the cape. Captain Hall prefers the summer (that is, the winter of the N. hemisphere) on account of the greater length of the day, and the comparative fewness of icebergs and floating masses of ice, which are always dangerous. (*Hall's S. America*, ii., Append. 16.)

CAPE ISLAND, p. v., Lower t., Cape May co., N. J., 108 m. S. Trenton, 218 W. Situated on a beach of the Atlantic ocean, near the S. point of the state. It is much frequented as a watering place, and contains six boarding-houses, three of them large, besides several fine hotels. The adjacent waters furnish the finest opportunities for bathing and fishing.

CAPE LOOKOUT, situated on the coast of N. C., on the S. point of an island which encloses Core sound, in 34° 42′ N. lat., and 76° 37′ W. long.

CAPE MAY, N. J. Situated on the N.E. side of the entrance into Delaware bay. It is 18 m. N.N.E. of cape Henlopen, in 38° 57′ N. lat., and 74° 32′ W. long. It has a light-house. It was named from Cornelius Jacobse Mey, a Dutch navigator, who visited the Delaware in 1623. He called cape Henlopen, cape Cornelius, from his Christian name.

CAPE MAY, county, N. J. Situated in the extreme S. part of the state, and contains 252 sq. m. Bounded N. by Tuckahoe river. It has a sand-beach along the coast, from ½ a mile to 2 miles in width, covered with grass and penetrated by inlets, by which the ocean enters marshes, forming lagunes or salt-water lakes. It contained in 1840, 4875 neat cattle, 5778 sheep, 2268 swine; and produced 8692 bushels of wheat, 7373 of rye, 69,975 of Indian corn, 882 of buckwheat, 24,404 of oats, 14,394 of potatoes. It had twenty-nine stores, eight grist-mills, twelve saw-mills, twenty schools, 992 scholars. Pop. 5394. Capital, Cape May, C. H.

CAPE MAY C. H., p. v., Middle township, capital of Cape May co., N. J., 93 m. S. Trenton, 203 W. It contains a court-house, a jail of stone, county offices of brick, and fire-proof; a Baptist church of brick, and ten or twelve dwellings.

CAPE OF GOOD HOPE, a celebrated promontory near the S.W. extremity of the African continent, lat. 34° 23′ 40″ S., long. 18° 32′ 25″ E. It was first seen by Europeans (in modern times) in 1486, Bartholomew de Diaz, a Portuguese commander, having been its discoverer. Diaz, however, merely saw it; the violence of the winds, the shattered condition of his ships, and the turbulence of his crews, prevented him from doubling it; and these circumstances doubtless induced him to name it *Cabo Tormentoso*, or "Stormy Cape." But his sovereign, John II., of Portugal, believing it to be at or near that remote extremity of Africa which the Portuguese had been so long endeavouring to reach, designated it *Cabo di Buena Esperanza*, of which the name we give it is a translation. Vasco de Gama doubled it in 1497, after which it continued for more than a century and a half to be indiscriminately resorted to by European navigators. (For the rest of its history, see succeeding article.)

CAPE OF GOOD HOPE (COLONY OF), an extensive colony, or rather territory, so called from the above cape, belonging to Great Britain, in S. Africa, comprising the greater portion of the extremity of that continent S. of lat. 29° 30′, and between long. 17° and 27° 30′ E. It has N. the country of the Boojesmans (Bushmen), Hottentots, &c., from which it is separated N.W. by the Koussie or Sand river, and N.E. for a considerable distance by the Nu-Gariep, afterward called the Orange river; E. it has the country of the Kaffers or Caffres, from which it is in part separated by the Keiskanna river; and S. and W. the Indian and Atlantic oceans, on which it has a coast line of about 1150 m., broken by numerous bays, the principle of which are St. Helena, Saldanha, and Table bays on the W., and False bay, St. Sebastian's, Mossel, Plettenburg, St. Francis, and Algoa bays on the S. coast. Length of the territory, E. to W., about 550 m.; average breadth, N. to S., 240 m., giving an area of nearly 130,000 sq. m. Pop., subdivisions, &c., according to the Cape Register of 1838, are as follow:

Provinces.	Districts.	Area in sq. m.	Whites. Males.	Whites. Fem.	Blacks. Males.	Blacks. Fem.	Total. Males.	Total. Fem.	Pop. to sq. m.	Births.	Marriages.	Deaths.	Chief Towns.
Western	Cape Town	9½	6,772	7,350	2,971	2,731	9,743	10,000	2,078	557	178	327	Cape Town (the cap.).
	Cape District	3,584	4,360	3,910	2,453	2,387	6,943	6,237	4	397	36	367	Simon's Town.
	Stellenbosch	2,380	3,773	3,347	5,704	4,154	10,006	7,878	4	244	108	170	Stellenbosch.
	Worcester	24,100	2,970	2,055	1,890	1,599	4,860	4,654	3½	374	40	237	Worcester.
	Clanwilliam	18,011	3,600	2,400	509	506	4,109	2,906	. .	95	16	180	Clanwilliam.
	Swellendam	3,000	6,887	6,509	1,772	1,543	11,245	10,614	. .	651	75	239	Swellendam.
	Beaufort	20,000	1,470	1,446	1,507	1,265	2,597	2,911	100	177	43	91	Beaufort.
	George	4,545	1,953	1,723	2,276	2,239	5,231	3,962	2	229	77	40	George Town.
Eastern	Colesberg	. .	1,100	1,000	. .	. .	1,100	1,000	. .	. .	60	. .	Colesberg.
	Albany	1,792	6,000	5,500	105	123	6,105	5,623	. .	709	40	150	Bathurst.
	Somerset	7,168	6,300	5,600	200	260	7,200	6,460	. .	1,000	101	172	Somerset.
	Graaf Reinet	22,000	3,840	3,671	3,657	3,750	7,517	7,421	1 in 1½	546	125	341	Graaf Reinet.
	Uitenhage	9,000	2,469	2,150	3,393	2,993	5,862	5,157	1	380	76	92	Uitenhage.
	Total	. .	51,464	48,569	27,369	24,294	82,913	75,823	. .	5,219	969	2,406	

SUMMARY of the Population.

	Males.	Females.	Total.
Whites	51,464	48,569	100,013
Blacks	27,369	24,294	51,663
	78,833	72,863	
Aliens and resident strangers			2,500
The army			2,500
Grand Total			156,516

Topography.—The whole country consists of three successive plateaus increasing in elevation according to their distance from the sea, and separated from each other by as many chains of mountains. The first great chain running E. and W., the Lange Kloof, or Long Pass, "encloses between it and the S. coast an irregular belt of land from 20 to 60 m. in width, indented by several bays, covered with a deep and fertile soil, intersected by numerous streamlets, well clothed with grass and small arboreous or fruiteseent plants, well wooded in many parts with forest trees, supplied with frequent rains, and enjoying, on account of its proximity to the sea, a more mild and equable temperature than the more remote and interior parts of the colony." (*Barrow.*) The next great chain, the Groote Zwarte Bergen (Great Black Mountain), is considerably more rugged and lofty than the first, reaching sometimes to 4,000 feet in height, and consisting in many places of double and even treble ranges. The belt or terrace enclosed between it and the first chain is about the mean width of that between the first and the sea. Its surface is very varied; it is composed in some parts of barren hills, in others, of naked, arid plains of clay, called *karroo*, and again in others, of fertile and well-watered patches of land. The temperature is here less uniform than in the grounds skirting the sea. The third great mountain chain, the Niewveldt Gebirgte, between lat 39° and 33°, is continuous towards the E. with the Schneeuw-bergen (Snow Mountains), the highest range in S. Africa, the loftiest summit of which is estimated at

not less than 10,000 feet in height, and is covered with snow for nearly half the year. Between this and the second chain is the *Great Karroo*, an arid, desert plain, nearly 300 m. in length by from 80 to 100 m. in breadth. "This is not a sandy plain, and bears no resemblance to the Sahara or Arabian deserts. It consists of a sort of table-land, or elevated basin, thinly covered with an argillaceous soil, largely impregnated with iron, upon a substratum of rock or gravel. Some large portions of it are perfectly level, but in others the surface is diversified by slaty hills and eminences, some of which would appear considerable save for the lofty mountains which bound the Karroo on all sides except towards the E., where it extends into Camdeboo. Its medium height above the level of the sea is estimated at about 3000 feet. It is crossed by many beds of rivers, or rather torrents, most of which run from N. to S., and find an exit for their waters to the coast through a few breaks in the S. chain of mountains. These rivers, however, are for the greater part of the year either entirely dried up or furnish only a few scanty pools barely sufficient for the wild animals, zebras, quaggas, ostriches, &c., which frequent this inhospitable region. Not unfrequently even those brackish pools and fountains also fail, as was the case at the time of our journey; and then the Karroo becomes almost impassable by man, and a large portion of it uninhabitable even by the wild beasts.

"In such a region, where rain is rare, and dews almost unknown, the vegetation must of necessity be at all times extremely scanty: and in summer, when the sun has dried the soil to the hardness of brick, it ceases almost entirely. Except along the courses of the temporary rivers, which for the most part are marked by a fringe of mimosas, not a tree nor a bush, nor a blade of grass, decks the wide expanse of the waste. Low, stunted shrubs resembling heath; numerous species of fig, marigolds, and ice-plants (*mesembryanthemum*), ghanna-bosch (*salsola*), gorteria, asters, &c.; some sorts of prickly euphorbia, and other succulent plants; and bulbs, whose roots nature has fortified with a tenfold net of fibres under the upper rind, to protect them during the long droughts, are alone able to subsist in the arid Karroo. During the dry season even these appear to be for the most part parched into a brown stubble, thinly scattered over the indurated or slaty soil: but in the early spring, when the ground becomes moistened with the fall of rain, these plants rush into vegetation with a rapidity that looks like enchantment; and in a few days millions of flowers of the most brilliant hues enamel the earth. It is chiefly at this season, when the whole dreary waste may be said to be transformed into a vast flower-garden, that the colonists of the Schneeuwberg, the Nieuwveldt, the Bokkeveldt, and the Roggeveldt, whose alpine farms are then chilled with keen frosts and the piercing mountain winds, descend into the Karroo to pasture their herds and flocks on the short-lived vegetation." (*Pringle's Sketches*, p. 297.)

From the W. coast the country ascends in a similar manner towards the interior by successive plateaus, separated by mountain chains, the loftiest of which, the Roggeveldt (Rye-field) mountains, reach to upwards of 5000 feet above the level of the sea, and unite about long. 21° with the Nieuwveldt chain. To the N. of all, and near the boundary line of the territory, there is a chain of mountains, the height of which is estimated at 9000 feet. The whole tract of country to the N. is much more sandy, barren, and thinly inhabited, than that to the E., which seems to increase in beauty and fertility in proportion as it is distant from the Cape. The third great chain of mountains forms the watershed, or division between the streams which flow N. into the country of the Boajesmans, and those which have a S. or W. course through the colonial territory. On its N. side rise the Great Riet, Braak, and other affluents of the Orange river; on its S. side, the Great Doorn (Thorn), the Gamba, or Great Lion, Camtoos, Sunday, Great Fish, and other rivers. The principal streams on the W. coast are the Great Berg (or Mountain) and Olifant or Elephant river; both are navigable by small craft for about 20 m. inland, but the mouth of the former is choked up with a bed of sand, and that of the latter has a reef of rocks across it. The chief of those which discharge themselves on the S. coast are the Breede or Broad river, the Gauritz, Camtoos, Sunday, and Great Fish rivers. Nearly all of them, unfortunately, have bars or other obstructions at their mouths, rendering them in great part useless for navigation. The Broad river, however, may be navigated by small craft for about 30 m., and its mouth, which is called port Beaufort, allows vessels of 200 tons to enter in safety. The Gauritz, formed by the union of several other streams, is in the rainy season a large and rapid river; but in the summer months has only a very weak current, while the bar at its mouth is then generally dry. The Camtoos has within its bar a wide basin deep enough to float a ship of the line, but the bar itself is fordable at full, and frequently dry at ebb-tide. Besides the above there are a number of smaller rivers; but, for the most part, they are either dried up during a part of the year, or run in such deep chasms as to be nearly unserviceable.

Considering the great extent of coast, good harbours are few. Saldanha bay, 65 m. N.N.W. Cape Town, is by far the most commodious. Ships lie safely in Table bay at Cape Town during the prevalence of the S.E. monsoons from Sept. to May; but after this, when the N.W. winds set in, they are obliged to resort to Simon's bay, in False bay. This harbour is protected on the W. by the peninsula of the Cape, and affords shelter all the year round; it is consequently much frequented by our ships of war, transports, and store-ships in their voyages to and from the East Indies, and is the station of the Cape squadron. Plettenburg's bay is open to the S.E.; but affords safe anchorage in 8 or 10 fathoms water, and desirable shelter, during strong N.E. or N.W. gales, to vessels intending to make Table bay. Algoa bay, the most E. but one, is exposed to the prevailing winds; but it contains good anchorage; Port Elizabeth, the principal port next to Cape Town, is seated on it.

Climate.—Though in general temperate and healthy, the climate is neither steady, agreeable, nor suitable for agricultural purposes. In the S.W. districts rains, in the cold season, are profuse; but in summer they are of rare occurrence, and during the greater part of that season the ground is parched up with drought. The deficiency and irregularity of the rains are, in fact, the great drawbacks on the colony. In some of the more northerly tracts bordering on the Great Karroo there has occasionally been no rain for three years together; and even in the more favoured districts of Albany and Uitenhage, and generally throughout the greater part of the colony, the rain, when it does come, descends in torrents that swell the smallest streams to an extraordinary magnitude, and occasion great damage. Sometimes the S.E. wind is really a species of simoom, and is not only excessively hot, but is loaded with impalpable sand, which it is all but impossible to shut out; but as the breeze continues, it gradually cools, and usually, in about 24 hours, becomes supportable. The mean temp. of the year, at the Cape, is about 67½° Fahr., that of the coldest month being 57°, and of the hottest 79°. Cape Town is a customary place of resort for invalids from India, who certainly benefit by the change; though perhaps they have been led to visit it as much from its being within the limits of the E. I. Company's charter, which entitles servants of the company resident there to full pay, as from its salubrity.

The beautiful white cloud frequently seen during the S.E. monsoon, resting on Table mountain, and thence called the "Table cloth," is occasioned by the condensation of the moisture in the air, cooled by contact with the mountain. During the prevalence of this phenomenon, the cold air often rushes down the sides of the mountain with such impetuosity as to be fatal to shipping in the bay. Hail-storms are occasionally very violent and destructive. Owing probably to its elevation, the cold of winter in the Great Karroo is much more severe than could have been anticipated from its latitude. (See *Cape Almanac for* 1838, &c.)

Geology, Minerals, &c.—The general geological character of the Cape is that of a region of sandstone resting upon a base of granite. In proportion as the latter rock is near the surface, as occurs on and round Table mountain, springs are abundant; but wherever the granite lies at a considerable depth, as is the case throughout a great portion of the country, the contrary obtains. The territory generally suffers from a deficiency of water. Limestone is found in the E.; clays and sands of various kinds compose most of the surface of the plains; an alluvial loam and black peat mould are very abundant in some of the lands skirting the sea. Very pure and white alum; saltpetre and salt, with which the ground in some of the N. parts of Graaf Reinet and in the Great Karroo are impregnated; coal, iron, galena, argentiferous lead, a little copper, cornelians, bloodstone, &c., are among the chief mineral products. Sulphurous, nitrous, and other mineral springs, are not rare, and several natural salt-pans exist at a considerable distance from the coast. In Beaufort district fossil remains of the mammoth have been met with. (*Med. Trans.*, &c.)

Vegetable Products.—The *Flora* of the Cape is very remarkable; its species are extremely numerous, varied, and elegant; but they want the aroma, whose sweetness fills the flower-gardens of Europe. Bulbous plants are particularly plentiful; and the tribes of *ixia*, *iris*, *anthelina*, *gladiolus*, *amaryllis*, and *geranium*, are both abundant and beautiful; and some of the most magnificent plants that adorn our gardens and greenhouses are brought from this part of the world. Still, however, as Malte-Brun has judiciously remarked, "the vegetation of the Cape Colony does not satisfy either the eye or the ideas of a European.

Rocks and sands everywhere prevail. The fields are separated by deserts; the green turf, scattered and thin, nowhere presents a close sward; the forests, filled with pointed trees, have neither a delicious coolness nor a solemn darkness." (Book 70.) The Cape olive-tree, and the *sophora* (a tree like the ash), furnish some wood for joinery; but, except on the E. frontier, in the distr. of George, and in some spots near False bay, there is generally a great deficiency of timber and fire-wood. The only spontaneous vegetable product that is turned to much account, is the aloe, which grows over a large surface in the district of Zwellendam, and for which the farmers sometimes get as much as £20 a load at Cape Town.

Animals.—The elephant, rhinoceros, hippopotamus, lion, leopard, hyæna, jackall, zebra, quagga, masked boar, antelopes of various kinds, monkeys, raccoons, squirrels, &c., are natives of the Cape; but many of these have now become comparatively rare, at least within the old limits and accessible districts of the colony. The rhinoceros is nearly extirpated; the hippopotamus is found only in the Great Fish and Kei rivers; and the elephant and lion have retired from all the old settled districts. Leopards and hyænas are still, however, by no means uncommon, particularly in the eastern districts, and are exceedingly voracious and destructive. The Cape buffalo (*Bos Caffer*) is a powerful and a formidable animal, which has not hitherto been tamed, and is probably untameable. Antelopes of all kinds are exceedingly numerous; and it is said that as many as 5000, 10,000, and even 40,000 springboks have sometimes been seen bounding along in a single herd! Eagles, vultures, and other large birds are met with. In the Great Karroo, and along the skirts of the N. deserts, the ostrich is abundant: it is occasionally seen in large flocks, and is eagerly hunted for the sake of its plumage, which meets with a ready and advantageous sale. It is very wary and difficult to come near: small birds are numerous and beautiful, but deficient in song. Lizards and other species of amphibia are met with: and the serpent tribe is both numerous and dangerous. Some rivers are well stocked with fish; but in general this is not the case, a consequence probably of the greater number of the rivers being nearly dried up in the hot season. A particular variety of locust (*Gryllus devastator*, Lich.) occasionally commits dreadful ravages. They always come from the N., and are no doubt bred in the interminable deserts of the interior. Their inroads appear to be periodical. They are devoured by the Bushmen and Hottentots.

People.—The European inhabitants consist in part of the English authorities and English settlers; but the majority are of Dutch, German, or French origin, being the descendants of the original settlers. The blacks are Hottentots and Kaffers; the remaining portion of the pop. consists of Malays and Africanders (the offspring of a black woman and a Dutch father). The Dutch, in the more civilized districts, are distinguished for sobriety, prudence, and economy, and by their hospitality and benevolence towards whites: but various travellers, and Mr. Barrow in particular, have given a very unfavourable picture of the boors, or farmers of the interior, describing them as indolent, rude, and brutal in their manners, and cruel and unfeeling towards their slaves and the native inhabitants. But whatever of truth may be in these statements is accounted for by the circumstances under which the boors are placed, at a great distance from each other, and leading in general a pastoral, semi-barbarous life. We believe that there is really no ground whatever for accusing the Dutch of unusual barbarity in their intercourse with the natives. In this respect they are unfortunately quite on a level with other European nations. And those who read the works of Dr. Philip and Mr. Pringle, and the official papers with regard to the late Kaffer war, will most probably be of opinion that we, at all events, have no very peculiar right to censure them. We have elsewhere given pretty full accounts of the Hottentots and Kaffers. Like other savage and uncivilized tribes, they have both, but especially the Hottentots, suffered severely from the settlement of whites among them, by whom they have been despoiled of their lands; and those that were not exterminated or driven into the desert, were reduced to a state of substantial slavery. At length, however, the British government interposed in favour of the natives; and by an order in council, dated the 15th of Jan., 1829, placed them on the same footing, in respect of civil rights, as the other free subjects of the colony. This wise and liberal measure made less immediate change than was anticipated in the condition of the natives. They can no longer, indeed, be flogged at the pleasure of their masters, nor their children forcibly taken from them, nor be sold along with the estates on which they lived; but in other respects their condition is nearly the same. They continue to be without consideration in society, and are now, as formerly, the servants of the colonists; who employ them, partly as cultivators, but mostly as shepherds and herdsmen, occupations for which they are extremely well fitted.

The Kaffers on the E. border are both physically and mentally a superior people to the Hottentots, and less easily subdued. The E. part of the British territory has been at different times much harrassed by them, and in 1835 it suffered very severely from one of their invasions, provoked, as has been alleged, by the encroachments of the colonists. It is, we are afraid, in vain to expect that the conflicting interests of the colonists and the aborigines should ever be reconciled, or that European civilization should ever take any firm root among the latter. Very little communication takes place between the negroes, Africanders, and Malays, each race holding the others in contempt. (*Pringle's Sketches; Thompson's Trav.*, ii.; *Quarterly Review; Cape in 1822*; *Ritter, &c.*)

Agriculture.—According to the official returns for 1833, the land in cultivation in the colony is estimated at about 224,000 acres, of which 124,494 were in wheat, 46,626 in barley, 12,939 in rye, 49,645 in oats, 20,554 in vineyards and gardens, &c. The pasture land was, at the same time, estimated at 17,510,000 acres, and the waste land at 9,757,000 acres. (*Colonial Returns for 1833*; *Board of Trade Papers.*) The crop lands are principally situated in the districts of Worcester, Stellenbosch, and the Cape in the W. and in Albany in the E. Agriculture is in a backward state, though, perhaps, not so much as is usually stated. The boors are industrious, sober, and parsimonious; but they are, at the same time, strongly attached to ancient habits and routine practices. Better implements have, however, been introduced, and various improvements effected of late years. Agriculture is injuried by the Dutch law of succession, which, by dividing a man's property equally among his children, hinders the accumulation of capital in masses, and the formation of proper farming establishments. (*Thompson's Travels*, p. 324, 4to ed.) In some limited districts the soil is very fertile, and the crops and quality of the grain excellent; but the greater part of the arable land is but of indifferent quality, and the crops are very liable to be injured by droughts, hailstorms, rust, &c. It would appear, from the official returns already referred to, that 124,500 acres in wheat, in 1833, produced only 528,147 bushels! But this must evidently be an error, as a return of less than five bushels an acre would not defray the expense of cultivation. Probably *muids* (a muid is equal to about three bushels) are meant; and even on this hypothesis, the return would be very indifferent.

The farms occupied by graziers are often of very great extent, comprising from 3000 to 10,000 acres and upwards: those in tillage are comparatively small. The boors are, for the most part, proprietors of the farms which they occupy, paying a quit rent to government as the original owner of the soil. Such a thing as land on rent, from the owner to another, is almost unknown. The transfer of land from one individual to another is effected with the utmost facility, and "without the possibility of fraud." Property seldom remains long in one family. Owing to the law of equal succession, farms are frequently sold on the death of the owner; sometimes the whole is purchased by one son, but it is frequently split into parts. Hence there is here, as Mr. Colebrooke says, no attachment to or preference of one's native place: so much land of such a quality, or worth so much, no matter where, is the only thing a Cape Dutchman cares for! (*Cape in 1822*, p. 104.)

The vineyards are mostly in the vicinity of the Cape, where the vine-growers occupy freehold farms of about 120 acres each. The vine (*Vitis vinifera*) has been long introduced to the Cape, and has for a lengthened period been cultivated with more or less attention. The culture, however, made no great progress till 1813, when the duty on Cape wines imported into this country was reduced to a third part of the duty levied on the wines of Portugal and Spain. But, excepting Constantia, Cape wine, whether from the vines being planted in an unsuitable soil, or from a want of care in the preparation of the wine, or both, has an earthy taste, and is generally very inferior; and the consequence of the reduction of the duty has merely been to increase the quantity grown and imported, without in any degree improving its quality, and to make it be employed as a cheap and convenient menstruum for adulterating more expensive wines. It were well, therefore, were this fictitious encouragement withdrawn, and Cape wine charged with the same duty as other wine. At present the average consumption amounts to about 520,000 gallons a year; of which we believe two thirds or more is employed to adulterate sherry and Madeira.

Constantia is produced on a farm of that name at the E. base of Table mountain, 8 or 9 m. from Cape Town. Its soil consists of decomposed sandstone, and is consequently more analogous to the soils which produce fine wine in Europe than the richer clayey soils where the ordinary vineyards are planted. Greater care is also taken in the

production of the wine, and in consequence of these, and probably other causes, it is very superior. It is luscious, sweet, has a strong flavour, and, being produced in limited quantities only, fetches a pretty high price. It is probable, however, that Constantia, or a wine closely approaching to it, might be produced in other parts of the colony, were sufficient pains taken. (*Henderson on Wines*, p. 256, &c.)

In 1833, 1294 acres were under potatoes, which yield two crops a year. The fruits of N. Europe, as cherries and apples, have somewhat degenerated, but figs, apricots, almonds, and oranges are as good as in France. Grapes are particularly good on the W. coast. Tobacco succeeds well except in clayey soils, or in situations exposed to the S.E. winds; but its culture is, notwithstanding, confined within very narrow limits. Tea was introduced by the Dutch, and some was raised of a tolerably good quality; but, how favourable soever in other respects, labour is too dear in the Cape colony to allow of tea being made a profitable article of culture. Dried fruit and aloes are important articles of export.

A return of agricultural produce for some of the districts is given in the *Cape Ann. Register*, for 1838. We regret that, in many respects, it is so incomplete.

Districts.	Wheat.	Barley.	Oats.	Other grain and legumes.	Potatoes.	Wine.	Brandy.	Hay.
Cape district .	30,950 muids	6,900 m.	15,075 m.	2,005 m.	1,350 m.	1,770 leag.	86 leag.	2,625,000 lbs.
Stellenbosch .	29,611 —	7,130 —	15,893 —	2,985 —	1,000 —	13,020 —	620 —	
Worcester .	13,303 —	8,743 —	7,404 —	1,843 —	. .	546 galls.	80 galls.	
Swellendam .	25,668 —	18,999 —	12,099 —	3,400 —	885 —	510 leag.	184 leag.	
George . .	24,735 —	13,712 —	1,834 —	2,409 —	150 —	218 —	230 —	
Beaufort .	907 —	539 —	. .	. .	. .	61 —	62 —	
Albany . .	30,000 —	2,500 —	6,000 —	6,950 —	8000 lbs.	. .	. .	300,000 —
Graaf Reinet .	4,980 —	1,598 —	85 —	. .	. .	152 —	62 —	

The remainder of the productive surface is, as has been said, chiefly pasture land, and the *Cape Register* gives the following as the numbers of live stock belonging to some of the chief grazing districts.

Districts.	Horses.	Horned Cattle.	Sheep.	Goats.	Pigs.
Stellenbosch . . .	6,253	14,469	7,311	3,639	
Worcester . . .	6,850	16,462	115,747	57,373	460
Swellendam . . .	26,249	31,274	150,988	85,488	1,174
George	2,674	19,351	98,289	16,954	265
Beaufort . . .	1,451	7,898	sheep & goats 224,000		224,700
Albany. . . .	2,765	28,946	104,000	21,000	
Graaf Reinet . .	5,191	44,788	sheep & goats 701,280		

The climate is not unsuitable for sheep, and great endeavours are making to improve the breed by the introduction of merinos from England and Australia. The native breed of sheep is very inferior; it is remarkable only for the size of the tail, which sometimes weighs 20 lbs.: its wool is good for nothing. But the wool of the Cape merinos fetches a high price. Goats, which are very numerous, serve for the food of the Hottentot farm-servants; oxen are used for draught in large teams. Herds of all these animals wander during the day over large grazing farms of from 3000 to 6000 acres, and at night are shut up in *kraals*, or inclosures. Hogs attract only a small share of attention, but turkeys, geese, ducks, and other poultry, are reared in great numbers. (*Barrow*, ii.; *Ritter, Géogr. Générale*, p. 161, 162; *The Cape in* 1822; *Mod. Trav., &c.*)

Fisheries, Mines, Manufactures, &c.—The fisheries are somewhat important. In 1836, forty-seven boats were employed in the whale, seal, &c., fisheries, and during that year eighteen whales, sixty-eight seals, and other fish were taken, their total value amounting to £3349. Mining industry has made little progress; but slate, lime, and building stone are quarried. Almost every farmer in the interior makes his own candles and soap, the alkali necessary for the latter being furnished by the consumption of a kind of *salsola*, which grows plentifully on such parts of the waste tracts as are at all watered. The other manufactures are mostly confined to those of leather, hats, snuff, saddles, tiles, rope, and a few other articles of a necessary kind; a few wind, water, and saw-mills now exist in most of the districts, and in Cape Town there is a steam flour-mill. There are several breweries and spirit distilleries, which, as well as other manufacturing establishments, are most numerous in the W. part of the territory.

Commerce.—The cultivators of the interior send their surplus agricultural produce, wool, butter, soap, candles, ostrich feathers, skins, &c., to the principal towns at stated intervals, and take back in return European manufactures, tobacco, brandy, coffee, &c. The chief foreign imports of the colony consist of woollens, cottons, hardware, earthenware, fire-arms, furniture, paper, books, haberdashery, soap, and portions of most other articles in use in the U. Kingdom; piece goods, sugar, and teak timber from India; tea from China; sugar from the Mauritius, &c. The principal articles of export are—wines, corn to the Mauritius and Rio Janiero, hides, skins, horns, salted provisions, horses, wool, butter, ivory, whale oil, aloes, argol, &c. The hides, skins, and horns, come chiefly from the E. province. The salt beef and other cured meats are very good, and are largely exported to the Mauritius. The export of wool has, for some years past, been greatly on the increase, and it is probable that it will in time become one of the greatest and most profitable staples. We subjoin an account of the quantity and value of the principal articles of colonial produce exported from the Cape colony in 1836.

Description and Quantity of Articles.			Value. £	s.	d.
Aloes	220,227	lbs.	2,153	5	0
Argol	21,748	—	420	0	0
Beef and pork	1,946	cwts.	6,622	0	0
Bone (whale)	14,527	lbs.	633	0	0
Butter	271,028	—	11,057	0	0
Candles	21,080	—	625	16	0
Corn, grain, and meal, viz.					
Barley	2,751	muids	1,185	0	0
Beans, peas, &c.	1,891	—	1,288	0	0
Oats	2,754	—	3,262	10	0
Bran	239,785	lbs.	749	0	0
Flour	926,505	—	9,894	0	0
Wheat	9,654	muids	7,201	0	0
Feathers (ostrich)	587	lbs.	1,942	0	0
Fish (dried)	157,946	—	2,196	0	0
Fruits (dried)	260,976	—	2,320	17	0
Hides (horse and ox)	24,798	No.	26,485	0	0
Horns	185,288	—	7,446	0	0
Horses	406	—	11,350	0	0
Ivory	21,886	lbs.	2,719	0	0
Mules	149	No.	1,741	0	0
Oil, viz.					
Seal	417	gallons	30	0	0
Whale	31,881	—	2,862	0	0
Sheeps' tails	1,494	lbs.	19	0	0
Skins, viz.					
Calf	889	No.	125	0	0
Goat	236,403	—	17,225	0	0
Kid	1,546	—	271	9	0
Seal	6,499	—	5,291	0	0
Sheep	177,469	—	7,268	9	0
Spirits, viz.					
Brandy	418	gallons	20	0	0
Tallow	615,693	lbs.	10,169	0	0
Wax	2,902	—	173	8	0
Wine, viz.					
Constantia	5,001	gallons	3,473	0	0
Ordinary	1,029,892	—	79,874	0	0
Wool	373,293	lbs.	25,189	0	0
Other articles			9,261	15	0
Total value			273,585	4	0

The gross amount of the trade in 1836 was as follows:

Ports.	Imports. £	Exports. £
Cape Town	799,672	326,199
Port Elizabeth	87,246	47,207
Simon's Town	23,243	577
Total	891,162	374,383

Exclusive of supplies to H. M's navy, &c., which amounted to £3062.

During the same year, 486 ships entered the different ports of the colony, having a united tonnage of 134,875 tons; outward bound ships 479, tonnage 130,512 tons.

Weights, Measures, &c.—The weights generally in use are those which were introduced by the Dutch. Some of these are as follows:

Pound	16 ounces / 32 loods	$= \frac{21 \cdot 5}{100}$ lb. avoird.
Muid (4 schepels)		= 3 imp. bushels nearly
Leaguer		= 126·6 imp. gallons
Pipe		= 91·6 —
Aum		= 31⅔ —
Anker		= 7·9 —
Flask		= 0·4946 —
128 ells		= 100 English yards
$49\frac{71}{100}$ morgen		= 100 English acres.

The coin in circulation is exclusively British. These

was estimated, in 1838, to be £530,000 gold and silver circulating medium: the amount of paper currency in the same year was set down at £198,740. (*Cape Register*, 1838.) The paper rix-dollar is worth 1*s*. 6*d*.

Public Revenue is derived from custom duties of three per cent. on British goods arriving in British bottoms, and ten per cent. on all others, various licenses, auction and transfer duties, port dues, land-store and rents, postage, assessed taxes, tithes, and duties on stock and produce, interest of money in the government banks, discounts, &c., tolls and ferries, fines, &c. It amounted, in 1836, to £158,697: the public expenditure for the same year was £147,579, exclusive of that incurred in England on account of the colony.

The Government is vested in a governor, with a salary of £6000 per ann., nominated by the crown, and assisted by an executive council composed of the commander of the forces, the chief justice, auditor-general, treasurer, and accountant-general. A legislative council, composed of five official and an unlimited number of unofficial members, has been established by the government in England, the debates of which are carried on with open doors. Each prov. is administered by a lieutenant-governor, and each district by a civil commissioner, subordinate to whom are the field cornets, magistrates superintending tracts of country 15 or 20 m. in circuit each, with jurisdiction in trifling disputes, and power to call out the burghers of their field-cornetcy armed. These magistrates, unless on the Kaffir frontier, receive no salary, but are exempted from all direct taxes.

Justice is administered by a supreme court of judicature, presided over by a chief justice, with a salary of £2500, and three puisne judges, whose salaries are £1500 a year, a high sheriff, and deputy sheriffs for each district, a court of vice-admiralty, police and matrimonial courts, &c. Civil and criminal circuit courts are held. The laws in operation are a modification of the Dutch civil and criminal code, and "Statutes of India," established before our taking possession of the colony, and supplied, when found deficient, by the *Corpus Juris Civilis*. Trial by jury in criminal cases has been established. The Dutch language, formerly used in courts of law, has been superseded by the English.

Religion, Education, &c.—The Dutch and English Reformed Lutheran, Roman Cath., and Presbyterian churches in the Cape are all entirely or in part supported by the government. There are numerous missionary schools; and Bell's, Lancastrian, and other free schools in each district, which, in 1836, were attended by 1559 pupils, and received the support of the government to the amount of £1465. A joint-stock institution, entitled the "South African College," with five professors, was established at Cape Town in 1829.

The Military Force consists of three regts. of infantry, the head-quarters of two being at Cape Town, and of the other at Graham's Town; a detachment of royal artillery, a party of the royal engineers, and a regiment of mounted riflemen, termed the Cape cavalry, the privates and non-commissioned officers of which are principally Hottentots.

The naval force is under the command of a rear-admiral, with authority along the E. and W. coasts of Africa, and the Mauritius and St. Helena.

The possession of this colony is important from its being, as it were, the key of the Indian ocean, and forming a depôt, whence ships and troops may be despatched with facility and expedition to most parts in S. India, the E. Archipelago, and Australia. It is probable, too, that in time it may become, intrinsically, a valuable colony; though, from the limited extent of its fertile land, and the other disadvantages attending it, a rapid progress need not be looked for. The average number of emigrants leaving the U. Kingdom for the Cape of Good Hope, during the six years ending with 1837, has been 385 a year.

History.—In 1620, two English E. India commanders, by a proclamation dated from Saldanha bay, took possession of the Cape in the name of Great Britain; but no settlement was subsequently established by the English; and, in 1650, the Cape promontory was colonized by the Dutch, who afterward made settlements in Saldanha bay and elsewhere, and disregarding, like other colonizing adventurers, the rights of the original inhabitants, gradually extended their encroachments, till their territory reached nearly to the boundaries of that of the British territory at present. In 1795, the English took possession of the Cape; but at the peace of Amiens, in 1800, restored it to its former masters. In 1806, it was again taken by the English, to whom it was finally ceded in 1815.

CAPE TOWN, a sea-port town of S. Africa, the cap. of a small distr. and of the above described British territory, on its S.W. coast, S. shore of Table bay, at the foot of Table mountain, about 32 m. N. from the cape of Good Hope; lat. 33° 55′ 56″ S., long. 18° 21′ E. Pop. (1838, including its distr.) 19,743, of whom 14,041 were whites, and 5702 negro apprentices. It is regularly laid out, and contains several good squares; its streets, which are straight and wide, cross each other at right angles, many of them being watered by canals, and planted on either side with trees, in the Dutch fashion. Houses, mostly of brick or red granite, "are flat-roofed, and chiefly white, with green windows; they are spacious and convenient, having an elevated terrace, here called a stock, in front, and small gardens behind, usually with a treillage clothed with vines." (*Colebrooke.*) Upon the shore, at the E. extremity of the town, is the castle, a pentagonal fortress of considerable strength, containing some public offices, barracks, &c., and having outworks, which command both the bay and the roads to the country. On the W. side of the town, Table bay is defended by four batteries, placed round and on the hill called the Lion's Rump; on its E. side, the town is protected by fortified lines of defence.

The principal public buildings are the government-house, with extensive gardens, the burgher senate-house, barracks, commercial exchange, custom-house, town and distr. jail, military depôt, tax office, English, Dutch, Lutheran, and Presbyterian churches, R. Cath., Independent Wesleyan, and missionary chapels, Somerset Hospital, and two others; the theatre, Freemasons' Lodge, South African College, police office, &c. Cape Town is the seat of the supreme court of justice for the colony, the Vice-Admiralty court, a court for the recovery of small debts, a government bank, called the Lombard Discount Bank; and contains a savings' bank, a public library, four public free schools, and many literary, scientific, religious, and benevolent associations. The town and distr. contain several water mills, tanneries, hat, candle, snuff, and soap factories, an iron foundry, breweries, distilleries, sawing and steam-mills, &c. It is plentifully supplied with good water.

Table bay is capable of containing any number of ships, and forms a safe and, on the whole, good harbour, except during the months of June, July, and August, when it is exposed to a heavy swell from the W. A wooden jetty projects for half a furlong into the bay from the E. end of the town, near the castle, alongside of which ships discharge or take in cargoes. Ships that only take in water or refreshments lie in the outer anchorage. A light-house, furnished with double lights, stands on the shore, near the W. extremity of the bay, about 2 m. N.W. the town. In the year ending Jan. 5, 1837, 321 British ships, of the burden of 93,268 tons, and 67 foreign ships, burden 20,604 tons, entered; and 330 British, and 66 foreign ships cleared from the port. The value of the imports in the same year from Great Britain and her colonies amounted to £756,525, and those from foreign countries, chiefly from the port of Boston (U. S.) and France, to £24,147. The amount of the exports to various countries of colonial and non-colonial goods, in British bottoms, in the same year, was as follows: Great Britain, £215,477; Madras and Calcutta, £9888; New South Wales, £24,010; St. Helena, £17,081; Mauritius, £44,150; other countries, £7808; total, £318,414. And in foreign bottoms: to Boston (U. S.), £16,115; other ports and countries, £1670. Making the total exports £336,199.

British residents in India frequently resort to the Cape for their health; and the town has generally the appearance of bustle and gaiety; balls and the theatre are the favourite amusements; but "music is here a passion with the negro only." The environs of the Cape are very picturesque, and between it and the mountains which surround it many handsome private gardens have been laid out.

Cape Town was founded by the Dutch in 1650, and remained subject to them until taken by the British in 1795. It was restored by the treaty of Amiens, but, being again captured by the British in 1806, was finally ceded to us with the rest of the colony in 1815. (*Cape Almanac and Register; Cape in 1822, &c.*)

CAPE VINCENT, p. v., and port of entry, Lyme t., Jefferson co., N. Y., 190 m. N.W. Albany, 442 W. Situated on the S. side of St. Lawrence river. It contains two churches, one Presbyterian and one Episcopal; five stores, two warehouses, one steam flouring-mill, one saw-mill, one furnace and axe-factory, one ship-yard, eighty dwellings, and about 500 inhabitants. It has a convenient steam-boat landing. A ferry crosses the river to Canada.

CAPITANATA, a prov. of Naples, which see.

CAPO D'ISTRIA (an. *Ægida*), a sea-port town of Illyria, gov. Trieste, circ. Istria, on a small island in the gulf of Trieste, connected with the main land by a causeway, 1-2 m. in length, 8 m. S. Trieste. Pop. 5000. It is fortified and defended by a citadel, and contains a cathedral, with about thirty other churches, and several handsome buildings; but the streets are narrow, and have a gloomy appearance. It is the seat of a bishopric, and has some superior schools, and a prison. Its inhab. manufacture salt, leather, and soap, and trade besides in wine, oil, and fish. The town is ill supplied with water, and not remarkably healthy. Its harbour is large, but little frequented except by

fishing boats. Capo d'Istria belonged, in the middle ages, alternately to the Venetians and the Genoese. (*Oesterr. Nat. Encyc.*; *Dict. Géographique, &c.*)

CAPPOQUIN, an isl. town of Ireland, co. Waterford, prov. Munster, on the Blackwater, 105 m. S.W. by S. Dublin. Pop. in 1821, 1896; in 1831, 2289. Pop. of the parish of Lismore, in which it is situated, in 1834, 15,838, of whom 494 were of the Established church, 45 Protestant Dissenters, and 15,299 R. Catholics. The town, which was a place of some celebrity in the wars of 1641, is finely situated on the N. bank of the river, over which it has a wooden bridge. The public buildings are, a church, a Roman Catholic chapel, and a school-house. Petty sessions are held every alternate week, and a party of the constabulary is stationed here. At Mount Melleray, near the town, is an abbey of Trappists, who lately removed thither from France. Fairs are held on 17th March, 31st May, 5th July, 20th September, and 29th October. Post-office revenue in 1830, £249; in 1836, £282. The mail-coach from Waterford to Cork passes through the town, and a car, carrying an average of three passengers each trip, plies between it and Lismore. The tide flows up the Blackwater to this place; but the navigation to Lismore is chiefly by a canal four miles long. (*Smith's Waterford*; *Railway Rep.*)

CAPRI (an. *Capreæ*), a small island belonging to Naples, on the S. side of the entrance to the gulf of Naples, about 4 m. W. Cape Campanella (an. *Promontorium Minerve*). Pop. about 3000. It is about 10 m. in circ., and is mostly surrounded by lofty perpendicular cliffs. It principally consists of two great masses of rugged calcareous rocks; but though the largest portion of its surface be wild and impracticable, it is in parts very fertile; and these being cultivated with great assiduity, yield the finest crops, with the choicest grapes, olives, and other fruits. But the most valuable product of Capri is its stock-doves and quails, particularly the latter, which at certain seasons of the year are caught in vast numbers. Swinburne says that rows of nets are placed across every break in the woods, or chasm in the rocks, to intercept these birds in their annual flights; and that the quantity taken is almost incredible.

Capri is famous, or rather, perhaps, infamous in history, from having been for about ten years the retreat of Tiberius, who is reported to have here abandoned himself to the most detestable debaucheries, while his proscriptions filled Rome with blood. The crafty tyrant was most probably led to select this spot for his favoured residence, as well from the difficulty of its access, as from the mildness and salubrity of the climate, and the unrivalled magnificence of the prospects which it affords. He is said to have built no fewer than 12 villas in different parts of the island, some close by the sea, and others in more elevated situations. (*Tacit.*, Annal., iv., § 67.) After his death, these were destroyed by order of the senate; but the ruins of some of them still remain; and the sculptures found in these, and the medals that have been dug up, go far to establish the accuracy of what would otherwise appear to be the singularly exaggerated statements of Tacitus and Suetonius, as to the private life of the emperor.

There are two towns on the island, Anacapri, near its W. (*see* ANACAPRI), and Capri, the cap., on its S.E. shore. The latter, situated on the acclivity of a ridge, has about 1200 inhab., and a cathedral, and some other churches. (*Swinburne's Two Sicilies*, ii., 1–9, 4to ed.; *Cramer's Ancient Italy*, ii., 182, *&c.*)

CAPUA (an. *Capua* or *Capua*), a city of Naples, prov. Terra di Lavoro, cap. cant., on the left bank of the Volturno, in a fine plain, 18 m. N. Naples; lat. 41° 7′ N., long. 13° 56′ 30″ E. Pop. 15,000, ex gar. It was fortified by Vauban, has a strong citadel, and is reckoned one of the keys of the kingdom; for though far removed from the frontier, it is the only fortress that really covers the approach to Naples. Swinburne calls it a "neat little city;" but it is said by Simond to be "an ugly, dirty place, and noisy beyond all bearing;" and we suspect that the latter statement is nearer the mark than the former. It has three principal streets, two magnificent gates, two fine squares, and three public fountains. The principal public buildings are the cathedral, the cupola of which is supported by eighteen antique columns, the Church of the Annunciation, the palace of the governor, the Hôtel de Ville, the barracks, and the theatre. It is the seat of an archbishopric; has no fewer than eighteen parish churches, several convents for both sexes, a royal college, a seminary, a military school, and four hospitals. A great fair is annually held on the 26th November.

The ancient Capua was situated about 2½ m. from the modern city, which has nothing in common with the former, except that it was partly built out of its ruins. The remains of its amphitheatre, said to have been capable of containing 100,000 spectators, and of some of its tombs, *&c.*, attest its ancient splendour and magnificence. The considerable town of Santa Maria di Capua occupies part of the spacious enclosure of the old city. The amazing fertility of its territory, and the commercial spirit of its inhabitants, rendered Capua one of the largest and richest cities of ancient Italy. Its citizens warmly espoused the side of Hannibal, and that great general took up his winter quarters here after the campaign of Cannæ. It has been said that this was a false step; that he ought to have marched direct from Cannæ to Rome; and that his soldiers, enfeebled by their residence in this luxurious city, henceforth lost their former superiority. But there seems to be little or no foundation for these statements. Hannibal, though victorious at Cannæ, was so far from being able to attack Rome, that he was repulsed in an attempt upon Naples; and the fact that he maintained himself, without assistance from home, for a dozen years in Italy after he had wintered in Capua, and defeated, during that period, several Roman armies, completely negatives the idea of his troops having been enervated. It was hardly, perhaps, necessary to say so much on such a point; the authority of Hannibal being of incomparably greater weight than that of those who have presumed to find fault with his proceedings. The old city was destroyed by the barbarians. (*Swinburne's Two Sicilies*, ii., 490, 4to ed.; *Simond*, p. 303; *Cramer's Ancient Italy*, ii., 205; *Montesquieu, Grandeur et Décadence des Romains*, cap. 4; *Ferguson's Roman Republic*, cap. 5.)

CARACAS, an inland city of Colombia, cap. of the repub. of Venezuela, prov. Caracas, in a mountain valley nearly 2900 ft. above the level of the sea, 12 m. S.S.E. La Guayra; lat. 10° 30′ N., long. 66° 55′ W. Pop., previously to 1812, 40,000; in 1834 only 23,000. This city is finely situated, and in the enjoyment of a temperate and healthy though variable climate; but it is exposed to the attacks of earthquakes: it has the advantage of being nearly surrounded by the Guayra and several other rivulets, which supply many public and private fountains, and wash the streets. It is well and regularly built; the streets are sufficiently wide, paved, and cross each other at right angles; there are several squares, the principal of which, the Plaza Mayor, has the cathedral on the E., the University on the S., and the prison on the W. side; but is disfigured by ranges of low shops collected in its centre, where the fruit, vegetable, and fish markets are held. Most of the public buildings are of a religious character; the cathedral is spacious, but heavily built, and it is probably to this circumstance that its preservation was owing during the great earthquake of 1812. Previously to that year there were eight other churches, the handsomest of which, Alta Gracia, was built by people of colour; but this and the other churches, 9-10ths of the houses in the city, and between 9000 and 10,000 inhab., were totally destroyed by the terrible catastrophe that then happened. There are three convents, two nunneries, and three hospitals; besides a theatre capable of holding perhaps 1800 persons, the pit of which is not roofed. The houses in Caracas are at present inferior to what they were before the earthquake of 1812, at which period those of the upper classes were also very well furnished; they are now chiefly of sun-dried clay or mud, the roofs tiled, and the walls whitewashed. La Guayra, which is the port of Caracas, is the chief trading town in Colombia; but its merchants are for the most part the agents of others in Caracas, and all negotiations are conducted in the capital. This city was founded by Diego Losada in 1567, and under the Spanish government was the seat of the captain-general of Venezuela.

CARAVACA, a town of Spain, prov. Murcia, 42 m. W.N.W. Murcia, on a river, and at the foot of a mountain ridge both of the same name; lat. 31° 6′ N., long. 1° 58′ W. Pop. 12,458. It has four convents, three hospitals, a Jesuits' college, *&c.* The remains of the ancient castle of Santa Cruz are on a height commanding the town. In a mountain on the W. is the cavern of Barquilla and its beautiful stalactites. The vicinity contains marbles of various colours, and produces grain, pulse, wine, oil, hemp, flax, *esparto* or Spanish rush, and pasture for sheep and goats.

CARBONDALE, p. v., Luzerne co., Pa., 35 m. N.E. Wilkesbarre, 160 m. N.N.E. Harrisburg, 264 W. Situated on the E. side of Lackawannock creek, which flows into Susquehanna river, though its communication is eastward by rail-road and canal to Delaware river, and thence to Hudson river. It has risen up suddenly by means of the coal trade. The coal mine here, one of the most extensive and best in the Lackawannock region, is situated in the front of a hill, and has been quarried in a continued line for 60 rods, presenting a front of good coal, 20 feet in thickness, besides several feet above of imperfect coal. The miners have followed the bed without removing the superincumbent materials, leaving pillars of coal to support the weight above. The coal is drawn up in wagons by several stationary steam engines to the summit level, 830 ft. above the mine, by several inclined planes. It thence descends by another railway, 16 miles, by several inclined planes, 912 feet to the canal at Honesdale, whence it pro-

seeds to Delaware r. by canal, and there joins the Delaware and Hudson canal, through which it is conveyed to Hudson r. at Roundout, opposite to Rhinebek. The coal fields contain 3500 acres, and 119,407 tons of coal were raised in 1840, by 275 persons, employing a capital of $100,000. The Delaware and Hudson Canal Co. mine and send to market from 180 to 200,000 tons of coal annually. Carbondale contains fourteen stores, one furnace, one brewery, three saw-mills; capital in manufactures $327,000, chiefly in the coal business; four schools, 190 scholars. Pop. 2398.

CARCAJENTE, a town of Spain, prov. Valencia, 7 m. N.N.E. San Felipe. Pop. 8300. It is in the centre of a large plain, planted with white mulberry trees, and intersected by canals. Its streets are spacious, and the comfortable appearance of the houses announces the prosperity of the place. Many Roman remains are found here. Its vicinity produces silk, wheat, maize, pulse, rice, abundance of oranges, pomegranates, and garden stuffs. (*Miñano.*)

CARCASSONNE, a city of France, dep. Aude, of which it is the cap., on the Aude, by which it is intersected, 97 m. S. of Paris; lat. 43° 12′ 54″ N., long. 2° 21′ E. Pop. (ex cant.) 14,931. It consists of two parts—the city, situated on a hill on the right bank of the river, and the new town, on a plain on its left bank, the communication between them being maintained by a bridge of 10 arches. The city, which is very ancient, is surrounded by double walls, and has an old castle; it is ill built and filthy, and is said to be at once *un cloaque et un labyrinthe!* The new town is well built; has broad streets intersecting each other at right angles, a square shaded by magnificent plane trees, and numerous fountains. There is a fine promenade along the canal. The fortifications by which the new town was formerly surrounded have been demolished to make room for gardens and boulevards. Principal public buildings—cathedral, with a fine spire; the church of St. Lazarus in the city, formerly the cathedral; the episcopal palace, the hotel of the prefecture, the Hotel de Ville, the barracks, the theatre, &c. The halles or covered markets are worth notice. It is the seat of a bishopric; has tribunals of primary jurisdiction and commerce, a departmental college, a primary normal school, a diocesan seminary with 116 pupils, a secondary ecclesiastical school, a royal society of agriculture, a public library with 6000 vols., &c.: it has also a hospital and a workhouse. Carcassonne has long been famous for its manufacture of fine woollen cloth, patronised by Colbert: this, however, has much fallen off, though, exclusive of minor articles, it still furnishes annually about 30,000 pieces of cloth, of which about 24,000 are sold in France, and 6000 in the Levant. There are also fabrics of stockings, linens, and soap; with paper-works, distilleries, tanneries, nail-works, &c. Its commerce, which is very considerable, is greatly facilitated by the canal du Midi, a branch from which comes to the town, and serves it as a port.

Carcassonne is very ancient, having been of considerable importance in the days of Cæsar. It fell successively into the hands of the Visigoths and Saracens, and suffered much during the wars of the Albigenses. Its last count ceded it to France in 1247. (*Hugo*, art. *Aude, Dict. Géog.*)

CARDIFF, or CAERDIFF, a parl. bor. and sea-port of S. Wales, cap. co. Glamorgan, on the E. bank of the Taaf, about 1½ m. above its embouchure in the estuary of the Severn, 25m. W. Bristol, and 21 m. S. by E. Merthyr Tydvil. It has increased very rapidly, the pop. in 1801 having been only 1870, while in 1831 it was 6187. The two principal streets, at right angles to each other, are well built; but behind these there are several courts, alleys, and lanes of very inferior houses; and some new streets, mostly occupied by Irish labourers, are of the same description. The castle, on the N. side of the town, is of great antiquity; it is in excellent repair, and is partly occupied by its noble proprietor, the Marquis of Bute. Besides the church of St. John, which has a lofty tower, there are places of worship for Baptists, Methodists, Independents, &c. There is here, also, a co. jail, a guildhall, where the assizes are held, a theatre, a bridge over the Taaf, of five arches, and numerous schools and charities. Cardiff has become a place of very considerable trade, being, in fact, the port of Merthyr Tydvil, and of the principal mining district of S. Wales. The exports of iron amount to about 125,000 tons a year, and those of coal to about 250,000 tons, exclusive of corn and other agricultural produce. The products of Merthyr are brought down to Cardiff by the Glamorganshire canal, which unites with the sea about one mile below the town. But as this canal was constructed about 40 years ago, its basin did not afford sufficient accommodation for the vastly increased traffic of the place. To obviate this inconvenience, the Marquis of Bute has constructed, at his own expense, a ship canal and docks a little below the town. These works are on the most magnificent scale. The inner basin occupies a space of not less than 18 acres; and there is an outer basin occupying a space of about 1½ acre, for the accommodation of ships and steamers of large burden. These great works are now (1839) almost complete. They will, no doubt, add greatly to the trade and importance of Cardiff; and, it is to be hoped, also to the fortune of their public-spirited proprietor. The limits of the pari. and municipal boundaries coincide, and comprise an extent of 1191 acres. It is joined with the boroughs of Cowbridge and Llantrissent, in sending one member to the H. of C. Previously to the Reform Act, the franchise was vested in the burgesses. Registered electors in 1837–38, 590. Markets, Wednesday and Saturday; fairs, June 29, Sept. 19, Nov. 30.

CARDIGAN, a marit. co. of S. Wales, stretching, in the form of a crescent, along the S.E. shore of Cardigan bay, having N. the counties of Merioneth and Montgomery, E. Radnor and Brecon, and S. Caermarthen and Pembroke. Area 432,000 acres. Surface mountainous and hilly, interspersed, however, with several fine valleys, of which the principal are those of the Teify, or Teivy, Rheidiol, and Ystwith, so called from the rivers, the largest in the co., by which they are intersected. The soil along the shore of this county, particularly between Llan Rhystyd and Llan Non, is a light sandy loam, and is, perhaps, the finest turnip and barley soil in the empire; it is, in fact, in some places alleged to have produced, with little or no manure, an uninterrupted succession of good, or at least tolerable barley crops, for a period reaching beyond the memory of man! (*Davies's S. Wales*, i., 163.) But this continued succession of corn crops has unhappily been tried in places where the soil is less capable of supporting such abusive treatment; and, altogether, agriculture is here at a very low ebb, being quite as far behind, if not more so, than in Caermarthen, which see. Estates of all sizes, from the smallest patches, which in some districts are very numerous, up to several thousands a year. Farms similarly divided. Average rent of land, in 1810, 4*s.* 8½*d.* an acre. Silver, lead, and copper have all been found in Cardiganshire; and at one time the silver mines were an object of great attention, and yielded a considerable produce; but for a lengthened period they have been wholly abandoned, and little or no attention is now paid to those of copper and lead. Slates are quarried in different parts of the county, and are largely exported from Cardigan and Aberystwith. Manufactures unimportant. Principal towns, Cardigan, Aberystwith, Tregaron, Lampeter, &c. At the last-mentioned place is a college, established in 1822, for the education of the Welsh clergymen. Cardiganshire contains five hundreds, and 65 parishes, and had, in 1831, 13,645 inhab. houses, 13,652 families, 64,780 inhab., of whom 30,863 were males and 33,912 females. It returns one mem. to the H. of C. for the co., and one for the bors. of Cardigan, Aberystwith, Lampeter, and Adpar. Registered electors for the co., 1837–38, 1829. Sum paid for the relief of the poor only in 1837–38, £16,502. Annual value of real property in 1815, £145,933.

CARDIGAN, a sea-port and pari. bor. of S. Wales, cap. co. Cardigan, on the N. bank of the Teivy, 5 m. from its embouchure in St. George's channel, 196 m. W.N.W. London. Pop. of old bor. (1831) 2795; but the present pari. borough, which includes the suburbs of Bridgend and Abbey Hamlet, had, in 1831, a pop. of very near 3000. The principal street is spacious, but the others are narrow and irregular, and the town contains a large proportion of small, mean tenements. Recently, however, not only the number of houses has been a good deal increased, but their quality has also been materially improved. (*Boundary Report.*) A stone bridge crosses the river, and connects the town with Bridgend, in Pembrokeshire; and there is another bridge across a deep inlet of the river on the W. side of the town. It has an ancient church, a free grammar school for 30 boys, a national, and another charity school, in which 130 children are educated, a handsome county hall, and a county jail. Two towers, the remains of its ancient castle, still exist on a commanding site above the river. Market, Saturday; annual fairs, Feb. 13th, April 8th, Sept. 6th, and Dec. 19th. The town has no manufacture of any consequence. A bar at the river's mouth is a great impediment to navigation, and makes the entrance to the harbour very dangerous in rough weather. In moderate weather, and at spring tides, vessels of from 300 to 400 tons may come up to the town; but the general trade is confined to vessels of from 15 to 100 tons. There belonged to the port, in 1837, 275 vessels, of the burden of 14,436 tons, manned by 1030 seamen; but of these ships a good many very rarely visit the port: the latter extends from below Fishguard on the S. to Aberavon on the N. Exports, slate, corn, and butter; imports, coal, culm, timber, and deals, limestone, and articles of general consumption.

Cardigan, conjointly with Aberstwith, Lampeter, and Adpar, returns one mem. to the H. of C. Previously to the Reform Act, the franchise (in Cardigan) was vested in the

burgesses, who were created by being presented by a jury of burgesses at the court of the corporation. Registered electors in the four boroughs, in 1837–38, 939. The town is divided into two wards, and governed by a mayor, aldermen, and councillors.

CARDONA, a fortified town of Spain, Catalonia, in a rugged country on the Cardanet, 55 m. N.W. Barcelona. Pop. 2962. Near it, on the S.W., is a mountain of solid rock-salt, which neither the erosion caused by the rains, nor the mining operations that have been continued for ages, seem to have power materially to diminish. (*See* CATALONIA.) Being exceedingly hard, the rock is first blasted with gunpowder, and afterwards dug out with pickaxes: it is then ground, and laid up in the government storehouses. Vases, crucifixes, and other articles, are made out of it, which stand very well in the atmosphere of Spain, but soon liquefy in a moist climate. (*Miñano; Townsend*, i., 190.)

CARENTAN, a town of France, dep. La Manche, cap. cant., on the Tante, near its embouchure, 15 m. N.N.W. St. Lô. Pop. 2801. It is situated in the middle of a marsh, and is indifferently fortified, and unhealthy. Small vessels come up to the town, which has some manufactures of lace and cotton.

CARIACO, a marit. town of Venezuela, prov. Cumana, in a large plain near the head of the gulf of the same name, 38 m. E.N.E. Cumana; lat. 10° 30′ N., long. 63° 40′ W. Pop. 7000. The town is small, and its climate is unhealthy; but it has some trade, and its vicinity is extensively cultivated with cotton, &c. (*Geog. Account of Colombia.*)

CARIATI, a sea-port town of Naples, prov. Calabria Citra, cap. cant., on a high promontory washed by the Ionian sea, 18 m. S.E. Rossano. Pop. 8000. Though the seat of a bishopric, it is a desolate, wretched-looking place, surrounded by dilapidated walls, and having a castle in ruins. It has suffered much from the attacks of the Turks and Algerines, and more recently from the depredation of brigands, who, in 1806, made the cause of legitimacy subservient to their own predatory purposes. It is now, however, beginning to improve. The best manna of Calabria is found in its environs, and the rivers furnish fish in abundance. (*Craven's Calabria*, p. 223.)

CARIGNANO, an inland town of N. Italy, kingdom of Sardinia, div. of Turin, cap. distr., on the left bank of the Po, which is here crossed by a wooden bridge, 11 m. S. Turin. Pop. 7000. It is surrounded by old walls, has a handsome square, a fine church, several convents, two hospitals and a college, and some remains of its ancient castle. A good deal of silk is produced in the neighbourhood, and there are several filatures in the town. Carignano is also celebrated for its confectionary. It has been several times taken; the French sacked it in 1544. (*Rampoldi; Dict. Geog.*, &c.)

CARINI, a town of Sicily, prov. Palermo, cap. cant., on the rivulet of the same name, near where it falls into the sea, 12 m. W.N.W. Palermo. Pop. (inc. cant.) 8684. It stands on a rising ground in a beautiful situation; is a respectable and clean town; and has a Gothic castle, with several churches, convents, and public buildings.

Near Carini are the ruins of the ancient *Hyccara*, a small but rich city, sacked by Nicias, who, on that occasion, captured Lais, the famous courtezan. (*Smyth's Sicily*, p. 69.)

CARINTHIA and CARNIOLA (Germ. *Kärnthen* and *Krain*) DUCHIES OF, two contiguous inland provinces of the Austrian empire; the former being included in the ancient *Noricum*, and the latter in *Illyricum*: they now respectively form the northern and central portions of the kingdom of Illyria as established in 1815, chiefly between lat. 45° 30′ and 47° 10′ N., and long. 12° 40′ and 15° 40′ E.; having N. Salzburg and Styria, E. Styria, S. Croatia and Istria, and W. a part of the government of Trieste, the Lombardo-Venetian kingdom, and the Tyrol. Area, 6930 sq. m. (326·69 Germ.) Pop. (1838) 748,785, about 3-5ths of which belong to Carniola. These provs. compose that part of Illyria forming the government of Laybach, and are divided into five circles, viz., Carinthia into Klagenfurt and Villach, or Lower and Upper Carinthia; and Carniola into those of Laybach, Adelsberg, and Neustadtl. The whole country is mountainous: the great Alpine chain, which passes from the Tyrol through Styria into Hungary (*see* AUSTRIA, EMPIRE OF, p. 235), bounds Carinthia on the N., and its southern parallel chain, with its second ramification or the Julian and Carnic Alps, run through the W. and S. parts of Carniola, and on its N. separate it from Carinthia. The great Alpine chain consists in its whole extent of granite, gneiss, quartz, mica, and clay-slate, and other primary rocks, and contains many metallic ores: the Carnic and Julian Alps have chiefly a calcareous formation, and the latter abound with ravines, caverns, and grottoes. They are comparatively poor in metallic products. There are fertile valleys between the mountain ranges; but the country generally is sterile and bare, and does not yield corn enough for the consumption of its inhabitants, the deficiency being made up by imports from Hungary. Carinthia is more abundantly watered than Carniola; the Drave intersects the former prov. in its whole length; the Save rises in the latter, and runs with a S.E. course through its N. and E. divisions: both greatly assist the traffic of these provinces. There are several moderate-sized lakes, as the Worthsee, Ossiacher-see, Muhlstadter-see, in the central part of Carinthia, and the Czirknitzersee and others in the W. and N.W. parts of Carniola, besides many small ones. The temperature depends chiefly upon the elevation; but, except in S. Carniola, the climate is generally cold, and unfavourable to agriculture. According to Becker (*Handel's Lexicon*, 1836), the surface of the conjoined provs. is thus divided: arable land, 678,993 Eng. acres; vineyards, 23,909 do.; meadows and gardens, 792,015 do.; commons, 1,085,669 do.; forests, 2,174,177 do.: total, 4,755,285 do.

The respective quantities of the chief agricultural products are stated to be: Wheat, 88,134 Eng. quarters; rye, 187,961 do.; barley, 126,863 do.; oats, 351,674 do.; wine, 3,350,601 Eng. imp. gall.

Wheat, barley, and wine, are principally produced in Carniola; rye and oats in Carinthia. Buckwheat, millet, hemp, and flax, are also grown, and the flax of Carniola is said to be the best in the empire. The extent of surface devoted to gardens and vineyards in Carinthia is very inferior to that so appropriated in Carniola, in the S. of which duchy the finest apricots, peaches, apples, pears, and plums are produced, besides a considerable quantity of good wine. On the other hand, in Carinthia, the pasture lands are extensive, and cattle are reared in much larger numbers than in Carniola, as will be seen by the following statement from *Becker's Handel's Lexicon*, 1836; and the *Nat. Encycl.*: Carinthia, 38,352 horses, 110,346 oxen, 165,842 cows, 227,571 sheep; Carniola, 14,803 horses, 48,369 oxen, 65,696 cows, 63,604 sheep. The horses, which are large and strong, are bred mostly in the valley of the Gail, and elsewhere, in Upper Carinthia. The sheep yield only inferior wool. Hogs and goats are plentiful. The Alps are inhabited by bears, which make great havoc among smaller animals. Chamois, deer, hares, foxes, &c., are, however, found, as well as a great variety of feathered game. The rivers and lakes, and especially the Drave and the Ossiachersee, abound with salmon, trout, and other superior fish. Bees are numerous, especially in S. Carniola; of late years the rearing of silk worms has increased. The principal wealth of Carinthia is in the produce of its mines. Iron is found throughout the whole extent of the primary Alpine chain, and is also procured in the Carnic Alps. Copper is mined in several places, but although the quantity of ore be inexhaustible, the hardness of the stone in which it is found, and other difficulties oppose serious obstacles to the attainment of any great supply of metal. The lead mine of the ore-mountain near Villach is the largest and most productive of that metal in the empire: it yields annually 33,000 centner of pure metal; other mines in the duchy afford yearly about 20,000 centner. Zinc, silver, and quicksilver, are likewise met with, and near Hüttenberg antimony is found in conjunction with iron. There are some iron and lead mines in Carniola, but those of the greatest importance in that prov. are the celebrated quicksilver mines of Idria, the richest in Europe. Coal, peat, marble, building stone, various clays, talc, asbestos, jasper, beryl, opal, emerald, garnets, are found in various parts of the country. The following shows the average annual produce of some of the mines in both provinces: bar iron, 271,925 cwt.; cast iron, 9942 cwt.; lead and lead ore, 60,893 cwt.; copper, 78 cwt.; coals, 49,614 cwt.

Manufacturing industry in Carinthia is mostly confined to working up its raw produce, and especially its metallic ores. The *Nat. Encyc.* a few years since enumerated 20 furnaces, and 61 forges, iron-plate and steel works. It gives 130,537 centner as the quantity of iron and steel wares annually made. Besides these manufactures, there were two of woollen, one of silk, and many of cotton fabrics, and a white-lead factory: most of these were in the capital. In Carniola the manufactures are more important, although still inferior in amount to those in many other Austrian provinces. Most of the rural male population follow linen weaving, in addition to their agricultural occupations; while their wives spin thread. Both these articles are generally coarse; but there are some fine linen and lace manufactures, and many of woollen cloth, flannel, worsted stockings, leather, &c. Iron manufactures, and others of wooden articles, also occupy many hands, and in Laybach there is a very extensive porcelain and earthenware factory. The principal exports from Carniola are steel wares, timber and wooden articles (to about 163,500 guilders), glass wares, linens (about 2600 pieces), felt hats, wax, wine, to Carinthia; flour to Trieste; quicksilver to Lower Austria, &c. Its imports are Hungarian and Italian wines, salt, oil, fruit, colonial produce, with coffee, sugar, various manufactured fabrics, tobacco, a large supply of horned cattle,

&c. The exports of home produce are not probably much below the value of its imports; but considerable wealth is derived to the province from the traffic through it, and conveyance of goods from Austria, Carinthia, Croatia, &c., to Trieste, and the other ports on the Adriatic. The town of Gottscheer, where a German colony is situated, has a remarkable commercial activity, and its goods are widely diffused over Hungary and the N.W. provinces of the empire, as well as in many other parts of Europe: Laybach, the cap., is the other chief place of trade. The exports of Carinthia are almost confined to its raw and manufactured mineral products, and cattle. Klagenfurt, the cap., and Villach, are its principal commercial towns. The inhab. of these provs. are mostly of the Slavonian race, denominated Wendes or Vandals; in Carinthia, however, those of German are to those of Slavonian stock as 172 to 95. The Drave formerly separated the two races. Carinthia has been always considered as a German prov. of the Austrian empire, and has enjoyed peculiar privileges. It has its own diet, consisting of four ranks—the upper clergy, nobility, knights, and the representatives of the royal burghs and market towns; but its internal administration is subordinate to the government authorities at Laybach. The high criminal and other judicial courts of Carinthia are at Klagenfurt. The Lutheran religion made considerable progress in this prov. in the 16th century, until checked by the government: there are now scarcely 20,000 Protestants, mostly in Upper Carinthia. The state assembly in Carniola is in most respects similarly constituted with that of Styria, with which prov. it was formerly united. The whole pop. of Carniola is Roman Catholic—a robust, contented, and frugal people. The Carinthians have, to a great extent, the character and disposition of Italians. They are said to be more inclined to indolence than their southern neighbours, and are often ignorant and superstitious. Both provinces formed parts of the empire of Charlemagne, and afterwards belonged to the dukes of Friuri. After passing through various hands, the house of Austria became possessed of Carniola in 1945, and of Carinthia in 1321. In 1809 these countries were annexed to the empire of Napoleon, and remained connected with it till 1814, when they were restored to Austria. (*Oesterr. Nat. Encyc.* art. *Kernthen* and *Krain*; *Dict. Géographique.*)

CARIPE, a town and valley in Venezuela, prov. Cumana, 40 m. S.E. that city. The town is the chief seat of the Chayma Indian missions. The valley is celebrated for a remarkable cavern in a limestone formation, at least 2800 ft. in depth, and for some distance 60 or 70 ft. high. It is inhabited by multitudes of birds, called guacharos, a species of *Caprimulgus*, the young of which are annually destroyed in great numbers by the Indians, for the sake of the fat with which the lining membrane of their abdomen is laden, and of which excellent oil is made. Humboldt visited this cavern. (See his *Personal Narrative*, vol. ii.)

CARISBROOKE, a par. and village of England, Isle of Wight, liberty W. Medina, situated by a rivulet, at the base of a conical hill, surmounted by its castle or fortress, 73 m. S.W. London. Area of par. 3880 acres: pop. do. (1831) 4713. Some portions of the fortress are very old; but it was repaired and greatly augmented in the reign of Elizabeth. The walls of the old fortress (a parallelogram enclosing an area of 1½ acre, with its keep in the centre) are comprised within the more modern fortifications, which enclose an area of about 20 acres. The latter have five bastions, and a deep moat; and are connected with a fine terrace, nearly 1 m. in length. The par. church stands on an acclivity opposite the castle: it is a Norman structure, originally attached to a Cistertian monastery, founded in the reign of the Conqueror; some remains of which exist at a farm-house on its site. The most celebrated event in the annals of Carisbrooke castle is the confinement of Charles I. for thirteen months within its walls, immediately previous to his being delivered up to the parliamentary forces. Subsequently, his children were also imprisoned in this castle; and his eldest daughter died in it, at the age of fifteen. It continues to be the residence and head-quarters of the governor of the Isle of Wight; and a considerable body of troops are usually stationed in it. There are many pleasant villas scattered over the parish; within which, also, is the general workhouse of the island, whose inmates, in 1831, made an augmentation of 676 persons to the population.

CARLEE, a small village of Hindostan, prov. Aurungabad, 34 m. N.W. Poonah, near which are some remarkable cave-temples, excavated in a spur from a chain of hills running E. and W.; the chief cavern is said to be 6000 ft. above the level of the sea, and faces due W. A little to the left, before the entrance, stands a large pillar, surmounted by three sculptured lions back to back. The temple is entered under a noble horse-shoe arch, through a small square doorway in a kind of portico screen, which in great part fills up the arch, and abounds with laboured workmanship. To one third of its height, it is covered with various figures in bas-relief; and one of these, in a dancing attitude, is exceedingly graceful: the ends of this screen are occupied to the same height with the figures of gigantic elephants, projecting in alto-relievo, and well carved. After entering the cave, which is 40 paces long by 14 broad, Mrs. Graham observes, "when we looked round, we almost fancied ourselves in a Gothic cathedral." Unlike the Buddhic cave-temples of Baug, Ellora, &c., the roof is arched, rising to an astonishing height, supported by twenty-one pillars along each side, and above these by ribs of teak, which are fitted by teeth into corresponding holes in the rock above. The pillars are mostly hexagonal, each with a bell-shaped capital, surmounted by two elephants with their trunks entwined, and each carrying one female and two male figures. On several of the columns there are inscriptions, which have recently been translated (see *Journal of the Asiat. Soc. of Bengal*, vol. iii.), and from one of them it would appear that this temple was constructed A.D. 176. The cave is semicircular at its termination: opposite the entrance is a structure with a dome, on which is fixed a huge teak umbrella, an ornament common in the temples of Buddha; but no separate cells, opening from the main temple, have been noticed, though such have been supposed characteristic of Buddhic structures. (*Erskine in Bombay Trans.*, iii., 512, &c.; *Graham, Journal of a Resid. in India*, p. 63–65; *Med. Trav.*, x., 269–272, &c.)

CARLENTINI, a town of Sicily, prov. Syracuse, 19 m. N.W. Syracuse. Pop. 4176. It was built by Charles V. for the head-quarters of the Sicilian army; but the design was never completed, and since the earthquake of 1693, by which it was partially destroyed, it has become a miserable place. (*Smyth's Sicily*, p. 159.)

CARLINGFORD, a sea-port town of Ireland, co. Louth, on the S. side of Carlingford lough, 10 m. E. Dundalk. Pop. in 1831, 1319. Carlingford lough is 8 m. in length, by from 1 to 1½ m. wide, with deep water and secure anchorage, but being situated between lofty mountains, is liable to sudden squalls. The bar at the entrance has 8 ft. water at low-water springs, 17 ft. at ordinary high water, and 26 ft. at springs. This bay is well stocked with excellent oysters, the fishing of which employs most part of the pop. of Carlingford. It returned two mems. to the Irish parliament, but was disfranchised at the Union. (*Nimmo's Sailing Directions for the Irish Coasts*, &c.)

CARLINVILLE, p. v., cap. of Macoupin co., Ill., 39 m. S.S.W. Springfield, 811 W. Situated on a branch of Macoupin river, a tributary of Illinois river, on a beautiful prairie. It contains a court-house, jail, several stores, one school, 89 scholars. Pop. 327. A theological seminary, under the patronage of the Presbyterian Synod of Illinois, was established here in 1838, which has a library of 700 vols.

CARLISLE, a city of England, co. Cumberland, on a gentle eminence, in an extensive plain at the confluence of the Eden, Caldew, and Peteril, which nearly surround it; 269 m. N.N.W. London, and 98 m. N. by W. Manchester. Pop., in 1801, 10,221; 1821, 15,486; and 1841, 36,064. The great increase of pop., particularly since 1821, is attributed to the increase of manufactures, and the influx of Irishmen and Scotchmen to the mills and rail-roads.

The Eden is crossed by an elegant and expensive bridge, finished in 1817, consisting of five large and five smaller arches; the Caldew has two bridges, and the smaller stream of the Peteril one. The principal streets diverge from the market-place, an irregular area in the middle of the town: though not regularly arranged, several of them are well built, and they are generally well paved and lighted, and plentifully supplied with water.

Carlisle is the seat of a bishopric, founded by Henry I., and remodelled by Henry VIII, after the dissolution of the monasteries, with whose lands he largely endowed it. The ecclesiastical jurisdiction extends over ninety-three pars., containing the whole of Westmoreland and great part of Cumberland. The revenues of the see amounted, at an average of the three years ending with 1831, to £2213 a year. The cathedral, having been repaired at different periods, exhibits various kinds of architecture; the E. window is said to be the finest specimen of the kind in England. The dignitaries, beside the bishop, are a dean, four prebendaries, and eight minor canons. The only part of the nave of the cathedral which remains forms the parochial church of St. Mary: that of St. Cuthbert is a plain building, erected in 1778. There are two chapels of ease, both built in 1828—Trinity church, in the perpendicular Gothic style, in the suburb of Caldew-gate; and Christ church, in the early English style, in the suburb of Botcher-gate: each has accommodation for 2000 persons. The other places of worship are those of Presbyterians, Independents, two denominations of Methodists, Baptists, R. Catholics, and the Society of Friends. The grammar school was founded by Henry VIII. There are also Lancastrian and national schools, St. Patrick's school for educating 400 children of all denominations, a school of industry for fe-

males, &c. The county infirmary is in the town, and it has a fever hospital, a dispensary, &c. An academy for the encouragement of the fine arts was formed in 1822, a mechanics' institute in 1824, and a literary and philosophical institution in 1835: a handsome building, erected in 1839, for the accommodation of these societies, contains a museum and a theatre for lectures. There are two subscription libraries and newsrooms—one of the latter a chaste new building opened in 1831—and two weekly newspapers. The environs afford many delightful rides and walks. Races take place in autumn, at the Swifts, a fine course on the S. bank of the Eden. The ancient castle, which stands on an eminence over the river, consists of an outward and inner wall, each of great thickness, and of a great square tower, constructed according to the ancient mode of defence. The ramparts command a very fine view. It has a governor, lieutenant-governor, &c., but is now used only as an infantry barrack and armory.

The *city*, technically so called, which formed the ancient bor. of Carlisle, is confined within limits which, in 1831, had only a pop. of 8356. It is a corporation by prescription; and obtained confirmations and extensions of its privileges by a series of eighteen charters, terminating with 13 Charles I., which was the governing charter. Under the new municipal act, the government is vested in a mayor, ten aldermen, and thirty common-councilmen, chosen annually by the rate-payers, whose number in 1838 was 989. There are eight guilds or fraternities of trades; admission into any one of which is by birth or apprenticeship only; and admission into one of the guilds is a preliminary requisite to the freedom of the city. Carlisle has sent two mem. to the H. of C. since the reign of Edward I.; the right of election, previously to the Reform Act, being in resident and non-resident freemen. The boundaries of the parl. bor. were extended by the Boundary Act, so as to embrace, not merely the city, but also the suburbs and a considerable contiguous circle. Pop. of parl. bor. in 1831, 21,072: houses taxed at £10 and upwards, 887. Registered electors in 1837–38, 1013. The election of members for the E. division of the co. is also held here.

The court of the mayor and the bailiffs sits weekly, and holds personal pleas to any amount. Petty sessions are held on Wednesdays and Saturdays. The police consists, besides a constable for each township, of a superintendent, three day men, and twenty night men. There is no city jail, prisoners being confined in the county jail, an extensive and well-constructed building at the S. entrance to the city, or in the house of correction: a subterraneous passage, through which the prisoners are brought to trial, connects both these places of confinement with the county court-house. The county assizes, and the quarter sessions, at Easter and Midsummer, are held in this building, which was erected in 1810 on the site of the ancient citadel: it has two magnificent towers. The revenues of the corporation, amounting to about £1800 a year, arise from tolls, rents, and shares in public companies.

The buildings for corporate and other public purposes connected with the government of the place, are the town-hall, guildhall, and council-chamber. Cotton is the staple manufacture of the town, eight mills for the spinning of cotton, employing 1486 hands, having been at work here in 1839, exclusive of factories for weaving checks, ginghams, and other fabrics, both in the city and along the Caldew. One of the mills recently erected has a chimney 305 ft. high! The hatting trade is also extensive; and there are several dye-works, print-works, iron-foundries, tan-yards, and breweries. Coal for manufacturing and domestic purposes is brought from Gilsland, 12 m. distant; and from other collieries, about 20 m. distant. A considerable part of the manufacturing pop. of Carlisle used to be in a very depressed condition; but, on the whole, the city is thriving, and its general aspect is good. The situation of the city, on the great N.W. road from Lancashire to Glasgow and Edinburgh, tends to increase its trade, which is still further promoted by the railway constructed between it and Newcastle. The navigation of the Eden being greatly impeded by shoals, a canal suitable for vessels of 100 tons' burden, has been cut to Bowness, on the Solway Frith, 11 m. distant. The trade with Liverpool and Ireland is carried on by steamers.

The following table shows the amount of tonnage for a series of years, distinguishing the amount inwards and outwards; also that of the foreign from the coasting trade:

Years.	Coastwise.		Foreign.	
	Inwards.	Outwards	Inwards.	Outwards.
	Tons.	*Tons.*	*Tons.*	*Tons.*
1823	14,226	7,908	2159	719
1826	16,786	18,708	2197	341
1827	27,673	24,221	2314	547
1829	25,963	26,976	2346	365
1831	24,065	25,024	2040	
1832	22,390	23,362	2730	741

Markets are held on Wednesday and Saturday; fairs on the Saturdays before Whitsuntide and Martinmas; also a statute-fair on the 26th Aug. and 14 days after, during the continuance of which no attachment from the civil courts can be executed; and another on 19th Sept. The banks are, the Carlisle City and District Bank, the Carlisle and Cumberland Banking Co., a branch of the Cumberland Union Banking Co., the house of Monkhouse, Head, and Co., and a savings' bank. The village of Stanwix, N. of the Eden, may be considered as a suburb of Carlisle, though not included within its corporate or parliamentary limits. Its ancient church, dedicated to St. Michael, is built on the site and out of the ruins of the Roman station of Congavata, which stood along the rampart of the wall of Severus. Pop. of the village in 1831, 545. (*Hist. and Antiq. of Carlisle; Municipal Reports; Sessional Papers; Dugdale's Cathedrals.*)

Carlisle was a Roman station, under the name of Luguvallum, as is attested by vestiges of the Roman wall, and by many Roman relics discovered here at various times. The Saxons called it Caer Luil, whence its present name is derived. William the Conqueror built the castle; and during the wars between England and Scotland, Carlisle was a frequent object of attack. It surrendered, without making any opposition, to the Pretender Charles Edward, in in 1745; but on his being compelled to evacuate it, on the approach of the British forces, he left behind him a small garrison, which surrendered at discretion: the officers of this garrison were subsequently executed at London as traitors, and their heads exposed on the gates and walls of Carlisle.

Carlisle, p. t., Middlesex co., Mass., 19 m. N.W. Boston, 456 W.; bounded E. by Concord river; incorporated in 1805. It contains two churches, one Congregational and one Unitarian; one store, one grist-mill, two saw-mills, five schools, 204 scholars. Pop. 556.

Carlisle, p. t., Schoharie co., N. Y., 36 m. W. by N. Albany, 8 m. N.W. Schoharie. It contains two stores, one fulling-mill, one grist-mill, six saw-mills, two tanneries, eleven schools, 587 scholars. Pop. 1850. The village, on the Cherry Valley turnpike, contains two stores and twenty dwellings.

Carlisle, p. v., capital of Cumberland co., Pa., 15 m. W. by S. Harrisburg, 103 W. Situated in 40° 12′ N. lat., and 77° 10′ W. long. Founded in 1751, and in 1753 contained five log houses; but being a border town and a military post, it increased rapidly. It is regularly laid out with streets crossing each other at right angles, which are generally paved; and it is neatly and substantially built, the houses being chiefly of brick or stone. It contains a court-house, jail, the county offices, which are fire-proof; a market-house, a banking-house, a young ladies' seminary, nine churches, two Presbyterian, one Episcopal, one German Reformed, one Lutheran, one Methodist, one Associate Presbyterian, one Roman Catholic, and one African; forty-two stores, six tanneries, three distilleries, two breweries, three printing-office, one bindery, three weekly newspapers, one academy, 90 students, sixteen schools, 855 scholars, 700 dwellings, and 4351 inhabitants. The United States barracks, half a mile from that village, were built in 1777, chiefly by the labour of the Hessians, captured at Trenton. They are sufficient for a garrison of 2000 men; and the U. S. government have recently established a cavalry school here.

Carlisle is the seat of Dickinson college, founded in 1783, under the direction of the Presbyterians, but some time since, it went into the hands of the Methodists, and is flourishing. The buildings are on elevated ground in the W. part of the village. The principal edifice is built of limestone, 150 feet long and four stories high, surmounted by a handsome cupola, which commands a beautiful and extensive view of the surrounding country, embracing North mountain, for a distance of eighty miles. Another building has been erected, 100 feet long and four stories high. It has a president and seven professors or other instructors; has had 561 alumni, of whom 140 have been ministers of the Gospel; has 109 students, and 10,000 volumes in its libraries. The commencement is on the second Thursday in July. It has an academical department.

The Cumberland valley rail-road, extending from Harrisburg to Chambersburg, passes through the borough. In the vicinity are several sulphur springs, and a remarkable cave, with several large apartments.

Carlisle, p. v., capital of Nicholas co., Ky., 53 m. E.N.E. Frankfort, 496 W. It contains a court-house and other county buildings, several stores, two schools, 50 scholars. Pop. 256.

Carlisle, t., Lorain co., O., 3¼ m. S. Elyria. Drained by Black river and its branches, which afford water-power. It contains two grist-mills, five saw-mills, six schools, 273 scholars. Pop. 1604. On the E. branch of Black river is a village, which contains one store, one grist-mill, one saw-mill, and about thirty dwellings.

CARLOFORTE, a sea-port town of the Sardinian States, on the small island of San Pietro, near the S.W. coast of Sardinia: lat. 39° 8′ 28″ N., long. 8° 17′ 28″ E. Pop. 2830. The streets are in "tolerable" order, and it is surrounded by a wall, and has some fortifications. It is moderately healthy. The inhabitants are engaged in the anchovy and coral fisheries, and in the manufacture of salt. (*Smyth's Sardinia*, p. 310.)

CARLOTA (LA), a town of Spain, prov. Cordova, cap. dep. of its own name, 17 m. S. W. Cordova. Pop. 302. It is one of the chief seats of the foreign colonists planted in Andalusia in 1768, in the view of peopling and fertilizing the Sierra Morena. It is a pretty town, and the inhabitants, who are clean and thriving, have some manufactures of hempen and linen cloths. (*Inglis's Spain in* 1830, ii., 42; *Miñano.*)

CARLOW, or **CATHERLOUGH**, an isl. co. of Ireland, prov. Leinster, lying mostly on the E. side of the Barrow, having S. and E. Wexford and Wicklow, N. the latter and Kildare, and W. Queen's co. and Kilkenny. Area, 219,863 acres, of which 23,030 are unimproved mountain and bog. Surface on the S. border mountainous, but elsewhere gently undulating. Besides the Barrow, by which it is partly intersected and partly bounded, it is watered by the Slaney. Soil in the uplands a light gravel; in the lowlands a fertile loam. This is one of the principal dairy cos. in Ireland; and the stock of cows has latterly been a good deal meliorated by the introduction of Ayrshire, and other improved breeds from Great Britain. Estates middle sized; and that minute division of land among the occupiers, so destructive of the best interests of the country, has prevailed less here than in most other parts of Ireland. Agriculture is, in consequence, in a much more advanced state here than in many other Irish cos.; there is a considerable breadth of land under green crop; and improved farming implements are pretty generally introduced. Average rent of land, 15*s.* an acre. Manufactures and minerals of no importance. Carlow is divided into five baronies and fifty parishes, and sends three mems. to the H. of C., viz., two for the co., and one for the bor. of Carlow. Registered electors for the co. in 1837–38, 1498. In 1831 Carlow had 13,275 inhabited houses; 14,609 families; and 81,988 inhab., of whom 40,149 were males, and 41,839 females.

Carlow, a parl. bor., the principal town of the above co., and the place where the assizes are held, on the Barrow, where it is joined by the Burren, 45 m. S.W. Dublin. The town, properly so called, lies wholly on the left bank of the Barrow; but it is connected by a bridge with the suburb of Graigue, on the opposite side of the river in Queen's co.; this suburb has been included in the parl. bor., which extends over a space of 496 acres, and had, in 1831, a pop. of 10,714. It is a well-built, thriving town. It has an old castle, now in ruins, but once a place of considerable strength and importance; a parish church with a spire; a handsome R. Cath. cathedral church, opened in 1834; a R. Cath. college, and convent; barracks; a lunatic district asylum for the cos. of Carlow, Wicklow, Wexford, and Kilkenny, erected in 1830 at a cost of nearly £26,000; an elegant new court-house; a co. jail; co. infirmary, &c. Besides the R. Cath. college, fitted for the accommodation of 200 students, there is a diocesan school, and numerous charity-schools both for Protestants and Catholics. There are also several charitable institutions.

Being situated on a navigable river, communicating with Waterford on the one hand, and with Dublin, by means of the Grand Canal, on the other, Carlow has a very considerable trade. It is a great mart for the agricultural produce, particularly the corn and butter, of the surrounding country, great quantities of which are sent down the river to waterford for exportation. It has also some large flour-mills, and and an extensive malting business; and furnishes considerable supplies both of flour and malt to Dublin. It has 2 breweries and a distillery; and paid duty, in 1836, on 39,577 bushels of malt. Postage, in 1839, £1301; in 1839, £1441. The Bank of Ireland has opened a branch here.

Carlow is a place of great antiquity, and has various charters; by the last of these, in 1671, the bor. consists of a sovereign, elected annually, and 12 self-elected free burgesses. From 1613 down to the union with Great Britain it sent 2 members. to the Irish H. of C., and since the union it has sent one mem. to the Imperial H. of C., who, till the passing of the Reform Act, was returned by the sovereign and burgesses. Registered electors in 1837–38, 410. (*Railway Report; Boundary Report, &c.*)

CARLOWITZ, a town of the Austrian states, Slavonia, within the military frontier, circ. Peterwardein, on the right bank of the Danube, 4 m. S.E. Peterwardein. Pop. 5,800, mostly of Servian descent. Most part of its houses are mere huts, and it is only in part paved. It contains a Greek cathedral, two other Greek churches, a R. Catholic church, a hospital, seminaries for the Greek and Catholic clergy, a Greek lyceum, and a Catholic high-school. The subordinate jurisdiction of the town is in the hands of an equal number of R. Cath. and Greek magistrates. It is the seat of a Greek archbishop, the only one belonging to that church in the Austrian Empire, to whom all the Austro-Greek clergy are subordinate. (*Oesterr. Nat. Encycl.*)

CARLSBAD, a town of Bohemia, famous for its hot springs, on the Tepel, near the Eger, 72 m. W.N.W. Prague. Stationary pop. about 2700. It lies in a low narrow valley, surrounded by hills, covered with every variety of foliage, and affording the most extensive and varied prospects. The town consists principally of lodging-houses, hotels, &c. for the accommodation of visitors to the waters; but it has some good shops and private houses, with a theatre, assembly and reading rooms, a hospital, &c. The Sprudel, the principal spring, is the hottest in Europe; its temperature being about 59° Reau., or 165° Fah. The expansive force of the steam below forces up the water in jets to a considerable height, and to guard against the danger that has sometimes arisen from the obstruction of the apertures by which the water and vapour escape, it has been covered over by a solid bed of masonry. There are several other springs: that of Muhlbrunnen, which is the most commonly drank, has a temperature of 138° Fah. Baths of all sorts are fitted up with every accommodation. The waters are efficacious in a great variety of complaints, but chiefly in those of the liver and kidneys. The walks and promenades in the neighbourhood of the town have a great deal of romantic beauty and interest. The number of visiters in the season varies from 4,000 to 5,000.

This, which is the most fashionable and aristocratical watering place in Europe, is of comparatively recent origin. The springs are said to have been discovered in 1376, by the Emperor Charles IV., who, when hunting in the vicinity, was attracted to the spot by the cries of a hound that had fallen into one of the springs. The town belongs to the emperor. A congress was held here in 1819. (*Murray's Hand-Book for S. Germany; Spencer's Germany and the Germans*, i. 222.)

CARLSBURG, or **KARLSBURG**, a royal town of Transylvania, co. Unter-Albens, on the N. bank of the Maros, 22 m. N.W. Hermstadt; lat. 46° 5′ 21″ N., long. 23° 23′ 10″ E. Pop. 11,360. It consists of the Upper town or citadel, built on a hill, and the Lower town, situated beneath it. The citadel is surrounded by walls with seven bastions, and its principal gate is adorned with some fine sculptures. The town has a handsome R. Cath. church, containing the tombs and monuments of John Huniades, and several royal and other personages; the fine residence of the bishops of Transylvania, a canons' college, containing the provincial archives, royal mint, observatory with a fine collection of apparatus, several libraries and scientific collections, an arsenal, barracks, &c. There are also a hospital, an ecclesiastical lyceum, college, and primary school. From the Lower town a bridge 210 paces in length passes over the Maros. It is worthy of remark that the Jews, who are naturalized in no other part of Transylvania, enjoy in Carlsburg the full rights of citizenship, under the protection of the bishop. (*Oesterr. Nat. Encyc.*)

CARLSCRONA, or **CARLSCROON**, a sea-port town of Sweden, on the Baltic, cap. prefecture Bleking; lat. 56° 10′ 9″ N., long. 15° 33′ 25″ E. Pop. 11,500. The greater part of the town is built on the small rocky island of Tros-oe, and the rest on some adjoining islets; the communication with the main land being maintained, partly by a mound, and partly by a wooden bridge. The harbour is large and safe, with water sufficient to float the largest ships. It has 3 entrances, but the only one practicable for large vessels is on the S. side of the town, and is defended by two strong forts. The dry docks constructed here, for the building and repair of men-of-war, have been formed at a vast expense; they are of great extent, and have been cut out of the solid granite rock. It is the principal, or rather, the only, station of the Swedish fleet. The town is well built, consisting partly of brick, but principally of wooden houses. The arsenal, and other buildings connected with the docks and shipping, are on a large scale; and there are also two handsome churches, a hotel for the prefect, a hospital, a lazaretto, &c. There is a great deficiency of good water; that which is obtained from the wells sunk in the town is brackish, so that when rain-water fails, recourse has to be had to springs distant about 3 m. There are some manufactures of canvass and linen, with anchor forges, tanneries, &c. The trade of the town is but inconsiderable; the exports consist principally of iron, copper, steel, potash, tar, pitch, &c.

Carlscrona derives its name and origin from Charles XI., who, in 1680, conferred on it considerable privileges, and removed the fleet thither from Stockholm. It has since continued to be the principal station of the Swedish fleet; but the Admiralty, which had been long seated here, was, in 1776, transferred to Stockholm. In 1790, it suffered severely from a fire. (*Coxe's Travels in the North of Europe*, iv., 282.)

CARLSHAMN, a sea-port town of Sweden, prov. Bleking, cap. herad., on the Baltic, at the mouth of the Nie, 55 m. W. Carlscrona; lat. 56° 12′ 40″ N., long. 14° 51′ E. Pop. 4150. It has two churches, a hospital, with considerable manufactures of canvass, woollens, and tobacco, and building-yards. The harbour is small, but safe. The exports consist of iron, timber, potash, pitch, and tar, tobacco, &c. Being built principally of wood, it has sometimes suffered severely from fires.

CARLSRUHE (*Charles's Rest*), a city of Germany, cap. of the grand duchy of Baden, circ. Middle Rhine, residence of the grand duke, and seat of the administration and principal state authorities, in the fine plain of the Haardwald (Stag's Forest), which surrounds it on the N. and W.; 4 m. E. the Rhine, 37 m. W.N.W. Stuttgardt, 57 m. S. by W. Darmstadt, and 42 m. N.E. Strasburg. Lat. 48° 58′ N., long. 8° 22′ E. Pop. 20,500 (*Berghaus*), more than two thirds of whom are Protestants. It is built in the form of an outspread fan, or rather wheel, round the grand-ducal palace, from which, as a centre, 32 public routes radiate, 11 of which, forming the principal streets, have been built on both sides: several of these streets stretch into the forest. The high, or long street, runs from E. to W., intersecting those above alluded to, and dividing the city into a N. and S. portion. Carlsruhe is in part walled, and has seven gates. It is a handsome, but rather dull town. Streets broad, well paved, furnished with foot-paths, and well lighted at night. Houses built in a great variety of styles, but those of wood are daily giving place to brick edifices. There are nine public squares, and, facing the palace, at the point of union of the principal streets, is a semicircular range of elegant buildings, comprising the government offices, and others attached to the palace. The grand-ducal residence, a plain building, composed of a centre and two wings, contains the *Bleytherm* (lead-tower), from the summit of which there is an extensive prospect; a cabinet of coins and natural objects; a library of 80,000 vols.; and the church attended by the court. Towards the E. extend the large gardens and park belonging to the palace, which are thrown open to the public. There are several other palaces belonging to the nobility deserving of notice, and ninety public buildings, including four Protestant and Catholic churches, a synagogue, town-hall, in which both chambers of the senate meet; a museum, the grand-ducal, and another theatre, a new mint, the post-office, infantry and cavalry barracks, arsenal, cannon-foundry, and several hospitals. It may be worth mentioning, that Stults, the fashionable London tailor, is the founder of one of these hospitals, which he endowed with 100,000 florins: in return for his generosity he has been created a baron. The city is supplied with water by an aqueduct from Durlach, distant 2½ m. E. by S.; it is adorned by several public fountains, and in the centre of the principal square is a stone pyramid, erected to the memory of the founder of the city. Its chief establishments for education are a lyceum, polytechnic, military, medical, and veterinary schools, and academies of architecture, painting, &c. It possesses an excellent botanic garden, a gallery of paintings, and a society of arts, under the patronage of the grand duke. Carlsruhe is not a place of considerable trade. It has some manufactures of silks, carpets, woollens, snuff, chemical products, furniture, carriages, clocks, jewellery, and articles of luxury, but the prosperity of its inhabitants mainly depends on its being the seat of the court, and the residence of the principal officers of state. It is quite a modern city, and has risen around a hunting-seat built by Charles William, Margrave of Baden, in 1715. (*Berghaus, Allg. Lander und Volk*, 1838; *Cannabich, Lehrbuch der Geogr.*, p. 490. 491; *Murray's Handbook, &c.*)

CARLSTAD, a town of Sweden, cap. prefecture of the same name, on the island of Tingvalla, at the mouth of the Klar, on the lake Weser; lat. 59° 16′ N., long. 13° 39′ E. Pop. 2600. It is built of wood on a regular plan; has a handsome cathedral, a gymnasium, an observatory, an agricultural society, a cabinet of natural history, and a tobacco manufacture; and is the seat of a bishopric, and the residence of the prefect. The opening of the Gotha canal has added considerably to its commerce. It exports copper and iron, corn, salt, timber, &c.

CARLSTADT, a royal free town of Austrian Croatia, co. Agram, cap. circ. of same name, at the confluence of the Korana and Dobra with the Kulpa, immediately beyond the limit of the military frontier, 32 m. S.W. Agram. Pop., inclusive of its suburb Dubovacs, 6300. It is well built, though mostly of wood; has a small fortress, originally intended to resist the incursions of the Turks, and which is surrounded by ramparts, trenches, and palisades; and contains a handsome parade, barracks, and arsenal. It has five Catholic churches, a Greek church, a gymnasium, superior and girls' schools, a civic and military hospital, &c., and is the residence of a Greek bishop. Considerable quantities of the liqueur called *roseglio* are produced here. Its trade is unimportant, but its inhab. derive considerable profit from the conveyance of goods to the ports of the Adriatic. It was founded by the Archduke Charles, whose name it bears. (*Oesterr., Nat. Encyc.*)

CARLTON, p. t., Orleans co., N. Y., 258 m. W. by N. Albany, 401 W. Bounded N. by Lake Ontario. Drained by Oak Orchard creek, which flows N. to the lake. It contains one store, two fulling-mills, one woollen-factory, one flouring-mill, two grist-mills, twelve saw-mills, two tanneries, fifteen schools, 793 scholars. Pop. 2275.

CARLYSLE, p. v., capital of Clinton co., Ill., 96 m. S. by E. Springfield, 771 W. Situated on the W. side of Kaskaskia river, 215 miles, by water, above its mouth. Founded in 1818, on the border of a prairie. It contains a court-house, five stores, one grist-mill, one saw-mill, and about fifty dwellings.

CARMAGNOLA, an inland town of N. Italy, and Sardinia, div. Turin, cap. distr., near the Po, 15 m. S. by E. Turin. Pop. 3900. It is said to be well built and laid out: many of its streets, as well as its principal square, are ornamented with porticoes. It contains several churches and convents, and a hospital, and has two suburbs. It has considerable trade in silk, flax, hemp, corn, and cattle, for which two large markets are held weekly. This town formerly belonged to the marquisate of Saluzzo: it was taken by the French in 1691 and 1796.

CARMEL (MOUNT), a famous mountain of Syria, extending from the plain of Esdraelon in a N.W. direction till it terminates in the steep promontory, forming the S.W. extremity of the bay of Acre. The name, Mount Carmel, is usually confined to this promontory, the height of which is variously estimated at from 1500 to 1800 ft. This mountain is famous in Scripture history, more especially in that of Elijah, being the place where he destroyed the prophets of Baal (1 Kings, xviii.). In more modern times, the mountain has been occupied by monks, who have resided in grottoes cut out of the rock, and in a monastery built near the summit. The latter was destroyed in 1821, but has since been rebuilt. (*Robinson's Palestine, &c.*, i., 194.)

CARMEL, p. t., Penobscot co., Me., 65 m. N.E. Augusta, 660 W. Drained by branches of Sowadabscook river, which afford water-power. It contains five stores, two saw-mills, and 195 scholars in schools. Pop. 520.

CARMEL, p. t., capital of Putnam co., N. Y., 100 m. S. Albany, 287 W. Drained by branches of Croton river. It contains several small lakes. It has seven stores, three fulling-mills, four grist-mills, seven saw-mills, eleven schools, 520 scholars. Pop. 2262. The village is pleasantly situated on the E. side of a small lake in the N. part of the town, and contains a court-house, jail, two churches, one Methodist, and one Baptist; an academy, three stores, forty dwellings, and about 250 inhabitants.

CARMEL, p. t., Eaton co., Mich. Pop. 868.

CARMI, p. v., capital of White co., Ill., 161 m. S.E. Springfield, 751 W. Situated on the W. bank of Little Wabash river, and contains a court-house of brick forty feet square, with a cupola, four stores, one flouring-mill, one saw-mill, fifty dwellings, and 350 inhabitants. It is surrounded by a flourishing and well-settled country.

CARMONA (an. *Carmo*), a city of Spain, prov. Seville, cap. dep. of same name, 20 m. E.N.E. Seville, 56 m. W.S.W. Cordova. Pop. 29,296. It stands in a picturesque situation on an isolated hill, looking down upon the plains of Andalusia; it is well built, and has seven churches, nine convents, and two hospitals, some Roman antiquities, and a beautiful Moorish gate. It has some manufactures of coarse woollen and hempen cloth, hats, glue, soap, delft, shoe-leather and wax candles; but most of them are in a decaying state. Its environs are very fertile, particularly in vines and olives; and Townsend says that there were above 100 oil-mills in the town and its immediate vicinity (vol. ii., p. 196). It was a place of importance under the Romans, and Cæsar conferred on it the privileges of a Roman city. Under the Moors it was celebrated for its castles, palaces, and fountains, of which hardly any remains now exist. (*Miñano; Inglis*, ii., 47.)

CARNAC, a village of France, dep. Morbihan, on a height at a little distance from the sea, 20 m. S.E. L'Orient. It is remarkable for very extensive remains of what is believed to have been a druidical monument. These consist of 11 ranges of granite stones, standing in lines nearly perpendicular to the coast. These stones are of great thickness, and from 9 to 10, perhaps 20 ft. in height. The French writers say that they are generally about 20 ft., and that the highest are 22 (French) feet above ground. But Mrs. Stothard distinctly affirms that this is an exaggeration; that the highest do not rise more than 15 ft. above ground, and that the medium height is from 9 to 12 ft. (*Letters from Normandy*, p. 235.) Their number is said to exceed 4000: the smallest end is fixed in the ground, and in some instances flat stones, supported by two of those that are upright, form vast gateways. The object, and the epoch

of the construction of this extraordinary monument, are alike unknown. It has exercised the ingenuity of the antiquaries of Bretagne; but their researches have not been more successful than those of our own antiquaries on the subject of Stonehenge.

CARNATIC, a very extensive maritime province of S. Hindostan, comprising a considerable portion of the territory under the Madras presidency. It extends along the Coromandel coast, from Cape Cormorin to the river Gondegam, or between lat. 8° and 16° N., and long. 77° 15', and 80° 30' E., having N., the Northern Circars, W. the Balaghaut ceded districts, the provinces Salem and Coimbatoor, and the Cochin and Travancore dominions, and S. and E. the Indian ocean, the gulf of Manar, and the bay of Bengal. Length N.E. to S.W. 500 m., average breadth about 90 m. Its area, population, divisions, &c., are as follows:

Districts.	Area in sq. m.	Pop. (1836–7.)	Land revenue.	Total revenue (1836–7.)
			Rupees.	Rupees.
Nellore and Ongole	12,000	846,572	1,209,814	2,474,880
N. division Arcot	8,900	596,881	1,875,456	2,377,181
S. division Arcot	4,860	860,896	1,975,699	2,409,073
Chingleput	2,259	386,219	875,252	1,508,168
Madras	30	630,000	67,364	
Trichinopoly	3,169	554,730	1,423,955	1,648,298
Tanjore	3,865	1,128,730	3,467,765	4,498,442
Madura	7,856	1,189,411	1,750,701	2,404,460
Tinnevelly	5,500	860,891	1,680,439	2,340,946
Total	[illegible]	6,530,[illegible]	14,[illegible],464	19,612,001

The E. Ghauts intersect this province in a N.E. or N. direction throughout its whole extent N. of lat. 11° 20', dividing it into the Upper and Lower Carnatic, or the countries above and below the Ghauts, differing, of course, greatly in elevation and proportionally in climate. The principal rivers, the Pennar, Palaur, Cavery, and Vagah or Vayvaroo, all rise in the table-land above the Ghauts, and fall into the ocean on the Coromandel, or E. coast of India. The climate of the Lower Carnatic is one of the hottest in the peninsula, though in the immediate neighbourhood of the coast it is sometimes mitigated by sea-breezes; that of the Upper Carnatic is similar to that of Mysore. The primitive rocks of this region are chiefly sienite, with a small proportion of felspar, and all the soil of the province appears to consist of the *débris* of disintegrated sienite mountains. Near the sea, sand and loam prevail upon the surface, sparingly intermixed with the remains of marine animals. Elsewhere, according to circumstances, loam is more or less prevalent, mixed with various proportions of gravel and sand, strongly impregnated with iron, and containing frequently large quantities of soda and common salt, which effloresce upon the surface in dry weather. Near Madras the soil is heavy, and abounds with salt: thence to Vellore, and in many other parts, it is so sterile as to nourish only the common bread-tree (*Melia azadirachta*), the *Robinia mitis*, &c. Rice is the principal crop in the low country; in the highlands all kinds of small grains are cultivated. Sugar is grown only in small quantities, the soil not being rich enough for the canes. Tobacco and a little indigo are cultivated; but the latter not for exportation. The cotton raised is chiefly of the dwarf kind (*Gossypium herbaceum*). Irrigation being here generally of extreme importance to the success of the crops, numerous and extensive tanks have been constructed in such districts as are not traversed by considerable rivers. Famines and scarcities are not unfrequent in this part of India. The farms are mostly tilled by Sudras. During the first few years after our acquisition of the Carnatic, the land revenue of extensive tracts was rented out to a set of middle-men or temporary zemindars, who underlet certain parts to the heads of villages. That this system was not without its defects is certain; and partly in the view of obviating these, and partly in order to secure a greater amount of revenue, the *ryotwar* system has been generally introduced. The principle of this system is to supersede all middle-men and head farmers, and to bring the collectors into immediate contact with the *ryots*, or cultivators, who are directly assessed with such a rent as it is supposed the land will bear: the more prosperous persons in a village being at the same time compelled to make up for the deficiencies of their less fortunate neighbours, and the assessment is perpetually varying. Notwithstanding our respect for the able men by whom this system has been recommended, it is not going too far to say, that it is a curse upon the country, and that till it be abolished, or very materially modified, nothing but impoverishment need be looked for. Most of the population are Hindoos of the Brahminical sect; there are comparatively few Mohammedans, and Hindoo customs are retained in wonderful purity throughout the provinces. Madras, Pondicherry, Tranquebar, Tanjore, Arcot, Dindigul, &c., are the chief cities and towns. Formerly there were a vast number of strong hill forts; but most of them are now crumbling into ruin. Few provinces exhibit so many large temples and other public monuments of former civilization and wealth: the temples are all built on a uniform plan, and inclosed within a four-sided wall, fifteen or twenty feet high.

The Moguls first invaded the Carnatic in 1310, but it was not finally in their possession till the reign of Aurungzebe. In 1717, it was severed, with the Mogul territories in the Deccan, from the throne of Delhi. After the wars, which lasted with little intermission throughout a great part of the 18th century, the Carnatic was conquered by the British in 1783; but it was not finally ceded to us till 1801. (*Hamilton's E. I. Gaz.*, i., 350–364; *Madras Almanac.*)

CARNESVILLE, p. v., capital of Franklin co., Ga., 111 m. N. Milledgeville, 585 W. Situated on Steven's creek, a branch of the N. fork of Broad river, and contains a courthouse, which cost $4000, a jail, an academy, and five or six stores. It was founded in 1798.

CARNIOLA. (*See* CARINTHIA and CARNIOLA.)

CARNWATH, a village of Scotland, E. part of Lanarkshire, 25 m. S.W. Edinburgh. It has of late been greatly increased and improved; the numerous new houses that have been erected are handsome, and built according to a definite plan; and manufacturing industry has been introduced. The inhab. amount to about 900, "the great body of whom are employed in weaving, and dependent on Glasgow for employment." (*New Statist. Acc. of Scot.*) But the par. is not less important than the town, containing, as it does, rich and apparently inexhaustible fields of coal, limestone, and iron-stone. The Wilsontown iron-works were commenced in 1780–81; and, in 1807, the monthly pay of the workmen employed was not less than £3000. (*Ib.*) Owing, however, to the embarrassments into which the company (the Messrs. Wilson) fell, the works, after languishing some years, entirely stopped in 1812, and continued suspended till 1821, when, having passed into other hands, they were revived, and have ever since been in operation, though not to the former extent. The following extract from the *New Statist. Account* contains ample information respecting the busy villages by which Carnwath is surrounded, and which have sprung into existence within the last sixty years. "Newbigging contains a population of 260, entirely weavers; Braehead, a mixed population of 120, weavers and labourers; Forth, 300, chiefly miners, as being close upon Wilsontown; and, Wilsontown 400, miners and labourers of all kinds belonging to the works." Here is a plain new church, a dissenting chapel, a parochial and other schools, and a subscription library.

CAROLINA (LA), a town of Spain, prov. Jaen, 35 m. N.N.E. Jaen; lat. 38° 18' N., long. 3° 35' W. Pop. 2880. This is the cap. of the foreign colonies settled in the Sierra Morena in the reign of Charles III. The district where they are established was previously a desert, and abandoned to banditti; but Don Pablo de Olavido, who then held a high office in the government of Seville, conceived the design of colonizing the Sierra with foreigners, who should support themselves by their own labour. Most of the settlers were Germans, and each received 500,000 sq. ft. of land, free from rent for ten years, and after that to be subject to tithes only. With each allotment the government gave, also, ten cows, one ass, two pigs, two fowls, and seed for the land, with a house and a bakehouse. The settler was restrained from disposing of the land to any one in possession of another lot; but was to be entitled to another equal grant on bringing the first into cultivation. But notwithstanding these and other advantages, the scheme has not been very successful. The funds assigned to carry it into operation were not regularly supplied, and the government was in too much haste to draw a revenue from the new pop. to reimburse itself for the first advances. Still the people present a striking contrast to the villagers in most other parts of Spain, being comparatively industrious and active. Corn, pasture, potatoes, and cabbages, are raised in the spots best suited to them. The cottages are of better construction than the cabins of the Spanish peasantry, and have most necessary articles of household furniture; and their inhab., instead of sitting wrapped up in cloaks in a state of stupid apathy, are all busy with something or other. They have assimilated themselves in language and religion with their neighbours: there are fifty-eight of these townships. (*Inglis*, ii., 28, *et seq.*; *Miñano.*)

CAROLINE, county, Md. Situated in the E. part of the state, and contains 240 sq. m. Bounded E. by the state of Delaware, W. by Choptank river, and S.E. by Nanticoke river. Drained by a branch of Choptank river. It contained in 1840, 5678 neat cattle, 5112 sheep, 9207 swine; and produced 24,844 bushels of wheat, 19,271 of rye, 269,375 of Indian corn, 53,725 of oats, 13,807 of potatoes. It had fifty stores, ten grist-mills, thirteen saw-mills, one printing-office, one weekly newspaper, twenty-three schools, 444 scholars. Pop.: whites, 5334; slaves, 752; free coloured, 1720; total, 7806. Capital, Denton.

CAROLINE, county, Va. Situated in the E. part of the state, and contains 600 sq. m. Bounded N.E. by Rappa-

hannock river, and S.W. by North Anna river, a branch of Pamunky river. Drained by Mattapony river and its branches. It contained in 1840, 10,359 neat cattle, 9349 sheep, 19,372 swine; and produced 80,938 bushels of wheat, 13,117 of rye, 576,685 of Indian corn, 119,986 of oats, 18,766 of potatoes, 773,745 pounds of tobacco, 90,005 of cotton. It had eighteen stores, twenty-four grist-mills, nine saw-mills, four tanneries, seventeen academies, 370 students, thirteen schools, 219 scholars. Pop.: whites, 6725; slaves, 9314; free coloured, 774; total, 17,813. Capital, Bowling Green.

CAROLINE, p. t., Tompkins co., N. Y., 12 m. S.E. Ithaca, 150 m. W. by S. Albany, 231 W. Drained by Six Mile creek, flowing into Cayuga lake. The Ithaca and Oswego rail-road passes through its S.W. part. It contains twelve stores, two fulling-mills, four grist-mills, thirty-seven saw-mills, one oil-mill, three tanneries, thirteen schools, 861 scholars. Pop. 9457.

CARONDOLET, p. v., St. Louis co., Mo., 134 m. E. Jefferson city, 814 W. Situated on the W. side of Mississippi river, 6 m. below St. Louis. It has a large common field, and also an extensive tract of forest, which permanently belong to the owners of lots in the village. It has two academies, 24 students, one school, 20 scholars. Pop. of the t. 2093.

CARORA, an inland town of Venezuela, prov. Coro, in a dry and sterile plain, 94 m. S.S.W. Coro; lat. 10° 13' N., long. 70° 26' W. Pop. 6000. It is well built and contains three handsome churches and a convent: its climate, though hot, is salubrious; it is supplied with water by a small rivulet. Its vicinity abounds with the Indian fig, aromatic balsams, gums, &c., and excellent cochineal; but these resources are neglected for the breeding of cattle, which occupies many of the inhab. The town has manufactures of leather, and of hammocks from the fibre of the *agave fœtida*; the inhab. are industrious, and have a brisk trade in the products of their industry with Coro, Maracaybo, and Carthagena. Most of the inhabitants are Mestizoes, Mulattoes, and Indians. (*Geog. Account of Colombia*, i., 136, 137; *Med. Trav.*, xxvii., 213, 214, &c.)

CARPATHIAN, or KARPATHIAN, MOUNTAINS, a very considerable range, enclosing Hungary on the N. and E., covering the principality of Transylvania, and forming the N.E. portion of the great mountain system of S. Europe. Including a lower range, called Kleine Karpathian (Little Carpathians), these mountains commence on the left bank of the Danube, in the neighbourhood of Presburg; lat. 48° 8' N., long. 17° 6' E.; thence they run N.E. to the borders of Silesia, where, in lat. 49° 30' N., long. 18° 35' E., they meet the mountains of Moravia, through which they are connected with the Sudetes and other Bohemian ranges. After this they bend round to the E. and S.E., separating Hungary from Galicia and the Buckowine, and Transylvania from Moldavia: they continue the last course as far as lat. 45° 30' N., long. 26° 30' E., where the main ridge turns due W., and forms the boundary between Transylvania and Wallachia. Finally, about the long. of 23° E., it turns S.W., and again meets the Danube at the town of New Orsova, lat. 44° 44' N., long. 22° 30' E. Between its extreme points, therefore, the Carpathian system describes a curve of about 600 m., and, except at its S.E. corner, one of a very regular and gradual kind. Its width is various, but generally considerable; the longest line that can be drawn across it, in a direction perpendicular to its course, is from Boksan, in the Banat, N.E., through Transylvania, to Puttna in the Buckowine, about 240 m. From the great S. bend of the Danube at Waitzen, or from mount Matra (about 35 m. E. of the bend) to the neighbourhood of the Vistula, the mountains measure 140 m. from S. to N.; but towards the N.E., between the Upper Theiss and the sources of the Dniestr in Galicia, they are not more than 70 m.; and on the W., between the rivers Waag and Moravia, they are less than 30 m. across. At a rough calculation, they may be said to cover 90,000 sq. m. With regard to elevation, the Carpathians do not attain the height of other great ranges, as the Caucasus, or the Alps; the highest measured peaks being under 9000 ft. The highest ascertained eminences are in the county of Zips, the most N. part of the chain, between the meridians of 19° and 21°; and among these, the following are the most noted:

	Ft.
Lomnitz Peak	8770
Great Kesmark ditto	8647
Great Krivan Ridge	8482
Gold mine on ditto	7093
White Sea Peak	7075
Limestone rocks, above the Fleisch Bank	6590
Fleisch Bank	6207
Kohlback	6207
Grun See (Green Lake)	5191
Brook at the foot of the Fleisch Bank	4990

The lower peaks, and subordinate ranges, vary from 2000 or 3000 to a few hundred feet in elevation. But if height be not, ruggedness is a very striking feature of the Carpathians: the roads among them are generally difficult, sometimes impracticable for horses; and the whole effect of their appearance is one of great majesty. The descent towards Galicia is much more abrupt than that towards Hungary, and in the S.E. and S. the steepest sides of the mountains are towards Moldavia and Wallachia. The rivers which mark the limits of the Carpathian system, are, on the N., the Vistula, as far as its junction with its most important affluent the San, and the Dniestr; on the E. the Sereth; on the S. the Danube, from the mouth of the Sereth to that of the Morava, which marks the extreme limit of the mountains towards the W. Within these bounds, however, are contained a large quantity of flat land in Galicia and Wallachia, together with the greater part of the Hungarian plain; on the other hand, the bed of the Danube at Orsova is nothing but a cleft between the Carpathians and the N. branches of the Balkhan, and at Waitzen, in like manner, it can scarcely be said to break the continuity of the former with the offshoots of the Styrian Alps. (*Townson's Trav. in Hung., passim; Born's Trav. in Banat and Transyl., passim; Clarke's Trav.*, ii., 507, &c.; *Bright's Trav. in Lower Hung.*, p. 101, &c.; *Korabinsky's and Bright's Maps.*)

Geology.—The most ancient rocks are found only on the highest parts of the Carpathians, and not always there (*Born*, p. 202); one of the highest ridges in the Alpine country of Zips consisting of calcareous limestone, (*Townson*, p. 348.) Granite, however, forms the substratum, or rather the main bulk and nucleus of the whole mass, and sometimes, even at slight elevations, lies at no great depth. Hornblende in small quantities, gneiss in much larger, and trap very considerably distributed, form the mass of the other older rocks; but the formation most worthy of notice is a kind of conglomerate, formed of hardened clay, quartz, shari, spar, and lithomarga, which, from its richness in ore, has obtained in Hungary the title of *Metallic Rock*, and which is met with most abundantly throughout the whole range, from Presburg to Orsova. (*Born*, p. 205.) Limestone, old and recent, occurs in immense quantities, and in the Alpine regions, Townson found stratified rocks of the first kind, of the amazing thickness of 2160 ft., (*Trav.* p. 353.) Basalt, porphyry, porphyritic basalt, jasper, petrosilex, lava, obsidian, and a whole host of substances, volcanic, and the result of aqueous deposition, are scattered in the wildest confusion among the lower ranges, giving unquestionable evidence of the extensive agency of both fire and water, but so little defined, that the best observers decline to offer an opinion as to the origin of many of the appearances. (*Born*, p. 209-214, *et pass.*; *Townson*, p. 275-303, *et pass.*) It is worthy of observation that the more recent formations, as sandstone, &c., observable in other countries, are singularly scarce in the Carpathians. (*Born*, p. 208, 211, &c.)

Hydrography.—These mountains form the dividing line between important river systems. The N. faces give birth to the Vistula and Dniestr; but with these exceptions, no river that reaches the sea has its source with them. The affluents of these two, from the N. slope, are, however, extremely numerous, though not comparable to those that pour from the S. and E. faces, to swell the stream of the Danube, to which river, also, the drainage of the N.W. face is conveyed, with the exception of an insignificant portion, which finds its way to the Oder. The running water of the Carpathians belongs, then, to two systems, the Black sea and the Baltic; and there are no lands better irrigated than those over which it flows; the Theiss, Maros, Aluta, and many others, would be called important rivers in most parts of the world, and the smaller streams and sub-tributaries are absolutely innumerable. (*See* DANUBE, VISTULA, DNIESTR, HUNGARY, &c.)

Mineral Productions.—The sides of the Carpathians are rich in the productions of the vegetable kingdom, and abound in animals of the most useful kind. The decomposed volcanic matter, which forms so large a portion of the soil, accounts for the first, and consequently for the second of these results. The particulars of both will be, however, better treated of under the heads of the different countries through which the mountains run. (*See* HUNGARY, TRANSYLVANIA, GALICIA, &c.) It is intended here to restrict ourselves to a brief account of their mineral wealth, in which respect they stand pre-eminent among the various ranges of Europe. Nearly every metal, and all in abundance, are produced in the Carpathians. The richer mines of Transylvania and the Banat yield for 1 cwt. of ore 125 oz. of gold, and 68 oz. of silver (*Born*, p. 102), and all the mountains of these beautiful countries are full of signs of undiscovered metals. It appears, however, that native gold and silver is scarce, except in the S.E. districts, but all the other ores are mixed with these precious metals throughout the whole range. (*Born*, p. 215, 217.) Clarke says (ii., 678.) that the stamping-works at Schemnitz employ 1040 ham-

mers, each hammer stamping three quintals of ore per day; the return averaging 12,000 florins per month, clear profit to the government. It would be endless to go through a detail of all the wealth of these mountains; suffice it to say, that copper, iron, lead, cobalt, antimony, sulphur, and saltpetre, are found in large quantities; cinnabar also appears, but not in sufficient abundance to tempt the miner; and in many places there are large fields of coal. Rock-salt is also one of the treasures of these mountains. The Polish mines of Galicia have long been famous, and from all appearances, their treasures are actually inexhaustible. In a word, the Carpathians appear to be one extensive mine, where nearly all the varieties of metallic wealth are produced; in addition to which, their recesses yield the opal, one of the noblest and most valuable of gems. (*Born*, p. 99, 178, 215, *et pass.*; *Townson*, p. 305–310, 378–391, *et pass.*; *Clarke*, ii., 656–678; *Bright*, p. 146–182.)

Name.—The Carpathians were known to the ancients, and by their present name, Καρπατης (*Ptolemy*, iii., 5); and they applied the same name to that part of the Mediterranean which lies about the island of Rhodes. (*Ptolemy*, v., 2; *Strabo*, x., 488.) Its etymology is not very clear; but Strabo, in speaking of the sea, calls it also Carpathian (Κρήπαθον); and though it be not very easy to connect the ideas of these mountains with that of the remote shore of Asia Minor, it is something remarkable that the German term for the former is *Krapack*, of which the Greek of Strabo seems only a softened form. The Hungarian name for these mountains is Tatra.

CARPENTARIA (Gulf of), an extensive arm of the sea, deeply indenting the N. coast of New Holland, between 16° 40′ and 17° 30′ S. lat., and 137° and 142° E. long. No settlements have, as yet, been founded on its coasts.

CARPENTRAS, a city of France, dep. Vaucluse, cap. arrond., in an agreeable situation, at the foot of Mont Ventoux, and on the left bank of the Auzon, 15 m. N.E. Avignon; lat. 44° 3′ 28″ N., long. 5° 2′ 43″ E. Pop. 9224. The town is surrounded by high walls in good repair, flanked by several towers, of which the most remarkable is that surmounting the *port d'Orange*. It is well built, but the streets are narrow, winding, and filthy. There are some good houses without the walls, in the suburbs. It is well supplied with fountains, and water is conveyed into the city by two aqueducts, one constructed by Clement V., and one by the town, in the early part of last century. The principal public buildings are the hospital, erected in 1757, without the walls; the cathedral, a large Gothic pile, with a spire of the age of Charlemagne; the ancient episcopal palace, now the palace of justice: contiguous to the latter is an ancient triumphal arch. There is also a public washing-house, theatre, &c. It is the seat of a tribunal of primary jurisdiction, and has a departmental college, a Jewish synagogue, a society of rural economy, a public library, with 22,000 vols., and some valuable manuscripts. It has distilleries, dye-works, tanneries, and madder-mills, with fabrics of soap and aquafortis; and has a considerable trade in silk, madder, and excellent fruits.

Carpentras is very ancient, having been, under the Romans, a principal town of Gallia Narbonensis. It was successively attacked and pillaged by the Vandals, Lombards, Saracens, and other barbarians. During the residence of the popes at Avignon, it began to revive; and was, for a short period, under Clement V., the seat of the holy see. The bishopric of Carpentras, said to have been founded in the 3d, was suppressed in the course of the present century. (*Hugo*, art., *Vaucluse*, *Dict. Géog. &c.*)

CARRARA, a town of the duchy of Massa, on the Lavenza, about 3½ m. from the Mediterranean, and 60 m. W.N.W. Florence. Pop. 6000. It has an unfinished cathedral, several churches, a convent, and an academy of sculpture. Several artists have fixed their residence here, attracted by the convenience of obtaining marble almost cost free; and the sale of rude marble and of articles of sculpture forms an important branch of traffic.

The marble quarries from which this town derives its entire celebrity and importance, have been wrought from the age of Augustus, and probably from a still more remote epoch. They are found in the lower ridges of the hills which unite in the Monte Sagro. The beds of the dove-coloured (*bardiglio*) marble are the nearest to the town. Higher up the valley are the beds of white marble. Only a few of these beds produce marble of such a grain and transparency as to be highly prized by the statuary; and if the quarrymen succeed in obtaining one block in ten that preserves throughout a good colour, they are satisfied. Still higher up, the marble becomes of a dull, dead colour; but of this much larger blocks may be obtained. The principal quarries of veined marble are in a parallel valley. Notwithstanding the vast quantities that have been dug up since these quarries began to be wrought, the supply of marble in this district seems to be now as inexhaustible as ever. About 1200 men are, or lately were, employed in the quarries. It is pretty certain, however, that the demand for Carrara marble would be much greater were it not for the heavy duty imposed on its export. This has led to the opening of rival quarries at Serravezza and in other parts of Italy. (*Conder's Italy*, ii., 45; *Simond's Italy*, p. 576; *Bowring's Report on the Statistics of Tuscany, &c.*, p. 53.)

CARRIBEAN SEA is the name given to that arm of the Atlantic ocean included between the Carribee islands on the E., Hayti and Jamaica on the N., Guatimala on the W., and the N. coast of S. America on the S.

CARRIBEE ISLANDS, or LESSER ANTILLES, the name sometimes given to that portion of the W. Indies that includes the vast chain of islands which extends, in a circular sweep, from Anguilla on the N. to Trinidad on the S. They comprise the whole of the Windward and the more S. portion of the Leeward islands. The principal islands, reckoning from the N., are St. Christophers, Antigua, Guadaloupe, Dominica, Martinique, St. Lucia, Barbadoes, St. Vincent, Grenada, Tobago, and Trinidad. They derived their name from having been mostly occupied, at the period of their discovery, by a tribe of Indians, called Carribs or Carribees, now nearly extinct. The reader will find an excellent account of the Carribs in Edward's *Hist. of the W. Indies*, book i., cap. 2.

CARRICKFERGUS, a parl. bor. and sea-port of Ireland, co. Antrim, prov. Ulster, on Carrickfergus bay, or Belfast lough, 95 m. N. Dublin, 9 m. N.N.E. Belfast. Pop. in 1821, 8023; in 1831, 8698; and in 1834, 8860; of whom 1387 were of the Established church, 6499 Protestant Dissenters, and 974 Roman Catholics. The castle, on a rock projecting into the sea, was built or much strengthened by the English shortly after their first landing in Ireland under Strongbow. King William landed here on the 14th of June, 1690, 16 days previously to the battle of the Boyne. In 1760, it surrendered to a French naval force under Thurot, who soon after evacuated it on the appearance of the English squadron under Commodore Eliot, by which Thurot's squadron was captured, after an engagement in which he lost his life. On the 24th of April, 1778, Paul Jones captured the Drake sloop of war in the bay; but sailed off without making any hostile attempt on the town.

Carrickfergus consists of the town within the walls, parts of which still remain; and of suburbs on the E. and W. sides, called the Scotch and Irish quarters. It is pretty well built, and has a respectable, though antiquated appearance; it is not lighted, and is but indifferently supplied with water. The church, a large cruciform building, with a fine modern spire, has, in one of the transepts, a large mural monument of the Donegal family; there is also a Roman Catholic chapel, and places of worship for Presbyterians, Independents, Methodists, Covenanters, and Unitarians. The castle, kept up as a fortress and magazine, has a number of heavy guns mounted on the walls, and is garrisoned by a company of foot. The town and the adjoining district, containing 16,700 acres, forms a co. independent of that of Antrim, within which it is enclosed on every side, except towards the sea. By its ruling charter, granted by James I. in 1612, who also, in 1622, granted it a charter of the staple, the corporation consists of a mayor, sheriffs, sixteen aldermen, twenty-two burgesses, and an indefinite number of freemen, who were classed in eight guilds, now kept up only in form. It returned two mem. to the Irish H. of C.; and sends one mem. to the imperial H. of C. Registered electors, in 1838–39, 1431. The mayor, as admiral of the liberties, has jurisdiction along the coast, from Fairhead, co. Antrim, to Beerlooms, co. Down. The assizes for co. Antrim are held here in the court-house in the county prison, a large and expensive, but ill-arranged building. There is a small local police. The rural district is watered by numerous streams, and in it is lough Mourne, covering 20 acres, at an elevation of 556 ft. above the level of the sea. Tanning is carried on to a considerable extent; a distillery paid duty in 1836 for 15,482 gallons of whiskey. There were in the town, in 1839, two cotton-mills, and one flax ditto; the former employing 256, and the latter 113 hands. The inhab. derive their principal support from the concourse of strangers at the assizes, and during the bathing season; and from the fisheries. Excepting haddock, all kinds of fish that frequent the Irish coast are abundant; as are oysters celebrated for size and flavour, scollops and lobsters. A pier has been lately built for the use of the fishermen; but it is defective, in not being accessible at low water. The greater part of the fish is sent by land to Belfast for sale. Markets are held in an antiquated market-house on Saturdays; fairs on 12th May and 1st November. A branch of the Northern Bank was opened in 1836. Post-office revenue in 1830, £327; in 1836, £425. Two *caravans*, conveying ten passengers each, and ten cars conveying four passengers each, ply daily to Belfast; and two coaches, with ten passengers each, daily to Larne. The port was long the chief mart on this part of the coast; but in 1637, the corporation having sold its exclusive privi-

longs to the crown, the business has since been almost wholly transferred to Belfast; its trade being, at present, confined to the import of coal, and the export of cattle and grain. Shipping in 1835, 3200 tons. The largest vessels may enter the bay at low water, but are prevented from discharging at the town, through the want of a landing-pier, with sufficient depth of water. The appearance and manners of the inhab. exhibit striking indications of their Scotch descent. The lower classes are industrious, frugal, and honest. Though wealthy residents are not numerous, many are in a state of respectable independence; most industrious persons attain the means of comfortable subsistence, and very few are in a state of destitution. (*M'Skimin's Carrickfergus; Stat. Surv.; Fishery Rep.; Railway Rep.*)

CARRICKMACROSS, an inl. town of Ireland, co. Monaghan, prov. Ulster, 40 m. N.W. by N. Dublin. Pop. in 1821, 1641; in 1831, 2979. It consists of one long street, in which is the church, a R. Cath. chapel, which serves as the cathedral for the R. Cath. bishop of Clogher, and a Presbyterian meeting-house. A grammar school, endowed by Lord Weymouth, is now (1836) being rebuilt. There is also a dispensary, a mendicity society, a savings' bank, and a bridewell. Petty sessions are held every fortnight: a party of the constabulary is stationed here. There is a tanyard, a brewery, and a distillery; which last paid duty, in 1836, on 162,509 gallons of spirits; duty was also paid on 14,964 bushels of malt. Markets are held on Thursdays, and on corn on Wednesdays and Saturdays: fairs on 27 May, 10 July, 27 Sept., 9 Nov., and 10 Dec. Post-office revenue in 1830, £398; in 1836, £471. The mail-coach from Dublin to Londonderry passes through the town; and a mail-car, carrying at an average two passengers each trip, plies daily to Dundalk. (*Stat. Survey; Railway Rep.*)

CARRICK-ON-SHANNON, an inl. town of Ireland, prov. Connaught, cos. Leitrim and Roscommon, on the Shannon, 85 m. W.N.W. Dublin. Pop. in 1821, 1673; in 1830, 1498. Pop. of par. 17,666; of which, 2091 are of the estab. church, and 15,608 R. Cath. It lies principally on the Leitrim bank of the river, being connected with a small suburb on the Roscommon side by a bridge; and has a new church, a R. Cath. chapel, two Methodist meeting-houses, and a co. infirmary and dispensary. It was incorporated by James I. in 1612, under a provost, twelve burgesses, and an unlimited number of freemen; and returned two mem. to the Irish H. of C.; but was disfranchised at the Union. The assizes for the co. Leitrim, of which it is the co. town, are held here, as are general sessions, in Jan. and July, and petty sessions on alternate Mondays. The county courthouse, jail, and bridewell, are in the town. A party of the constabulary is stationed here; and it has an infantry barrack. A smart trade in butter, grain, and provisions, is carried on by the Shannon, now rendered navigable to Lough Allen. Yarn is also manufactured. Markets are held on Thursdays, in an enclosed market-place; and fairs on 18 Jan., 29 Mar., 12 May, 6 June, 11 Aug., 14 Sept., 22 Oct., 21 Nov., and 16 Dec. Post-office revenue in 1830, £355; in 1836, £811. The mail-coach from Dublin to Sligo passes through the town; and a mail car plies daily to Cashcarrigan, conveying, at an average, two passengers every trip. (*Stat. Surv.; Railway Rep.*)

CARRICK-ON-SUIR, an inl. town of Ireland, prov. Munster, cos Tipperary and Waterford, on the Suir, 85 m. S.W. by S. Dublin. Pop. (1821) 7406; (1831) 9696: being almost wholly R. Cath. The town, situate at the S.E. extremity of the Golden Vale, and near the junction of the cos. Tipperary, Kilkenny, and Waterford, consists of an open area surrounded with houses, and a long street leading to a bridge across the river, connecting it with the suburb of Carrick-beg, formerly C.-magriffin, in co. Waterford. It has a par. church, a R. Cath. chapel, an abbey, a nunnery, a fever hospital and dispensary, an almshouse, and the ruins of the castle built by an ancestor of the Earl of Ormonde. Some traces of the town walls are still visible. The woollen manufacture was carried on under the auspices of the Ormonde family till the close of last century; but all traces of it have now disappeared, and the labouring pop. are very poor and miserable. Tanning and brewing are still carried on; duty was paid in 1836 for 12,941 bushels of malt; and there is a considerable trade in grain and provisions. Large vessels come up the Suir to Piltown, about 4 m. lower down, whence their cargoes are conveyed to the town by lighters. A local act, lately passed, authorises river improvements, which, if effected, will enable vessels of larger tonnage to discharge at the town. Petty sessions are held every fortnight. A party of the constabulary is stationed here. Markets are held on Saturdays; fairs on the first Thursday of every month. A branch of the National Bank was opened in 1835. The post-office revenue in 1830 was £613, and in 1836, £716. By a grant of William III. the par. is exempted from co. rates. A mail-coach and a car, from Waterford to Limerick, pass daily through the town; as do cars from the former city to Clonmel and Thurles: a car, plying six days in the week, from the town to Kilkenny, carries, at an average, three passengers every trip. (*Mason's Parech. Survey; Railway Rep.*)

CARROL, county, N. H. Situated in the E. part of the state, and contains 530 sq. m. Bounded S.W. by Winnipiscogee lake. It has Squam lake on its W. border, and contains Ossipee lake and other ponds. Drained by Bear, Camp, and Saco rivers and their branches. Swift and Pigwacket rivers are branches of Saco river. Ossipee mountain is in its W. part. Formed from the N. part of Strafford co., since 1840. The statistics are included in that county.

CARROLL, county, Md. Situated in the N. part of the state, and contains 500 sq. m. Bounded S.E. by Patapsco river. Drained by branches of Monocacy river. It contained in 1840, 11,012 neat cattle, 12,565 sheep, 23,311 swine; and produced 180,804 bushels of wheat, 72,691 of rye, 254,384 of Indian corn, 209,230 of oats, 112,171 of potatoes, 238,560 pounds of tobacco. It had fifty-four stores, seven fulling-mills, two woollen-factories, two cotton-factories, with 2032 spindles; thirty-one flouring-mills, thirty-seven grist-mills, sixty-one saw-mills, three oil-mills, four paper-mills, one ropewalk, twenty-six tanneries, twenty-eight distilleries, one brewery, six potteries, two printing-offices, two weekly newspapers, two academies, 20 students, fourteen schools, 234 scholars. Pop.: whites, 15,921; slaves, 1122; free coloured, 898; total, 17,941. Capital, Westminster.

CARROLL, county, Ga. Situated toward the N.W. part of the state, and contains 800 sq. m. Bounded S.E. by Chattahoochee river. Drained by branches of Tallapoosa river. This county was ceded to the U. States by the Cherokees in 1825. It contained in 1840, 9373 neat cattle, 2345 sheep, 15,172 swine; and produced 24,532 bushels of wheat, 236,840 of Indian corn, 14,439 of oats, 6950 of potatoes, 14,456 pounds of tobacco, 354,069 of cotton. It had fourteen stores, produced gold to the amount of $17,370; thirteen smelting-houses, four furnaces, four cotton-factories, with fifty-four spindles; one flouring-mill, sixteen grist-mills, ten saw-mills, four tanneries, thirteen distilleries, two academies, 36 students, twenty schools, 441 scholars. Pop.: whites, 4725; slaves, 322; free coloured 5; total, 5052.

CARROLL, county, Miss. Situated a little N.W. of the centre of the state, and contains 990 sq. m. Bounded W. by Yazoo river, and S.E. by Big Black river, by branches of both of which it is drained. It contained in 1840, 16,651 neat cattle, 4137 sheep, 21,937 swine; and produced 6028 bushels of wheat, 455,205 of Indian corn, 10,240 of oats, 35,743 of potatoes, 3,542,051 pounds of cotton. It had seventeen stores, two flouring-mills, twenty-two grist-mills, eight saw-mills, seventeen tanneries, one printing-office, one weekly newspaper, one college, 60 students, three academies, 165 students, eleven schools, 267 scholars. Pop.: whites, 5136; slaves, 5344; free coloured, 1; total, 10,481. Capital Carrollton.

CARROLL, parish, La. Situated in the N.E. part of the state, and contains 1100 sq. m. Bounded E. Mississippi river. Drained by bayou Macon, and Tensas river. It contained in 1840, 5670 neat cattle, 10,414 swine; and produced 168,890 bushels of Indian corn, 12,971 of potatoes, 8,476,880 pounds of cotton. It had one saw-mill, one school, 18 scholars. Pop.: whites, 1146; slaves, 3062; free coloured, 9; total, 4217. Capital, Providence.

CARROLL, county, Tenn. Situated in the W. part of the state, and contains 960 sq. m. Drained by Big Sandy river, a branch of Tennessee river, and branches of Obion river, flowing into the Mississippi. It contained in 1840, 47,163 neat cattle, 30,635 sheep, 65,349 swine; and produced 684,691 bushels of wheat, 602,340 of Indian corn, 74,679 of oats, 34,320 of potatoes, 866,464 pounds of tobacco, 215,338 of cotton. It had thirteen stores, three flouring-mills, seventeen grist-mills, twelve saw-mills, nine tanneries, eight distilleries, one printing-office, one weekly newspaper, thirty-five schools, 923 scholars. Pop.: whites, 10,114; slaves, 2218; free coloured, 30; total, 12,362.

CARROLL, county, Ky. Situated in the N. part of the state, and contains 140 sq. m. Bounded N. by Ohio river. Watered by Kentucky river. It contained in 1840, 4322 neat cattle, 3044 sheep, 11,125 swine; and produced 31,888 bushels of wheat, 1895 of rye, 196,229 of Indian corn, 18,600 of oats, 5636 of potatoes, 225,060 pounds of tobacco. It had eleven stores, three grist-mills, five saw-mills, three tanneries, six schools, 314 scholars. Pop.: whites, 312; slaves, 731, free coloured, 23; total, 3066.

CARROLL, county, O. Situated in the E. part of the state, and contains 400 sq. m. Drained by Sandy river and Conotton creek. It contained in 1840, 12,841 neat cattle, 23,369 sheep, 16,519 swine; and produced 252,498 bushels of wheat, 22,568 of rye, 137,939 of Indian corn, 13,593 of buckwheat, 218,278 of oats, 38,164 of potatoes. It had sixteen stores, five flouring-mills, eleven grist-mills, fourteen saw-mills, one oil-mill, four tanneries, two distilleries, two printing-offices, two weekly newspapers, one academy, 32

students, twenty-three schools, 681 scholars. Pop. 18,198. Capital Carrollton.

CARROL, county, Ia. Situated towards the N. W. part of the state, and contains 380 sq. m. Watered by Wabash river, and Deer, Rock, and Wild Cat creeks. Organized in 1828. The Wabash and Erie canal passes through it along the Wabash river. It contained in 1840, 7903 neat cattle, 5928 sheep, 17,442 swine; and produced 69,172 bushels of wheat, 2214 of rye, 298,331 of Indian corn, 76,636 of oats, 26,736 of potatoes, 77,650 pounds of sugar, 3773 of tobacco. It had twenty stores, three flouring-mills, ten grist-mills, thirty saw-mills, seven tanneries, five distilleries, one pottery, two printing-offices, two weekly newspapers, one academy, 60 students, eleven schools, 288 scholars. Pop. 7819. Capital, Delphi.

CARROLL, county, Ill. Situated in the N.W. part of the state, and contains 445 sq. m. Bounded W. by Mississippi river. Drained by Plum and Rush creeks. It contained in 1840, 952 neat cattle, 237 sheep, 2,385 swine; and produced 7226 bushels of wheat, 26,530 of Indian corn, 10,150 of oats, 7805 of potatoes. It had seven stores, four schools, 100 scholars. Pop. 1022. Capital, Savanna.

CARROLL, county, Mo. Situated in the N.W. part of the state, and contains 700 sq. m. Bounded S. by Missouri river, and N.E. by Grand river. Drained by Waconda river, which flows into Missouri river, and by branches of Grand river. It contained in 1840, 3652 neat cattle, 2113 sheep, 16,885 swine, and produced 1100 bushels of wheat, 141,735 of Indian corn, 10,545 of oats, 6401 of potatoes, 7360 pounds of tobacco. It had eight stores, five grist-mills, three saw-mills, one tannery, one distillery, one school, 26 scholars. Pop.: whites, 2155; slaves, 268; total, 2423. Capital, Carrollton.

CARROLL, county, Ark. Situated in the N.W. part of the state, and contains 1650 sq. m. Drained by branches of White river and by Little Red river. It contained, in 1840, 4300 neat cattle, 2938 sheep, 10,429 swine; and produced 4462 bushels of wheat, 119,539 of Indian corn, 1253 of oats, 4898 of potatoes, 6995 pounds of tobacco, 6754 of cotton. It had nine stores, twelve grist-mills, one saw-mill, three distilleries, eight schools, 185 scholars. Pop.: whites, 2707; slaves, 137; total, 2844. Capital, Carrollton.

CARROLL, p. t., Coos co., N. H., 99 m. N. Concord, 566 W. It lies at the foot of the White mountains, on the N.W. side. Chartered in 1772. It contains a Free-will Baptist church, two schools, 75 scholars. Pop. 218.

CARROLL, p. t., Chautauque co., N. Y., 336 m. W. by S. Albany, 313 W. Drained by Conewango creek, which flows S. into Allegheny river. It contains three stores, two grist-mills, twenty-two saw-mills, two tanneries, ten schools, 505 scholars. Pop. 1649.

CARROLL. t., York co., Pa. It contains three stores, three grist-mills, three saw-mills, two tanneries, six distilleries. Pop. 771.

CARROLL, t., Washington co., Pa. It contains fourteen stores, three tanneries, two schools, 70 scholars. Pop. 1235.

CARROLL, t., Cambria co., Pa. It contains two saw-mills, five schools, 150 scholars. Pop. 696.

CARROLL, t., Perry co., Pa. It contains two stores, two fulling-mills, one woollen-factory, one flouring-mill, two grist-mills, eleven saw mills, seven schools, 315 scholars. Pop. 1100.

CARROLLTON, p. v., capital of Carroll co., Ga., 131 m. W.N.W. Milledgeville, 719 W. It contains a court-house, jail, three stores, and about twelve dwellings.

CARROLLTON, p. v., capital of Pickens co., Ala., 42 m. W. Tuscaloosa, 860 W. Situated on the W. side of Lubbub creek, a branch of Little Tombigbee river. It contains a court-house, and other county buildings.

CARROLLTON, p. v., capital of Carroll co., Miss., 92 m. N. by E. Jackson, 279 W. Situated on the S. side of Big Sandy creek, a branch of Yalabusha river, and contains a court-house, and a few dwellings.

CARROLLTON, p. v., capital of Carroll co., Ark., 212 m. N.N.W. Little Rock, 1146 W. Situated on the N. side of a branch of White river, and contains the county buildings.

CARROLLTON, p. v., capital of Carroll co., Mo., 124 m. N.W. Jefferson city, 1018 W. Situated on the N. side of Wyaconda river, six miles from its entrance into Missouri river. It has a neat, brick court-house, and about 300 inhabitants.

CARROLLTON, p. v., Centre t., capital of Carroll co., O., 125 m. N.E. Columbus, 296 W. It contains a court-house, several stores, a printing-office issuing a weekly newspaper, and 696 inhabitants.

CARROLLTON, p. v., Greene co., Ill., 69 m. S.W. Springfield, 834 W. It is pleasantly situated on the borders of a prairie, and has a neat, brick court-house, four churches, one Methodist, one Presbyterian, one Baptist, and one Reformers; twenty-three stores, two steam flouring mills, two steam saw-mills, many neat dwellings, thirty schools, 120 scholars. Pop. 667.

CARRON, a village of Scotland, celebrated for its iron-works, co. Sterling, 2 m. N.E. Falkirk, on the Carron, a stream which falls into the Frith of Forth, at Grangemouth. The iron-works were first set on foot in 1760. The Carron company, which is chartered, had an original capital of £50,000 sterl., divided into 600 shares; but that is understood to have been greatly augmented since its formation. In addition to the periodical dividends, "there is an accumulating undivided capital of landed, mineral, and other fixed property, with a large stock of materials and implements" for carrying on the works. (*Nimmo's Hist. of Stirlingshire*, edit. 1817, p. 721.) The Carron iron-works were long the most extensive in Scotland, and were for a while, perhaps, the most extensive in Britain; but they are now far surpassed by similar establishments in Scotland, such as those of Gartsherrie, Calder, and Clyde, and by vast numbers in England. The works are employed in the smelting of iron ore, and the manufacture of all kinds of cast-iron goods, whether for civil or warlike purposes. But they were chiefly celebrated during the late French war, for the manufacture of cannon, mortars, howitzers, carronades, (so called after Carron, where they were first made), bombs, and such like warlike instruments. Since the peace, this branch of business has been well nigh annihilated, except for the supply of a limited foreign demand. These pieces of ordnance, after being cast and bored, are proved by water forced into the chamber by a powerful compressing machine—a method more esteemed than the old powder-proof. (*Ib.*, p. 721.) The consumption of coal in the works is about 200 tons per day. The company convey their goods to Liverpool and London (at both of which they have warehouses), and other places, in their own vessels, which vary from 15 to 20 in number. The Forth and Clyde canal runs within a ¼ m. of the works, so that the access to both seas is most convenient. The company have cut a canal from the interior of the works down to the Carron wharf at Grangemouth, 3 m. dist., on which lighters ply and carry their goods for shipment at the latter place. The supply of water is abundant, derived partly from the river, and partly from artificial reservoirs, which cover about 250 acres of ground. The whole people employed in the works, mines, and pits, or otherwise by the company, is, on an average, about 2500.

CARTAGENA, or CARTHAGENA, a marit. city of New Granada, and the chief naval arsenal of that repub., cap. prov. of same name, on a sandy peninsula in the Carribean sea, connected with the continent by a narrow neck of land, 410 m. N. Bogota; lat. 10° 26′ N., long. 75° 34′ W. Pop. 18,000. It has, on its E. side, a suburb called Ximani, standing on an island, and almost as large as the city itself, with which it communicates by a wooden bridge. Both the city and its suburb are surrounded by strong fortifications, and at a short distance from them on the main land they are overlooked by a strong fort placed on an eminence about 150 ft. high. These works are, however, commanded by a contiguous hill, rising to the height of 550 ft. above the sea, and which, instead of a fortification, has on its summit an Augustine monastery! The possession of this hill has several times led to the capture of the city.

Cartagena is famous for its port, one of the largest and best on the N. coast of S. America. It lies to the S. of the town, between the peninsula on which it is built and the island of Tierra-Bomba, and the main land. The anchoring ground is excellent; and being completely land-locked, vessels lie in it as if in dock. It had originally two entrances, the *Boca Grande*, close to the city, and the *Boca Chica* (narrow passage), several miles farther S. The former, however, was blocked up by the Spaniards, subsequently to Adm. Vernon's attempt upon the place in 1741, by sinking several ships in the channel. The *Boca Chica* is defended by two strong castles. Cartagena contains a handsome cathedral, several other churches, convents, &c., and some fine public cisterns. The city and its suburbs are well laid out; streets regular, and well paved; houses mostly of stone, and of one story above the ground floor, with balconies in front, and lattices instead of windows. A recent French traveller, speaking of the town, observes that it presents a melancholy aspect with its long galleries, short and clumsy columns, and streets darkened by projecting terraces, &c.; but he admits that, how singular soever the construction of the houses, they appear to be well contrived for supplying the indispensable luxury of fresh air. The great drawback upon the place is its climate, which is intensely hot. It is not unfrequently visited by the yellow fever; and is infested with tormenting and destructive insects. The importance of Cartagena has greatly declined of late years; but it is still the principal depôt for the goods of Bogota, Popayan, and Quito, and has a considerable foreign trade. Its artisans are ingenious, and excel in the manufacture of shell articles. The packet boats between Colombia,

the U. States, and Europe, sail from this place. In 1837 the value of the specie and bullion exported is supposed to have amounted to about £340,000, and that of ordinary merchandise to about £20,000. (*Board of Trade Papers*, viii., 336.) Cartagena was founded in 1533, and was long considered as the great bulwark of the Spanish possessions in S. America. It was taken by a Corsican pirate in 1544, by Sir F. Drake in 1583, and by the French in 1697. Under the Spaniards, it was a bishopric, and the seat of a captain-general, and of one of the three tribunals of the inquisition in America. It is still the residence of a bishop. (*Geog. Account of Columbia*; *Mod. Trav.*, xxvii., 239-268.)

CARTAGO, or CARTHAGO, an inl. town of New Granada, prov. Popayan, on the left bank of the Vieja, a little before its junction with the Cauca, 165 m. N.N.E. Popayan; lat. 4° 45′ N., long. 76° 8′ W. Pop. 5500. It has a handsome appearance, and contains a cathedral, two parish churches, and a Lancastrian school. Its trade is chiefly in cattle, dried beef, fruits, cacao, and tobacco. Its whole district is rich in mineral products: its climate is hot and dry, but healthy. (*Mod. Trav.*, xxvii., &c.)

CARTERET, county, N. C. Situated in the S.E. part of the state, and contains 680 sq. m. Bounded S. by Bogue sound, S.E. by Core sound, and N.E. by Pamlico sound. Separated from the Atlantic by low islands, on one of which is cape Lookout, its southern point. It contained in 1840, 4721 neat cattle, 2003 sheep, 7834 swine; and produced 2133 bushels of wheat, 36,674 of indian corn, 41,190 of potatoes, 4263 pounds of cotton, 16,347 barrels of tar, pitch, or turpentine, 593 bushels of salt. It had seventeen stores, seven grist-mills, two saw-mills, three schools, 47 scholars. Pop.: whites, 5087; slaves, 1360; free coloured, 144; total, 6591. Capital Beaufort.

CARTER, county, Tenn. Situated in the N.E. corner of the state, and contains 540 sq. m. Drained by Watauga river and its tributaries, and a branch of Holston river. It has mountains on its S. and E. borders. It contained in 1840, 3933 neat cattle, 3470 sheep, 11,232 swine; and produced 22,663 bushels of wheat, 990 of rye, 130,041 of Indian corn, 1732 of buckwheat, 54,530 of oats, 14,330 of potatoes, 2711 pounds of tobacco, 7698 of sugar. It had four stores, three furnaces, eight forges, one flouring-mill, twenty-three grist-mills, eighteen saw-mills, one powder-mill, four tanneries, eight distilleries, one printing-office, two academies, 48 students, three schools, 60 scholars. Pop.: whites, 4896; slaves, 388; free coloured, 98; total, 5372. Capital, Elizabethtown.

CARTER, county, Ky. Situated in the N.E. part of the state, and contains 800 sq. m. Drained by Little Sandy river and its branches. It contained in 1840, 3041 neat cattle, 2968 sheep, 6789 swine; and produced 2155 bushels of wheat, 1532 of rye, 90,069 of Indian corn, 25,530 of oats, 4596 of potatoes, 3946 pounds of tobacco, 7413 of sugar, 8009 bushels of salt. It had five grist-mills, two saw-mills, two tanneries, two schools, 59 scholars. Pop.: whites, 2711; slaves, 186; free coloured, 8; total, 2905. Capital Grayson.

CARTHAGE (Lat. *Carthago*, Gr. Καρχηδών), a famous marit. city, long the rival of Rome, with which she waged a lengthened, doubtful, and desperate contest for the empire of the world; situated on the N. shore of Africa, in the immediate neighbourhood of Tunis. But such is the mutability of human affairs, and so complete the destruction that has overtaken this celebrated city, *dives opum studiisque asperrima belli*, that even her position has been matter of dispute among the learned!

> Giace l'alta Carthago, e a pena i segni
> Del l'alte sue ruine il lido serba!

But the plans of M. Falbe seem to have put to rest all doubts as to the situation of Carthage; and, combined with the learned and elaborate dissertation of Dureau de la Malle, give not only a satisfactory explanation of the form and situation of the city, but of all that can be ascertained respecting it from the most careful examination and comparison of ancient authors. Referring such of our readers as may wish for full information as to this interesting subject to the sources now mentioned, we shall content ourselves with stating that Carthage was principally built along the coast of the peninsula to the N.E. of Tunis, from a little N. of the goletta or entrance to the lagoon of Tunis to cape Carthage (lat. 36° 51′ 30″ N., long. 10° 26′ 45″ E.), and then round to cape Quamart. It was defended on the land side, where it was most open to attack, by a triple line of walls of great height and thickness, flanked by towers, that stretched across the peninsula from the lagoon of Tunis to the sea on the N. The harbour lay to the S. of cape Carthage, and was entered from what is now the gulf of Tunis. Having less to fear from attacks by sea than by land, the city had on that side only a single wall.

At the period of its greatest splendour Carthage must have been one of the richest and finest cities of the ancient world. It consisted of three principal divisions, viz., the *Byrsa*, or citadel, built on an eminence, the summit of which was occupied by a magnificent temple in honour of *Æsculapius*: and it also contained the famous temple of the Phœnician Astarté, the Juno of Virgil: the *Megara*, or town so called, lay to the W. of the Byrsa, along the triple wall, and was of great extent, comprising extensive squares and gardens: the third division was called the *Cothon*, or port; this, as its name implies, was artificially excavated, and consisted of two great basins, an outer and an inner; the first for merchantmen, and the latter for ships of war. The access to both basins was by a common entrance, which was shut up by a chain; and each was supplied with quays, warehouses, stores, &c., suitable to its destination. It was in this quarter that the seamen, shipwrights, merchants, and others connected with the mercantile marine of the republic principally resided.

Besides the public buildings already alluded to, Carthage had a famous temple in honour of its tutelar deity, Melcarthus, or Saturn, whose altars were sometimes stained with the blood of human victims; with temples to Ceres, Jupiter, &c. It had also all the usual places of public resort and amusement, including a magnificent forum, a circus, and a theatre. The water within the precincts of the city seems to have been at once scarce and bad; and to obviate the inconvenience thence arising, vast cisterns, of which the ruins still exist, were constructed for the saving and preservation of rain-water. The streets were all paved; and this essential improvement in the construction of streets is said to have been originally introduced by the Carthaginians. Strabo states that the pop. of Carthage amounted to 700,000; but M. Dureau de la Malle has shown that no reliance can be placed on this statement, and that the pop., previously to the destruction of Carthage by the Romans, cannot safely be estimated at above 250,000 persons, slaves included. (*Recherches sur la Topographie de Carthage*, p. 1–180.)

The early history of Carthage is involved in the greatest obscurity. All that is certainly known with respect to it is, that it was founded by a body of emigrants from Tyre; but of the occasion and epoch of their emigration we have no certain knowledge. The common opinion is, that Utica, also a Tyrian colony, was founded before Carthage; and that the foundation of the latter took place anno 1259 B.C. It is probable that the colony subsequently received fresh accessions of immigrants from the mother country; and it is supposed that one of these was headed by Eliza or Dido, to whom Virgil has ascribed the foundation of the city. (*L'Art de Vérifier les Dates*, iii., 414, 8vo ed.)

The Carthaginians appear to have inherited, in its fullest extent, the enterprising character of their ancestors; and, like them, were principally addicted to navigation and commerce. After extending their sway over a considerable part of Africa, they began to make settlements in, and to endeavour to subjugate, more distant countries. The fine and fertile island of Sicily seems to have early excited the ambitious views of the Carthaginians; but, though they had several valuable settlements in it, they were uniformly thwarted in their efforts to effect its complete subjugation. After the destruction of Tyre, Carthage inherited the possessions of the former in Spain, to which she afterward made large additions; and she also subjugated the island of Sardinia.

Of the long-continued struggle between Carthage and Rome, it would be useless, even if our limits permitted, to say anything. It is a favourite subject of every classical reader, and has been ably treated of in many modern works; but it is much to be regretted that we have no Carthaginian history of this memorable contest, and that we are constrained to depend wholly on the one-sided, prejudiced accounts of the Latin historians, and the Sicilian Greeks. The reader will do well to bear this in mind, and to modify most of their statements unfavourable to the Carthaginians.

Government.—As far as can be gathered from Aristotle, and the incidental allusions of other writers, the government of Carthage seems to have been one of the wisest and best constituted of ancient times. Like that of the mother country, it is generally supposed to have been originally monarchical; though on its first emerging into authentic history we find it an aristocracy of birth and wealth, with a slight mixture of democracy. At the head of this aristocracy was a senate analogous to the senates of Sparta and Rome, and composed of the most illustrious citizens. Its members appear to have been very numerous; but all statements with regard to the mode of their election, or the duration of their authority, must be purely conjectural. The senate had the management of all affairs of peace and war, the arrangement of treaties and negotiations, and, in short, the power of deliberating, and to a certain extent, of deciding upon all public affairs. Within itself, the senate contained a committee of 104, called, by a round number, *centumviri*, originally instituted as a check upon the encroachments of the aristocracy. It afterward became a high court of judicature, vested with such authority as rendered it in effect the depository of all the sovereignty which lay in the senate itself. Aristotle compares this committee, or council, to the

ephori of Sparta, but it should seem that the pentarchies, or *quinquumviri*, had a better title to the comparison. These were composed of several bodies, each consisting, as the name implies, of five persons selected from the *gerousia*, or committee, and possessed of almost despotic authority. They had cognisance of all affairs both public and private, and appear to have constituted a court of appeal in the last resort for all causes. They continued in office a long time, and had not only the power of filling up vacancies in their own body, but the right of choosing those who composed the tribunal of the centumviri. This, no doubt, was a highly aristocratical institution; and Livy says of it, that *vis, fama, vitaque omnium in illorum potestate erat*. At the head of the senate were two magistrates, or *suffetes*, answering to the Spartan kings or the Roman consuls. Originally the right of electing the suffetes was vested in the senate: but in the decline of Carthage it fell into the hands of the people. In their nomination, according to Aristotle, regard was had chiefly to birth, riches, and popularity; and a passage in the recently discovered work of Cicero, *De Republicâ*, in which he compares them with the Spartan kings, and contrasts them with the Roman consuls, would lead us to infer that they were elected for life. Their province was to convene the senate, in which they presided, to propose subjects for deliberation, and to collect the suffrages. In time of war, one of the suffetes was usually appointed general of the forces of the state, while his colleague remained at home. But besides the suffetes there were other subordinate magistrates, with the nature of whose duties we have become acquainted only through the Roman writers. We hear, for instance, of a *prefectus morum*, *prætor*, *quæstor*, &c., with powers analogous to those of the Roman magistrates so called; but these statements must be received with great caution, considering the tendency of the Roman, as indeed of all authors, to represent the institutions of other people as corresponding with or analogous to their own, though, in reality, there might be very little in common between them. The people were divided into guilds or corporations; and though in the infancy of the state they did not directly participate in the administration of affairs, they possessed, from the first, the important privilege of deciding upon those questions about which there was a difference of opinion in the senate. They had also, like the Spartans, their public or political festivals, at which questions of policy were discussed; and thus public opinion was enabled to exercise a salutary influence over the deliberations of the senate. Upon the whole it should seem, that although, as indeed might have been expected in a commercial state, the influence of wealth preponderated in the administration of affairs, still so well had the constitution of Carthage been balanced, that while, on the one hand, the nobles did not engross the whole power, as was the case in Sparta, Corinth, and Rome, the people seldom or never exhibited the factious spirit of the "fierce Athenian democracy," or the ferocity of the Roman rabble. "The excellence," says Aristotle, "of the Carthaginian government is evinced by a single reflection: though its origin mounts to a very ancient date, and though, for many centuries, it has contained within its bosom a numerous and a free people, yet Carthage has never, to the present day, experienced any one sedition worthy of record, nor has it ever endured, for a moment, the cruel yoke of a tyrant." (*Gillie's Aristotle*, book ii., § 9.)

Possessions, Commerce, &c.—At this distance of time, and with our scanty means of information, it is almost impossible to trace the various stages of Carthaginian encroachment on the neighbouring territory; but we are enabled to state pretty accurately the extent of country in Africa subject to Carthage at its most flourishing epoch. E. it stretched to the Syrtes and the confines of Cyrene; S. to lake Triton and mount Atlas; and W. (though this point has been less accurately ascertained) to the territories of the Numidian princes; while in the same direction the whole African coast was studded with Carthaginian colonies. Hence its subjects were divided into three different classes: the first were the cities on the coast, such as Utica, Hippo, Zaryta, and others, which, like itself, were colonies from Phœnicia. These were at first not so much its subjects as its allies; though at a later period a supremacy was conceded to it which soon passed into sovereignty. The next class consisted of its own colonies—the maritime colonies on the coast and the agricultural settlements in the interior of the country. The third class were the native Libyans, to whom Carthage had originally been tributary, but who now submitted to her authority. These were partly a fixed agricultural people, who, from a gradual amalgamation with the Carthaginians, were called Liby-Phœnicians, and were kept in restraint by the agricultural colonies planted among them; and partly nomadic tribes, whose allegiance was partial and precarious. The agricultural pop. only, which the Carthaginians had trained and accustomed to that mode of life, could be treated as subjects, properly so called; for the nomadic tribes were subject to Carthage only so far that they paid her tribute; and their hatred of those who disturbed their aboriginal mode of life, fomented as it was by the oppressions of the Carthaginian government, frequently broke out in revolt when the approach of an enemy gave the signal. But the Carthaginians appear to have attached less importance to their possessions in Africa than in other parts. At an early period they became masters of Sardinia, the Balearic islands, and Malta. We have already noticed their vigorous and long-continued efforts to make themselves masters of Sicily; and had they succeeded in this, the foundations of their power would probably, as Heeren supposes, have been established on a solid basis. The failure of their efforts to effect the conquest of Sicily, and the loss of Sardinia, that was taken from them by the Romans, seem to have impelled them to attempt the subjugation of the entire Spanish peninsula. They had also several settlements along the W. coast of Africa; and it is probable, though not certain, that Madeira and the Canary islands (*Fortunate Insulæ*) were included in their dominions.

The commercial operations of Carthage embraced the whole ancient world, and have only been surpassed by those of Europe since the discovery of America and the passage to the East Indies by the Cape of Good Hope. But the greatest difference of opinion exists as to the extent to which the Carthaginians carried their maritime expeditions; and while some geographers restrict their limits between the S. coast of Britain on the N. and cape Bojador on the S., others contend that they reached the coasts of the Scandinavian peninsula, circumnavigated Africa, and even visited the shores of the New World! We have elsewhere seen (*anté*, p. 37) that it is probable, from the statement of Herodotus, that the circumnavigation of Africa was really performed by Phœnician mariners; but there is no ground whatever for supposing that it was ever performed by the Carthaginians, or that they ever approached the shores of America. The only really authentic information, as to their navigation, is embodied in the account of the voyage of Hanno along the W. coast of Africa; and it is so very difficult to identify the localities mentioned in it, that some critics assign to it a length of 3000, and others of not more than 700 miles.

The merit of being the first who, in modern times, drew attention to the *land trade* of the Carthaginians belongs to Heeren, whose researches have placed the connexion of Carthage with the central nations of Africa in a clear and striking light. We have already, however, adverted to this interesting subject, and must refer those wishing for more comprehensive details to Heeren's work. It is sufficient here to remark that the internal trade of Africa seems to be alike unchanged and unchangeable. The countries to the S. of the great desert of Sahara are destitute of two most important articles, salt and dates, which abound in the countries N. of the Sahara; while, on the other hand, the S. countries have ample supplies of gold dust, ivory, drugs, gums, and slaves, all articles in great demand along the Mediterranean. Here are the wants and materials that go to form an extensive and mutually beneficial intercourse; and the oases found in the desert, and the camel furnish the means of carrying it on. It is, in fact, carried on at this moment by caravans, nearly in the same manner that it was carried on by the Carthaginians and negroes 2500 years ago; and the probability is, that it will continue in time to come to flow in the same channels. (See *anté*, p. 35.) It is impossible to enumerate the various articles of Carthaginian traffic, seeing that they most probably included the commodities of every known country and climate. The exports from Carthage consisted chiefly of articles of native produce, and of those procured by its land trade from the interior of the continent. She freighted her ships with the wines of Italy, Sicily, and Sardinia, and carried these articles to Cyrene, the Balearic islands, and W. Africa. She carried on a large trade in oils and other articles, which she sent to Cerne, the "ultima thule" of her African colonies, and received skins, gold, and ivory in exchange. She procured iron from Elba, alum from the Lipari islands, and tin from the N. of Spain, the Scilly islands, and Cornwall. The Baltic supplied her with amber; but whether it was procured by sea, or conveyed overland to the head of the Adriatic, and thence imported into Africa, has not been ascertained. From Tyre, with which she always maintained the most friendly relations, she received not only trinkets, glass, pearls, and other ornaments, and Sidonian cloths, the chief branches of the industry of Tyre itself, but cassia and cinnamon, and the other precious spices, which were imported into Tyre from India. Malta, too, supplied her with articles of woollen manufacture equal if not superior to those of Tyre. Her traffic in slaves, which she procured from the interior of Africa and from Corsica, was most important, and formed a large source of revenue. So abundant were slaves, that during the second Punic war, Asdrubal is said to have pur

chased 5000 at a time. The commercial policy of the Carthaginians has been said to be of a peculiarly grasping, jealous, and selfish character; but it is not entitled to any such distinction, and really differed in very few respects from that of most other commercial nations. Her object was, in as far as possible, to monopolize the trade of the world; and in this view she practised most of the favourite schemes and devices of the mercantile system. The privilege of trading was vested exclusively in the citizens (in contradistinction to the slaves or tributaries of Carthage); no commodities were suffered to be exported or imported except in Carthaginian vessels; the trade of her colonies was restricted to the mother city; and the ships of the foreign nations with whom she had entered into commercial treaties were absolutely excluded from her harbours; but this regulation appears to have been dictated more by political than commercial jealousy.

But though Carthage was from the first a trading city, it would be wrong to regard the Carthaginians as a mere nation of merchants. On the contrary, it is sufficiently proved that they found leisure to engage in other pursuits, among which agriculture held a prominent place. This science, in its widest range, was so well discussed by them in their writings, that the Romans considered them worthy of translation. Nowhere, indeed, was agriculture better understood, or practised with more zeal, than in Carthage; and most families were in the habit of applying the produce of their commerce to the cultivation and improvement of the soil. All accounts concur in assigning a high state of cultivation to the neighbourhood of Carthage. "The territory," says Diodorus Siculus (ii., 411), "through which Agathocles led his army was covered with gardens and large plantations, and everywhere intersected with canals, by which they were plentifully watered. A continual succession of landed estates was there seen adorned with elegant buildings, which evinced the opulence of their owners. Vineyards, olive grounds, and meadows spread on every side; and the whole region was thickly studded with the country seats of the wealthy citizens of Carthage and the other towns in its vicinity."

Revenue.—Our information on this subject is, unfortunately, extremely meagre; but there is little doubt that the revenues of Carthage were more considerable than those of any state of antiquity. They were derived from three sources; the *tribute*, levied on the subject and confederate states; the *customs*, and the *mines*. To what extent tribute was levied in time of peace is unknown; but examples are not wanting to prove that, in cases of urgency, the tributary nations were very heavily taxed. It is a curious fact that the contributions paid by the allied states and the cities along the African coast were in money, and by all the other tributaries in kind. The *customs* were levied with great rigour both in Carthage and in all her colonial ports; and in later times they became so important that they are said to have supplied all the wants of the state without the imposition of any other tax. The *mines* formed an important source of revenue; in working these all the inventions which ingenuity and industry could suggest were rendered available. The most considerable mines were situated in the neighbourhood of Carthago Nova in Spain; they gave employment to 60,000 slaves, and yielded about 50,000 drachms daily. At first they belonged entirely to the state; but we afterward find them in possession of some of the great families, who worked them on their own account. What use the Carthaginians made of the great quantity of precious metals which they procured from the mines, cannot be ascertained with certainty. The circumstance that no Carthaginian coin has been handed down to us will scarcely warrant the belief that no coined money was employed in Carthage; and though it be true that many, and indeed the most important, expenses of the state were not paid in money, it is highly improbable that a city, whose colonies confessedly coined money, should herself be without a coinage.*

These were the ordinary revenues of the state; but in cases of emergency, the Carthaginians resorted to other means of recruiting their exhausted treasuries, either by procuring foreign loans, by legalizing piracy, or by the imposition of a property tax, which should press more heavily on the rich than the poor. But with regard to all that concerns the administration of the revenue, we are still in the dark; though it has been said that one of the pentarchies above mentioned, with a magistrate at its head, formed a board for its management.

Naval and Military Forces.—To maintain the sovereignty of the sea, the chief source of her prosperity, and to protect her commercial marine, as well as to extend her conquests and preserve them, rendered the formation and support of vast fleets and armies indispensable. The ordinary number of ships or galleys of war possessed by Carthage, at the period immediately preceding the Punic wars, was from 150 to 200. It was increased in the first Punic war, when their naval power appears to have attained its highest pitch; and in the fatal naval engagement by which Rome opened its way to Africa, the Carthaginian fleet consisted of 350 galleys with (but this is no doubt exaggerated) 150,000 men, exclusive of transports. Their war-ships were manned partly by fighting men and partly by rowers; the latter of whom consisted entirely of slaves bought by the state for this particular purpose, and amounting, even in time of peace, to 50,000. But though the genius and position of Carthage naturally led the citizens to regard the navy as their main bulwark, the wars of conquest in which the republic was perpetually engaged, and the maintenance of its foreign possessions, obliged it to keep large armies continually in the field. These were composed almost entirely of mercenaries, collected from every part of the world, and exhibiting every diversity of blood, complexion, tongue, garb, and weapon: "*Exercitus mixtus ex collivione omnium gentium quibus non lex, non mos, non lingua communis; alius habitus, alia vestis, alia arma, alii ritus, alia sacra.*" (*Livy*, 28, 12.) Hordes of half-naked Gauls stood side by side with bands of white-robed Iberians; wild Ligurians were arrayed with far-travelled Nasamones and Lotophagi; Carthaginians and Phœnician Africans formed the centre or main army; Balearic slingers formed the advanced guard; and lines of colossal elephants, with their Ethiopian drivers, preceded their march like a front of moveable fortresses; but the main strength of their army consisted in its light cavalry, which was provided in abundance by the nomadic tribes which flanked their dominions. All these tribes, including the Massyles and the Mauritii, the Numidians, the nomadic races of the Syrtes, the Nazamones, and Lotophagi, were accustomed to serve in the Carthaginian armies, and receive their pay. The heavy cavalry were formed from Carthaginian, Libyan, Spanish, and in later times Gallic, levies. In cases of emergency the Carthaginians could raise an army of 40,000 from the citizens alone, besides the battalion called "the sacred legion," which consisted entirely of the *élite* of the Carthaginian nobles, and amounted, even in time of peace, to 2500 men.

Language, Religion, Literature, &c.—The destruction of the Carthaginian records, which would otherwise have thrown a flood of light, not only on the history of Carthage, but on that of the numerous nations with which she came in contact, must be considered as one of the greatest losses the civilized world has sustained. It has, no doubt, been usual to regard the Carthaginians as wholly immersed in commercial pursuits, and thence to infer that their attainments in literature and the arts must have been very inconsiderable. But there is not so much as the shadow of a foundation for this opinion. So far from commercial pursuits being unfavourable to literature and the fine arts, their effect is distinctly and completely the reverse. The experience of Athens and Corinth in antiquity, of the Italian republics in the middle ages, and of England in modern times, is conclusive as to their humanizing influence. Had the literature of the Carthaginians survived the wreck of their empire, we believe it would have been found to be at least as valuable intrinsically as that of Rome, and less erotic. It is worthy of notice that they began their career under the most favourable circumstances. Their descent from the Tyrians, confessedly one of the most civilized nations of antiquity, gave them, as it were, an almost intuitive knowledge of many of the most useful and ornamental arts and sciences, and placed at once within their reach all those means and contrivances which both facilitate the prosecution of commercial undertakings, and extend the boundaries of civilization. Surely then it may be reasonably inferred, even in the absence of all monuments of genius, that the rich legacy of their ancestors, increased as it must have been by the intercourse they carried on for seven centuries with the most renowned nations of antiquity, and by the researches and inquiries which their wealth afforded the means of prosecuting, must have produced, in the end, a vast accumulation of science and literature. But, like the city itself, nothing remains of all this. The only traces of the language of Carthage are to be found in a comedy of Plautus, from which it is clear that, like the Phœnician, it formed a branch of the original Asiatic languages, bearing a strong resemblance to the Hebrew, Syrian, and Chaldaic, with a slight admixture of purely Libyan idioms and phraseology. The [illegible] of Hanno, and a few other fragments, are known to us only through the medium of translations.

Like all colonies, they brought with them the [illegible] their fathers; but the authentic information [illegible]

* A singular circumstance connected with this branch of the history of Carthage is the contrivance which they made use of in their colonies, nearly answering the purpose of our paper money, or bank notes. It consisted of a small piece of leather, stamped by the state, upon which a fictitious value was bestowed, and which could be exchanged at pleasure for the precious metals.